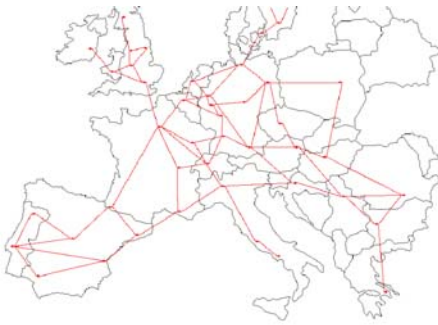


1ab mobility
rotterdam

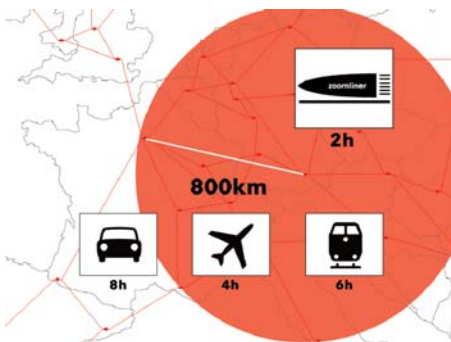
zoom town

zoom T O W n

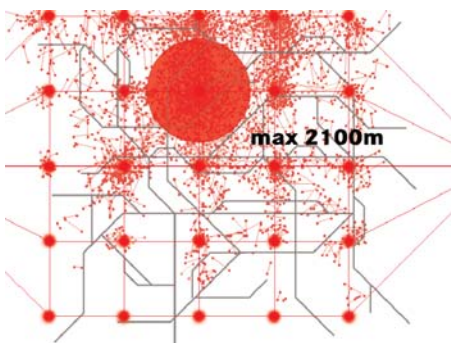
PETER HAIMERL
 in collaboration with
 wzb berlin dept. mobility stefan rammler
 university of augsburg institute for information
 technology prof. andre



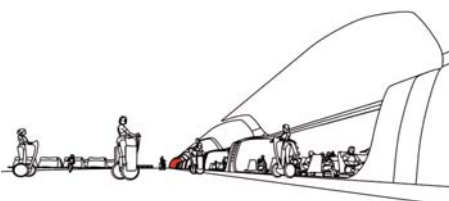
The zoomliner joins all European metropolises turning them into districts of zoomT O W n



With a travelling speed of about 600 km/h the zoomliner connects the European metropolises.



Combination of individual (floater) and public (zoomliner) transport system.



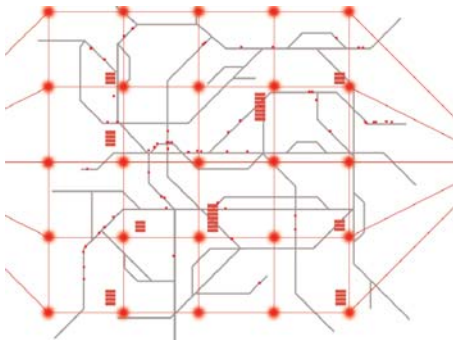
zoom T O W n The cultural and economic force of America's and Asia's megapoles poses a challenge to the European cities. To keep up with them on an international level and to ensure wealth and quality of life on a long term basis the European metropolises will be forced to develop new concepts. Disadvantages such as intolerable densities, uncontrolled growth, social hardship as well as suburbanisation and the waste of resources have to be avoided at any means. For that reason new concepts have to be based on historical qualities like grown structures, manageable size and a humane and democratic social order. Previous flawed developments - mainly regarding the excessive expansion of cities beyond their centres - have to be put to a halt. This is where **zoom T O W n** offers an alternative: It is a compact urban concept that - based on high density in terms of infrastructure and networks - will again turn the city into the actual cultural and economic centre. Restructuring and increasing the densities will also have the great advantage of a more efficient usage of environment and energy resources. **zoom T O W n** is an urban conception able to adapt to the new conditions of media mobility. Using precisely this new type of mobility the space required for living, pleasure and leisure can return into the cities. Size is more than mere quantity for metropolises. First of all it is a huge gain in terms of economical power and levels of mobility. Its large numbers of urban microcosmos also enrich the individual quality of life. For that reason the centres of Europe's largest cities merge and form a new city: **zoom T O W n**

city fusion Is there a way to join the advantages of the European cities? Similarly to business mergers communication and infrastructures will be tightened up, synergetic effects will be made use of and powers and competences will be joined together. The individual cities will be interlinked and penetrated by a high speed system, the zoomliner traffic network. As a result they will become districts of **zoom T O W n**. **zoom T O W n** is a new, networked city. Its definition of urban development and urban space will be superimposed onto existing cities and therefore transform them. **zoom T O W n** can be initiated at any time. **zoom T O W n** is based on the redefinition and transformation of the existing infrastructure with a new planning structure being established at the same time. The gradual implementation of new traffic and logistic systems as well as the setting up of a supply and disposal network all over the country situated below the cities will free up huge areas within the cities. This will offer possibilities for transformation, development and growth without expansion. Instead **zoom T O W n** will be characterised by continuous reorganising and restructuring. The different urban functions will again be established in the city, the urban sprawl can be put to a halt.

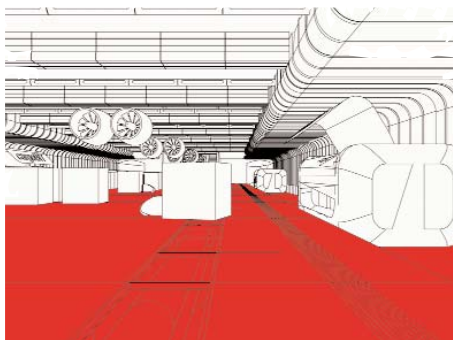
zoomliner The new transport system in **zoom T O W n** will reduce the existing pluralistic system to 2 means of transport with 2 speed categories throughout Europe: The innereuropean high speed train zoomliner with a travelling speed of 400-600 km/h and the urban floater with a speed of up to 30 km/h. Airplanes with a speed of around 900 km/h will only serve the intercontinental traffic. Due to the considerable time savings of the floater they will not be able to compete on the innereuropean market. The energy supply for the zoomliner will be provided by the installation of solar collectors positioned along the zoomliner track. Thus it will become a self-sufficient means of transport, a linear power station preserving energy resources. At the same time the zoomliner is part of the transport system within the cities. The zoomliner stations will be located on a regular 3x3km grid on one level above the roofs. Within the city boundaries the speed will be reduced to 120km/h which is twice as fast as the underground tube system at about 60km/h.



Covering all short distances with a max. speed of 30km/h the floater will slow down the volume of innercity traffic.



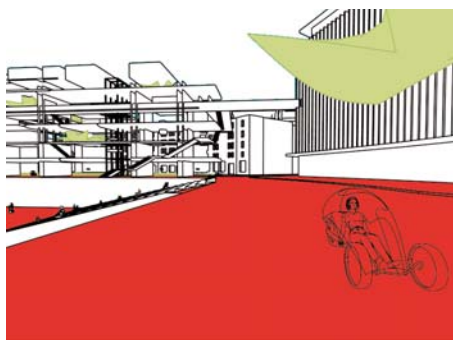
Within the city boundaries goods will be subdivided into autonomous Cargobits and redistributed through the improved tube shafts.



Reintegration of urban supply and disposal functions area-wide below the city.



The interaction of the existing urban structure and the new pioneerspace will transform the urban texture and the way we read it.



Redefinition of freed up urban spaces.

floater The second means of transport is the floater (segway, electrocabs, bicycles, conveyor belts). Penetrating the entire area of the city it acts as a shuttle to the zoomliner stations. The maximum distance one would have to make with the floater is 2000m. Because of this limited distance a relatively low speed of max. 30 km/h will be sufficient. By combining zoomliner and floater the time required to get from A to B will be halved. At the same time the volume of traffic will be reduced and will turn into an integral part of continuous, steady-going "soft" urban movement lines. Stress and restrictions caused by the noise and danger of modern traffic will disappear. **zoomtown** offers evenly distributed, decentralised infrastructures within its entire area. Only the inhabitants of this area will be able to profit from the attractive zone of **zoomtown**.

reservoir The city ground will be utilised more intensively than it has happened so far. It will be redefined and expanded as an extensive reservoir underneath the city, regardless of the structures above. Thus it will form the means of existence for all urban activities and at the same time it will feed on them. From this subterranean energy store the functions above ground draw life. Apart from freight transport all other necessary urban supply and service systems will be located within the reservoir. All processes that are essentially devoid of any social functions will be concentrated here: parts of production, energy storage and exchange, water tanks, sewage treatment as well as recycling processes. With an increasing modernisation of industrial processes and reduced emissions the production can be relocated in small and large cells within the city area. The currently existing separation of production and consumption will be unmade. The existing underground traffic network will be expanded and will receive a new meaning. The freight transport will be dealt with on the zoomliner network. Within the city areas the goods will be sub-divided into Cargobits and will be distributed through the redefined tube shafts. Up to now a time and cost intensive change of transport was required to deliver these goods. In **zoomtown** they will reach their programmed destination (i.e. the end user) through a system that joins e-commerce and integrated logistics. The large number of branches of this underground freight transport system allows for dynamic logistics and reduced storage costs: the network itself serves as a mobile storage unit, thus the goods can permanently be moved around or temporarily stored.

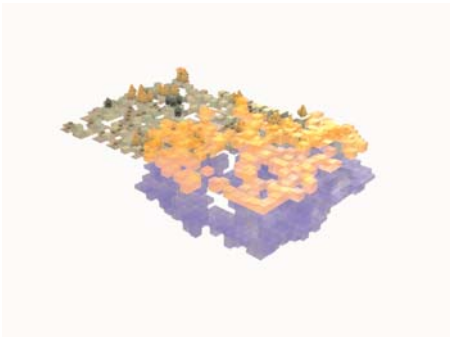
pioneerspace With the implementation of the new transport system the traffic arteries cutting through the cities will disappear. Aspects such as noise and pollutant emissions will become irrelevant. By relocating and restructuring all urban supply processes into the reservoir new urban space will be created - freely disposable living space, the pioneerspace. The interaction of the existing urban structure and the new pioneerspace will transform the urban texture and the way we read it. New relationships between the city components will be created. Elements such as streets, blocks, courtyards, plotsize, quarters, green spaces etc. lose their known functions. The demand for their redefinition offers the possibility to develop new components. The increase of nature and green in a city together with a simultaneous increase of metropolitan supply (culture, art, sports, politics etc.) boosts the attractiveness of urban life. Leisure can return into the city and resources will be brought back. The restructuring of the elements reservoir, floater and pioneerspace provides the planners and inhabitants with an instrument that will enable the development of democratic processes.



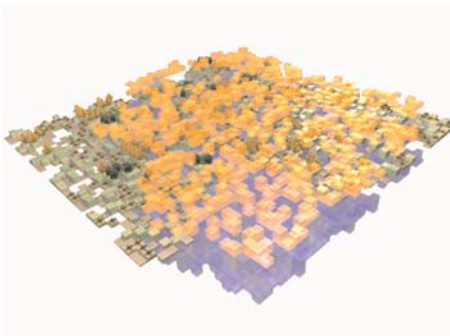
nature

pioneerspace

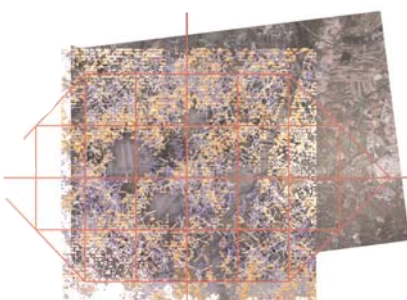
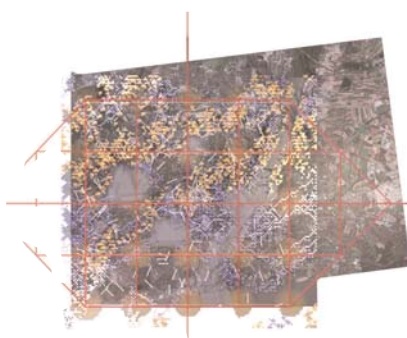
reservoir



The elements pioneer-space and reservoir being influenced by the agents form a growing, constantly changing structure. Green and built up areas, equal elements, are in open competition.



The abstract orange cubes generate into concrete building elements that theoretically can adopt any shape.



Areal image of Munich
Growth of the structure of reservoir, pioneerspace and floater network.
orange - pioneerspace
blue - reservoir
white - floater-network

planning process In zoom town planning is based on bottom-up processes. These processes are initiated by individuals or urban planners, however they are influenced by their single elements in unpredictable ways.

One possible way of controlling these processes is to predict future developments with computer simulations thus making visible potentially negative developments. This has the advantage of being able to react faster to changes than it would be possible within static planning. Processes do not have to be put into operation, only their direction has to be changed. For this purpose software is being developed so that intentions of individuals can be comprehended as process strategies. These will then be superimposed and associated with other urban processes. On the basis of adjusted and generalised urban structures it is now possible to develop planning strategies that are similar to those known from engineering and artificial life areas. Part of this are parametric planning devices as well as non-linear simulation modelling. Parametric urban planning is not aimed at a specific tangible goal, it is not anticipatory and it is not global. It is created spontaneously by different elements interacting. The emerging urban structure is not a final endproduct following a standardised planning process, but is re-shaping itself again and again starting from minute initial conditions.

structure of growth The growth of the structure is based on simple rules that are calculating the future of each single element in relation to its neighbours.

Green areas will not be treated like a surplus, but they will have the same value as pioneerspace and reservoir. reservoir and pioneerspace will partly replace the green spaces. However, it will not be possible to simply reduce these green spaces. On the contrary they will conquer new areas by in turn displacing reservoir and pioneerspace. As a consequence green spaces, reservoir and pioneerspaces will develop a kind of dialogue, they will determine each other.

Reservoir is the basis for pioneerspace. The images in the top left corner of this page initially only show abstract orange cubes representing the pioneerspace.

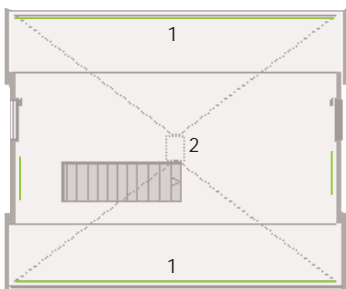
First these cubes do not seem to be coherent. In several steps of the simulation process they become more and more interrelated and as a result a linear structure appears.

In case there are not sufficient cubes grouped together, or already occupied by other structures such as green spaces, these cubes turn into undeveloped, empty spaces. The abstract orange cubes generate into concrete elements that theoretically can adopt any shape.



presentation of zoomtown infrastructure in the nai or the kunsthal. location of the cocobello exhibition unit in front of the nai.

presentation in rotterdam In the kunsthal the concept of zoomtown will be explained. Furthermore the integration of rotterdam into the european zoomtown city network and its role in this context will be shown. Video animations, slide-shows and models visualize the infrastructure of zoomtown. Additionally a suitable innercity area is chosen which will be reinterpreted based on the new planning system.



top floorplan ca. 40m²
interactive, virtual reorganization of rotterdam according to zoomtown principles.

cocobello display unit A mobile exhibition pavillon - cocobello - appearing also in zoomtown will be placed in front of the nai. cocobello consists of three interlocked components which can be unfolded horizontally and vertically to produce a two-storey atelier unit. On the top floor there is a large bright atelier room with facilities for media connection which allows the user a good overview of the surroundings. Here the visitor finds interactive programs to simulate the influence of zoomtown planning on rotterdam. The results will be projected on the facades of cocobello, acting as display windows to present possible solutions to the public.



ground floorplan ca. 15m²
entrance area / cafe

copyright by
studio für architektur
peter halmerl
architekt.bda
lothringer strasse 13
81667 münchen
tel: 089_44 760 561
fax: 089_44 760 563
peter-halmerl@urbnet.de
munich.october 2002
layout: bertram doerfler



unfolding cocobello

based on "the open city" peter halmerl, armin lixl and paul schlossbauer 1988-1990
jutta görllich text and video, büro wilhelm programming, animation and graphics, bertram dörfel programming and 3d animation, mw2 animation, gero wortmann programming, ulrike weyländ narrator
premiere lothringer 13/halle. munich.july 2001
current exhibition sammlung daimler chrysler.berlin.27 september 2002 - 9 february 2003