Serve City - Interactive Urbanism

Production and working methods are being reorganised in the globalised economy. As a result of the flexibilisation of working time, of outsourcing, tele-homework and part-time work, more and more employees in the industrialised countries are being released from traditional forms of employment. As «self-entrepreneurs» they are obliged to reconstruct the social and organisational structures employees previously had access to in companies and institutions. Cooperation between self-entrepreneurs and trans-national companies establishes a communication network that operates beyond company limits and breaks up traditional, hierarchical communication structures.

More and more people are having their workplaces transferred into the private domain. The setting up of home offices is just one instance of this trend. Production resources that employees once had access to in the companies are now being sought in the urban space. The city is turning into a network space of ubiquitous production. It is helping to compensate for the loss of corporate structures.

The productivity of trans-nationally networked companies is based on immediate and constant communication with the markets, in which the production of commodities is determined by individualised lifestyles and preferred tastes. In the industrialised countries, the share of material production work is being progressively rationalised with the help of computerised machines. The share of immaterial «knowledge work» is increasing. This work steers, regulates, controls and designs material production. Private households are also reducing the amount of material work they perform themselves. They socialise domestic re-production work by making use of household appliances or by employing the services of home helps, child minders, carers, etc., leaving just the control and organisation of the household to be attended to.

Self-entrepreneurs and ultra-small businesses need access to the global networks of production, i.e. the technological infrastructure and opportunities for cooperation. Networked, mixed-use urban neighbourhoods provide concentrated «opportunity structures» for cooperation and the exchange of different forms of knowledge. Planners must, therefore, provide access to information and communication systems beyond the mere infrastructure. Physical mobility has not become any less important, but in future the main focus will be on accessibility to information networks. The «right to access» incorporates, in particular, those who are prevented by their social and economic situation from making use of the new media. There is a need here to bridge the growing gap between the well connected and the poorly connected.

It is not linear, mono-functional sequences of activities but overlapping activities performed in different spheres of everyday life that become characteristic of individualised performance in time and space.

The separation of working and living, of gainful employment and family life, of working time and leisure time that was typical of the «city of simple modernity» is evaporating and becoming dysfunctional. Structural and spatial typologies, therefore, need to pave the way for combined activities – living and working, family life and work, work and leisure – and they need to link the public and the private in new ways. The growing complexity of individualised modes of activity, the increase in multi-tasking in people's everyday activities, the increased speed of social change call for a corresponding response from urban developers. They need to devise a variety of programme options that go beyond rationalist functionalisation. The "functional" space for exchange and community building is no longer the traditional space in

the city. The information space has now taken over this position. Goods, money, information and entertainment are being exchanged to a lesser extent in the urban space. In theory, every item of information is available via this media space; the real difficulty is access to the information that is relevant. Information needs filters.

The overlapping of physical by digital communication channels is weakening the principles of urban structure, spatial hierarchies and centres. They are being interpreted in new and different ways. Instead of a centralised focus, they are developing forms of density with a greater extension, in which the concentration of knowledge, services, the quality of life, the intensity of activities and natural space are becoming ever more important.

The urban space can becomes a filter for information instead of being a source of information. Spatial planners and designers, therefore, have to help shape the interface between space and information in the city. Modern technologies (PDAs, GPS) offer wideranging potential in this respect and they also make it possible to rethink urban orientation systems. These technologies can be used to provide new sources of access and orientation in the urban space, which will take their place alongside traditional spatial orientation systems, such as squares and axes. With the help of GPS and PDAs the visual presence of services and retail outlets along a «main street» can be arranged in the form of an «urban field» with extended access potential.

Planning proposal

Our planning proposal for a central suburban neighbourhood in Sydney Australia, takes into account that the functional requirements are changing at greater speed and programmes are shifting their priorities. A suburban neighbourhood might be transformed into a mixed-used area with a high percentage of knowledge work. It could equally well be changed into an area with shops, entertainment facilities, cafés and restaurants. We regard the present challenge as being to create an environment that can be adapted and developed.

The main idea is to create a physical urban environment that will be capable of triggering and accommodating specific, diverse and changing programmes and activities to accommodate the new demands of the knowledge workers. We have to provide a balance between conditions that we can foresee and plan and conditions that are unpredictable and for which we can only provide a framework. The project and the programme should be as open as possible and as determined as needed.

The principle of networking organizes the project on different urban scales. We see the site as being an area with various attractions and connections with the urban surroundings. The organisational principle is a non-hierarchical system for the building volumes (hardware). The various programmes (software) provide opportunities for flexibility. We determine some of these as planners, while others are non-determined and have to be generated by the user. Both the software and the hardware are connected with the surrounding environment at the level of the infrastructure, on-line services, other services and companies.

Our strategy to achieving the requisite degree of urban flexibility is to develop an architecture in which the «software» changes, while the building itself offers a permanent framework for the changes, thus allowing the users to put whatever they wish into it. A fundamental principle in the planning of the unforeseeable is to incorporate a range of different choices. The different types of function that make up the urban fabric can meet this requirement in a variety of ways, so we developed a system of transformable use within the urban context.

To enable such a dynamic urban fabric, we propose four different information and communication tools for the urban context: a community website as a basic exchange hub; a

personal digital assistant (PDA) as a networking tool; location-based information zones as spatial filters; and non-cash payments for instant access.

The personal digital assistant is the ideal tool to provide ubiquitous access to the site information network. Commercially available mobile phone services are already capable of performing this function. Every inhabitant gets a free PDA sponsored by a local company. This portable communication system can transmit specific, location-related information covering everything from private to commercial activities.

In providing Location-based information about the physical space, this system offers a dynamic method of activating urban areas. The inhabitants again become content consumers and providers at one and the same time, thereby controlling access to the information they give or receive.

The website provides and filters the exchange of local information. The site occupants, neighbouring residents, visitors and users can be both content consumers and providers. The organisation is governed by a few basic rules. The website includes a message board, market place, interest finder, link system, information service, locally related service links, business support and more. Its reach extends from "my block" to "worldwide" but is always organized with respect to the community.

This new method of non-cash payment provides easy access by mobile phone, PDA, mobile cash or cash card. These modes of payment exemplify the expansion of the information and organisation potential of information and communication technologies. Locations and activities can be immediately accessed, used and paid for. Spaces can be rented at very short notice without large deposits or the need for contract negotiations. The renting of spaces entails acceptance of certain conditions, comparable to those agreed upon when signing a contract for the renting of a car.

Furthermore, the dynamic planning process we imagine aims to extend communication between the designer and the client. The two main aspects here are the elaboration of design proposals and the use of new co-design tools that information and communication technology makes possible. For this dynamic planning process we propose a website that will establish a link between the occupants / clients and the planners / developers. This website will specify a series of options and interactive design parameters that the planners / developers will make available to the occupants / clients. The options offered include size, use, layout, style, fittings, location and price. The planning website is an interactive communication tool giving the consumers what they want and the developers the chance to sell what is in demand.

The dynamic planning process shows that the design is neither completely determined by the future occupants nor completely controlled by the planners. It is a Co-design process and means maximum choice and control for the occupants combined with professional advice and quality control supplied by the planners. This planning process generates housing which are largely adapted to the needs and wishes of the occupants.

Typologies

IP-5 Information Provider

The Information Provider is a communication area for residents, immediate neighbours and other users. Areas of this kind are temporary and flexible; they form an additional layer over the urban fabric that stimulates activities. The combination of wireless communication technology with the global positioning system (GPS) enables anyone to post information relevant to the location.

Apart from business-related uses by companies on the site, such as advertising or bonus zones, the information areas can also be used for individual and private purposes. They facilitate a smooth transition from private activities to business and commercially viable activities. Services are provided in the form of information zones or urban "post-it" zones, where individual information needs can be satisfied without any great effort. Leisure-related communication areas, such as game zones or meeting places for singles, enhance the opportunities for encounters and the organisation of common interests.

The Information Provider gives a platform for individual services and communication, a way for communal exchange. The content is generated and provided by the inhabitants, they are consumer and producer at the same time.

UG-3 Urban Generator

The Urban Generator is a type of service that provides the requisite information, educational opportunities and space for individuals and small businesses. The Urban Generator is not merely the starting point for the development of the site, it is also the programme that generates other programmes. It is run by Sydney's non-profit-making organisations, and the services it offers range from basic and further training to child care, domestic services, start-up support, the provision of office space, job placement and a senior citizens' information centre. These services are free of charge for the less well-off in the new district, while others pay the customary charges. The Urban Generator can help people to «modernise» their lives or businesses and integrate into a larger community. It also provides an opportunity for people from different social and cultural backgrounds to mingle.

All the activities and services are posted on the community website and they can also be accessed via the location-based information system (Information Provider). Residents are thus encouraged and helped to connect their businesses and activities with this local network.

SP-4 Space Provider

The Space Provider is an outdoor space, a substitute for nature, an alternative location for leisure-time activities that can be rented at short notice. The physical shape of the Space Provider is predetermined and the design for these outdoor spaces includes features like paving, roofing, fencing, greenery, tartan track, sand, water and trees.

It is up to individuals to decide how these areas are to be used. We can conceive of such uses as a short-term garden; a barbecue area; an outdoor exhibition facility; places for presentations; a tennis, basketball or beach volleyball court; a flea market; and experimental services. The period for which the space is hired can range from an hour to a week. The area is large enough to host all the employees of, for instance, a small business. Instead of public gardens with a limited number of uses, the Space Providers offer public use of private spaces that are operated on a commercial basis. They constitute an extension of private premises but with very few obligations. Reservations, rent, payment and activities are available on the community website and from the local information service.

ASP-6 Access Space Provider

The Access Space Provider combines the need for network access and privacy. It is a small space fitted with a wide range of communication equipment that is situated in the public urban space. This access space makes it possible to combine privacy, relaxation, workspace and entertainment. The Access Space Provider is directed at visitors, tourists, business people and residents who need privacy or who don't have comparable technical equipment. The unit is located at strategic points and busy public places in Sydney, where it offers users a private sanctuary.

W+2 Work Station

The work unit provides a "work station+" area covering 50 to 500 square metres. The + stands for a series of additional functional and spatial features that go beyond the typical office space. The standard office space can be supplemented by additional elements that can be ordered from a catalogue at any time. These internal or external components provide special areas for additional activities such as eating, relaxing, watching TV, smoking (outdoors), company newsgroups and outside services supplied in the office, such as a massage or a hairdo. The + also indicates extra features for the entire office building, such as services and spaces for communal use, e.g. copying, a distribution point for on-line orders, a wellness area, a fitness studio and a fully equipped conference room.

The offices can be rented and equipped via the Internet. Every company has a presence on the local website and is part of the local network. Every company can also decide what information it wishes to make accessible from outside and what passers-by can find out about the company using their personal digital assistants.

L+1 Living Transformer

Whilst the Living Transformer is the simplest type of unit, it is also the most complex. To provide a living+ environment we have to integrate individual, changing uses and accommodate different preferences in size, style and fittings. The unit we have developed is a system, a matrix of options that we can plan and develop, but with the options ultimately being selected, combined and transformed by the occupants as they make use of them. We also allow for flexibility of use by having 30 to 50 percent of the Living Transformer reserved for purely residential purposes and the rest left as non-determined space. This neutral space has minimum fittings and allows for a maximum variety of uses. In addition to the residential features, almost any form of occupational activity can be integrated into this additional space, including small offices, retail businesses and services as well as entertainment, cultural and leisure facilities. This neutral space can be let by the owner, rented or shared.

Access to information and communication technologies is important for this unit. Within the urban context it is crucial that the unit and the activities going on inside is connected to the neighbourhood and the existing communication networks. The interlinking of all the «Living Transformer+» typologies with one another and the surroundings produces an exponential increase in use value.

Conclusion

The integration of every new services into the local communication network is crucial for the development and existence of new entrepreneurs of the creative industries. The integration of the new businesses within the local communication networks makes new business ideas immediately available for companies in the neighbourhood and beyond, thus giving market access support to small businesses, in particular.

On the urban level, these services give a density of urban life and providing an urban quality within an suburban setting, while maintaining a suburban scale and the suburban lifestyle.

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