

ročilo", interna publikacija, Ljubljana: Ljubljanski urbanistični zavod, jan. 1982.

Korošec, B.: „Ljubljana skozi stoletja, Mesto na načrtih, projektih in v stvarnosti“, Ljubljana: Založba Mladinska knjiga, 1982.

Koželj Jože: Načrtovanje univerzitetnih ubikacij / Kurent, T. (ur.): „Zbornik ljubljanske Šole za arhitekturo 1982“, Ljubljana: Univerza Edvarda Kardelja, FAGG, VTOZD Arhitektura, 1983, str. 135 – 152.

Modic, R. (ur.): „Petdeset let slovenske Univerze v Ljubljani, 1919 – 1969“, Ljubljana: Univerza v Ljubljani, 1969.

„Prostorski razvoj Univerze v Ljubljani“, raziskovalna naloga, Ljubljana: Katedra za javne zgradbe FAGG, 1973; po: Wichmann, H. / „Bauwelt“,

štev. 49, 1969 / dokumentacija Centra za razvoj Univerze.

Ravnikar, E. (sod. Šašek, M.): „Lokacija univerzitetnih objektov v zvezi z nadaljnjim razvojem Univerze v Ljubljani“, interna publikacija, Ljubljana: Katedra za urbanizem in javne zgradbe FAGG, 1. okt. 1971.

Šelih, A. (gl. ur.): „Univerza Edvarda Kardelja v Ljubljani, Zbornik ljubljanske Univerze 1989“, Ljubljana: Univerza Edvarda Kardelja v Ljubljani, 1989.

„Urbanistični načrti za Ljubljano Jožeta Plečnika“, Ljubljana: Arhitekturni muzej Ljubljana, 1982.

Zupančič Strojjan, T.: „Univerza in mesto – ubikacijski razvoj Univerze v Ljubljani“, Ljubljana: Univerza v Ljubljani, Fakulteta za arhitekturo, 1997.

position at the interchange of two highways and two railway lines, but although it is situated close to the city centre, public transport accessibility is poor. The area is cut in half by various traffic lines. This “industrial” part is characterised by a railway connection-line, primarily storage and transport-oriented companies, some horticulture, many vacant or underused plots, the “Gaswerke Wien” (Gasworks Vienna) with four huge buildings for gas-storage (“Gasometer”) and 25 hectares of extensively used land.

The other half is basically a housing area with large public buildings (e.g. the customhouse, the national archive, parts of the revenue office) and the “Zentralviehmarkt St. Marx” (Central Cattlemarket St. Marx), the slaughterhouse, the protected cattle-hall, a wholesale meat market and adjacent meat-processing companies.

Because of such surroundings and today's uses, but also it's bad accessibility from the city centre, for decades this area was neglected. Maybe that's why the area kept a variety of different uses and urban situations, which create an atmosphere of identity and originality, and make the place – at least for planners – appealing. This variety and the typical buildings (Gasometer, Cattle Hall) create the contradictory situation of a good amount of identity but with a bad image.

However, nowadays things are changing rapidly. The eastern extension of the metro has created a new situation; in the year 2000, it will be possible to reach the city centre by metro in 7 minutes, while a new train station on the connection between the city centre and the airport (Schwechat) is now being constructed. Furthermore, the slaughterhouse was dismantled in January 1998, leaving 20 hectares of vacant land while removal of the adjacent wholesale meat market with another 25 hectares is under discussion. In the Gasometers, a hou-

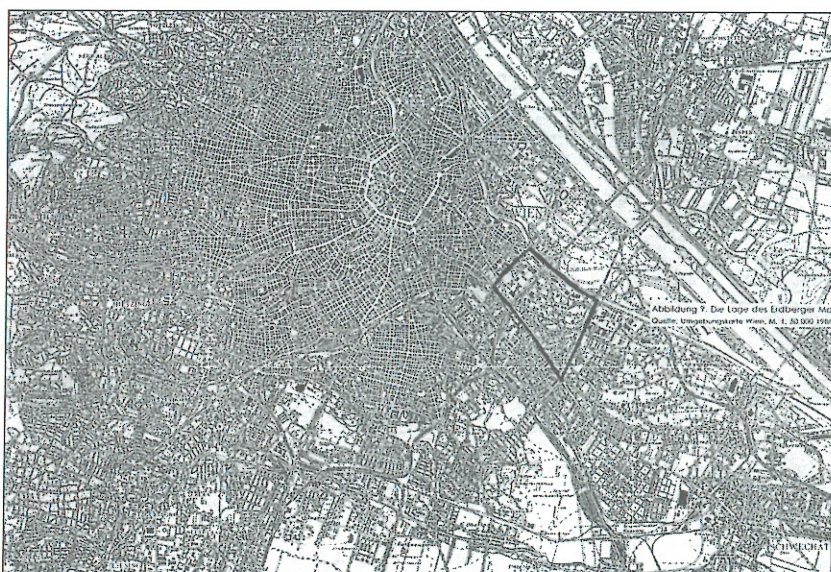
Claudia CSEPAN

## Implemented urban development planning in Vienna – Erdberger Mais

The article presents an approach to current topics of urban planning, new planning techniques and implementation methods and their applicability to a former industrial site in Vienna.

### 1. Introduction

The so-called “Erdberger Mais” is an inner-city area of about 400 hectares. It's main feature is good general accessibility, owing to it's



Picture 1: The situation of the Erdberger Mais in Vienna

ing project was proposed and planned by four renowned architects; the start of construction was planned for April 1998. However, this project still causes discussions, mainly because it's situated in an industrial quarter in inadequate surrounding, but also because of the stunning experience of the empty interior, which would be impaired by the housing facilities.

To avoid uncontrollable developments due to rising prices and

speculation, the rapidly changing circumstances now created an obvious demand for planning activities. An urban design competition was carried out, and a few (but not coherent) planning projects are under consideration. All these activities have as a main feature the aim to enhance the area's attractiveness as a housing and office quarter.

The city government sees the structure of various owners as a hindrance to effectively enhance

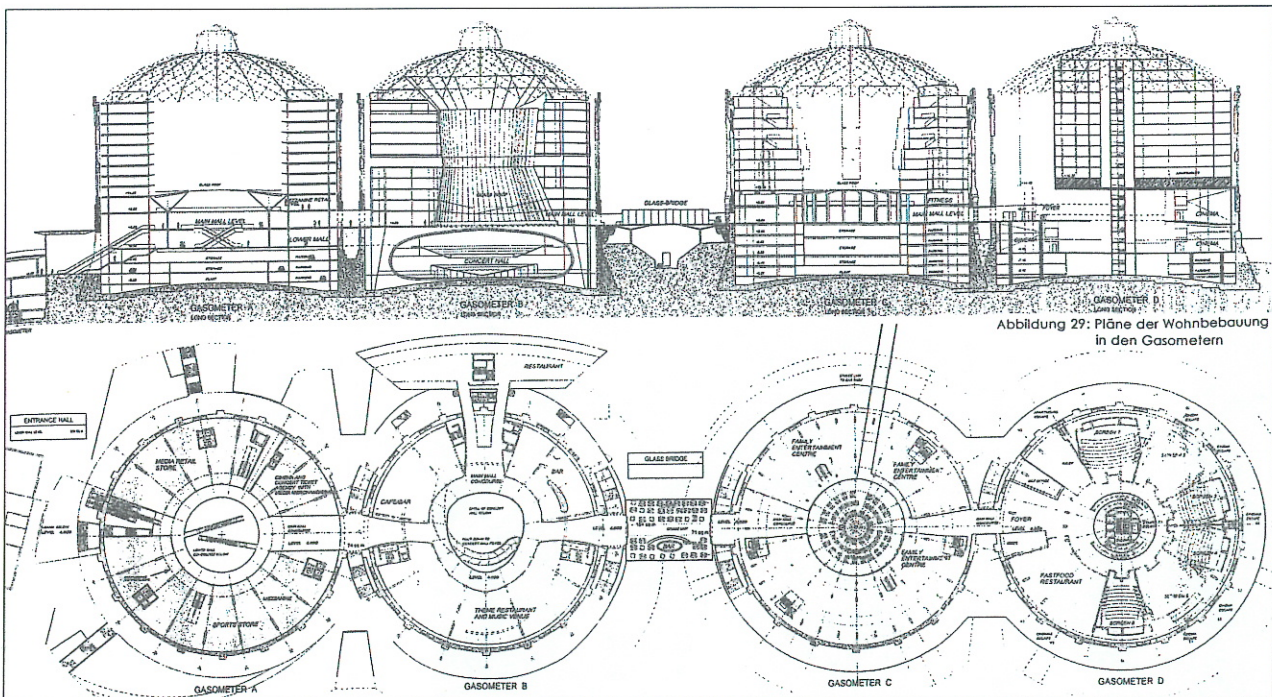
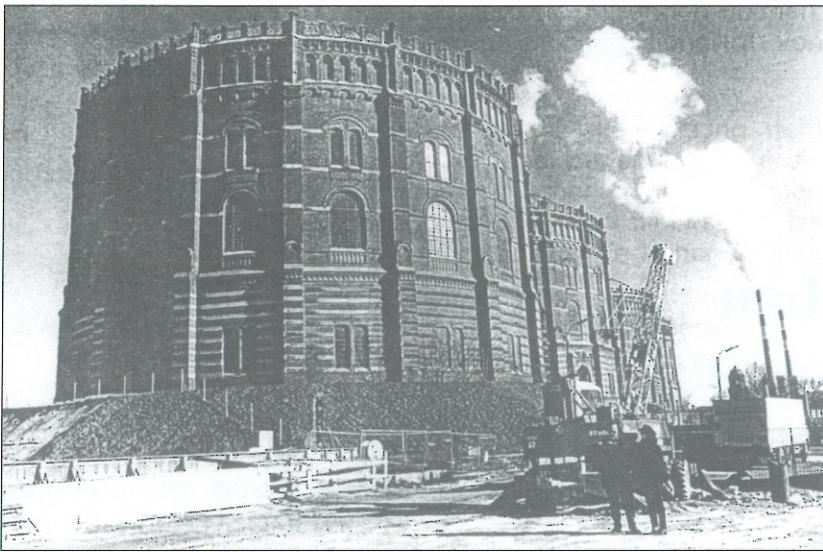
today's low quality uses. However, this should be not regarded as negative, but as a possibility for the aimed mixed-use development.

## 2. Five Scenarios

In consideration of the features of the area and it's interactions with the city of Vienna, and also the areas developments during the last years, five scenarios show different possibilities for the further development of the area. The characteristics of those scenarios are that they evolve from one of the existing features and create a certain image, a new identity for this area. In each scenario, different ways of using the Gasometers are suggested to emphasise the various potentials of these buildings.

### Scenario 1 Dense & Dynamic *Dicht & Dynamisch*

The basic assumption of the first scenario is that the situation of the area as an entrance into the city will play a major role in it's future development. An important feature is the position of the



Picture 2: A built-in housing project in the Gasometers by four renowned architects is ready for construction, but still heavily discussed

area in the South-east part of the city, which makes it the first contact point (of visibly built-up land) for people arriving from the airport by car from the highway, but even more by train, via the new-built train station. For this purpose measures need to be taken to create a dense, lively area, clearly marking the beginning of the city. The Gasometers will be places for events, e.g. a circus (the Cirque du Soleil is actually looking for a site in Europe), clubs, exhibitions, fairs, etc., but also for sports activities, like cycling, diving between the foundations, ice-skating or climbing.

**Scenario 2 Education offensive**  
*Bildungsoffensive*

The rationale of the second scenario is the planned faculty of mechanical engineering in an area adjacent to the Erdberger Mais, the existing bio-chemical institutes and research facilities in the area, and the lack of students' facilities in Vienna (primarily student dormitories). Therefore, a campus is suggested including not only the lodgings for students, but also faculties, departments, research facilities, and companies benefiting from the spatial proximity to university institutions and their innovative potential. Furthermore, students can contribute to the quality enhancement of an area, making it populated and lively without caring too much about the existing surroundings. This is what happened in many different cities, which changed into artist's quarters and finally to desired high-quality housing areas. This is probably not going to happen in the Erdberger Mais, but at least this scenario shows the opportunity for relatively quick settlement of a new population in an old industrial area, which would at the same time enhance its image. The Gasometers in this scenario could be used as a library, for a student's union in the British sense (including shops, a bank, pubs, game rooms, rooms for student organisations, etc.), as students dormi-

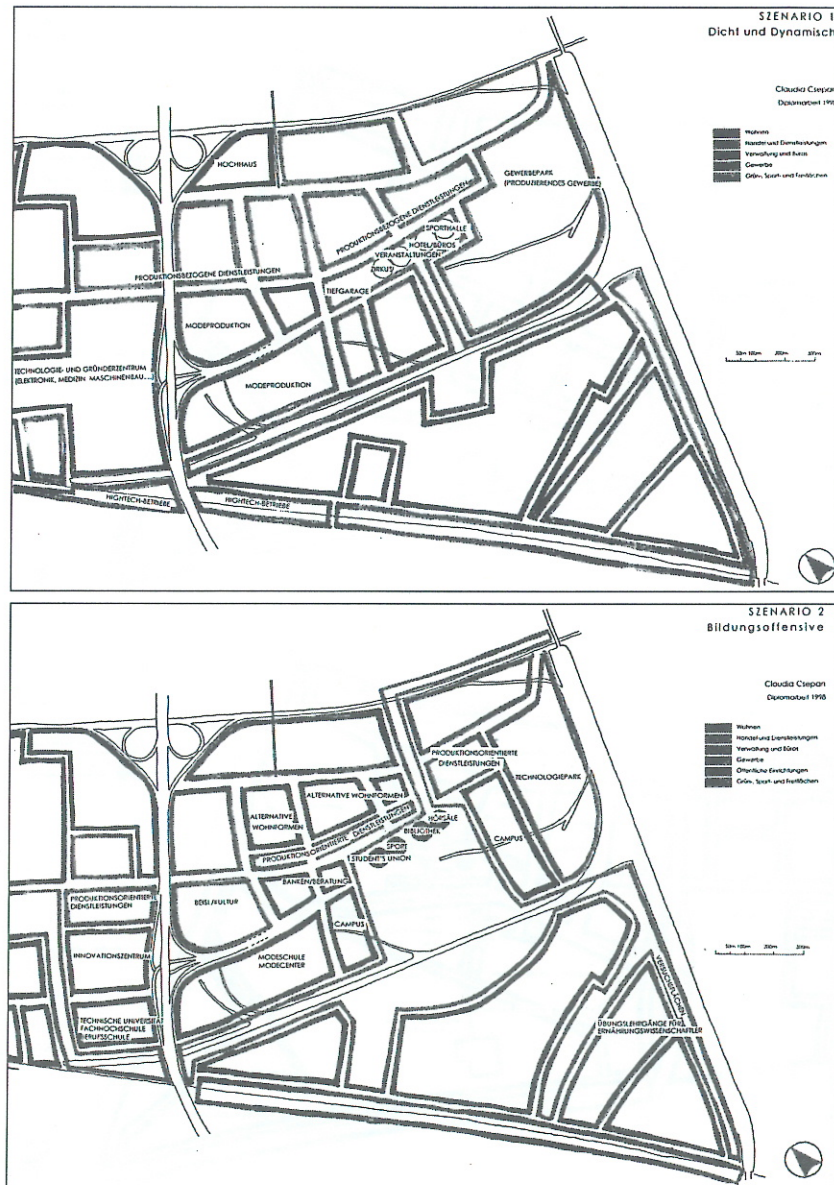
tries, dormitories for lectures or as ateliers.

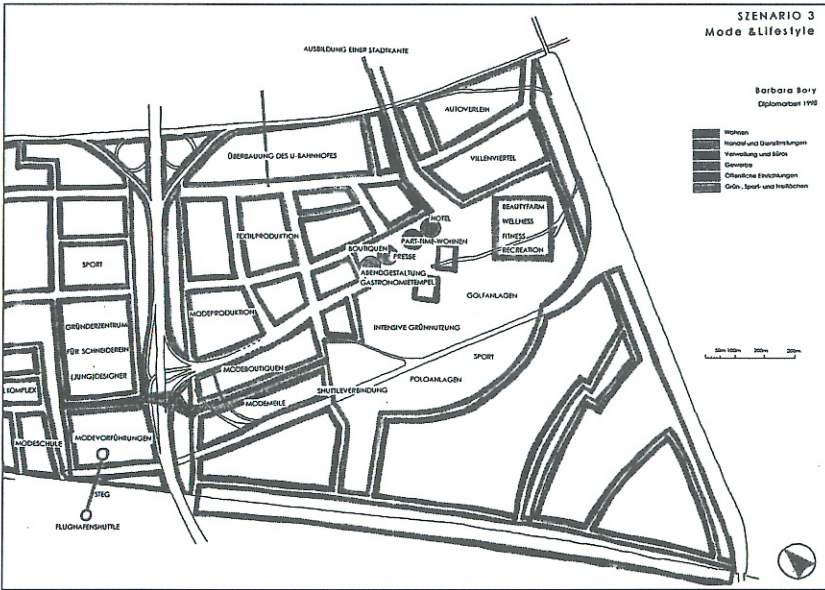
**Scenario 3 Fashion & Lifestyle**  
*Mode & Lifestyle*

The third scenario is developed out of the existing fashion-trading companies and by the youth-cultural activities in the area, which are carried by a centre with regular cultural events and internationally known rave-events in the gasometers. The scenario further aims to utilise the atmosphere of the industrial area, mainly of the Gasometers and the slaughterhouse to create a typical "cool

and trendy" image. The fashion trading companies are restructured into fashion-producing companies. To enable a starting point for young designers, an innovation-centre on the grounds of the slaughterhouse is suggested. This scenario is meant to give Vienna's fashion scene new impulses. The Gasometers play a very important role in this scenario; they are used for expensive apartments and a hotel, which is supposed to suit people "jet-setting" to Vienna and looking for a trendy place to stay, for boutiques and press rooms, and as presentation halls for fashion shows.

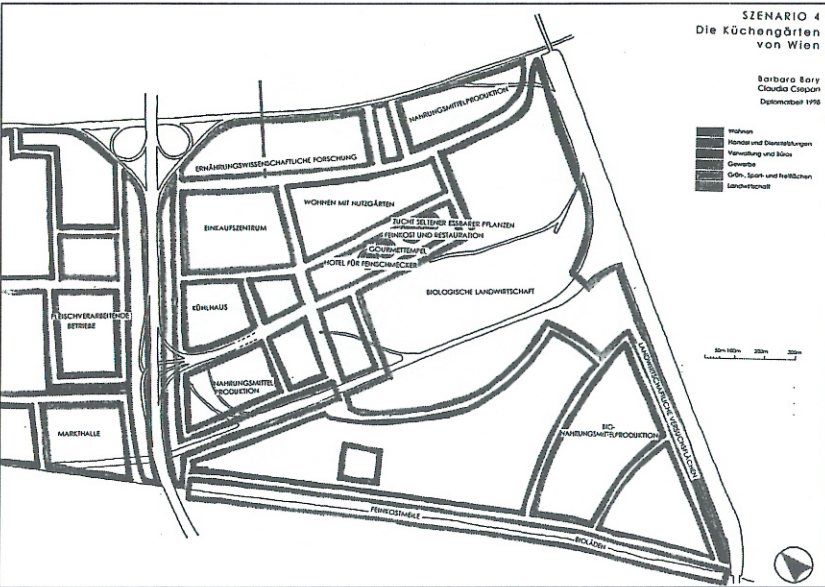
Picture 3: The five Scenarios





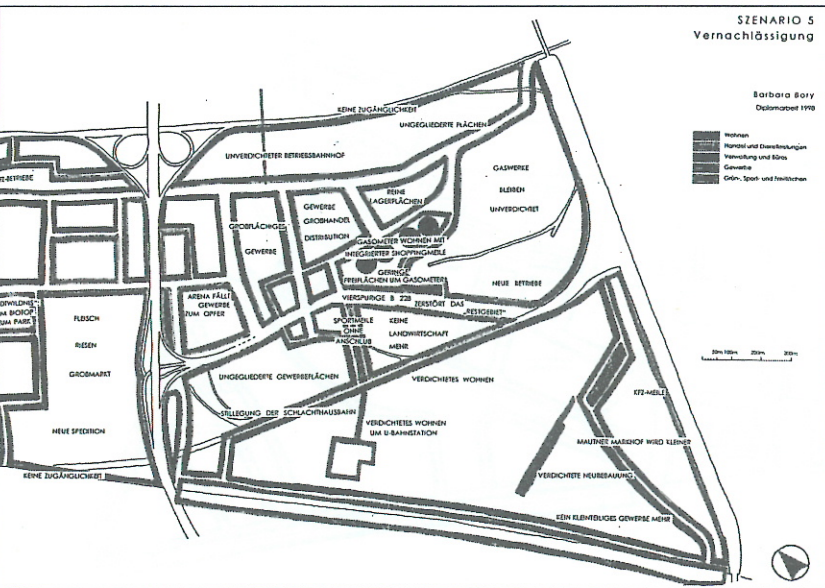
**Scenario 4** The kitchen gardens of Vienna *Die Kuechengaerten von Wien*

The fourth scenario further develops the traditional horticulture, the Meat Market and its adjacent meat-processing companies and the resident food-production company Mautner Markhof. By extending the agricultural use and settling more food-producing companies, the quarter would become the cities centre of food technology and could also play a role in supplying the city with food. The Simmeringer Hauptstrasse, which is one of Vienna's former main shopping streets, but now deeply impaired by periphery shopping centres, could gain a new image by selling diverse food specialties, respectively to sell the locally produced food directly. A market could give the abandoned Cattle Hall a new function. The Gasometers could be used as gourmet-temples with a varied gastronomy, a hotel and a horticulture for rare eatable plants.



**Scenario 5** Neglecting the Erdberger Mais *Vernachlässigung des Erdberger Mais*

The last scenario deals with what happens to the quarter, if no development planning activities gets implemented. Tendencies in developments and existing non-coherent projects are indicated in this scenario. The outcome is a rather realistic, but nevertheless threatening picture of an area, which lost its potential for any high-quality uses. A four lane road is supposed to connect the highway exit with the industrial area southern of the Erdberger Mais. In its planned shape, it would cut right through the area and make any high-quality use impossible. In this scenario, the Gasworks stay in their today's extension, the distribution-oriented companies enlarge while vacant lots stay empty, eventually being sold to an investor who builds (due to the lack of a coherent planning) anything in any shape and function. The Gasometers are used in the



planned mode for housing with integrated shopping mall and underground entrance to the metro, which prevents any interchange with the surroundings. All in all this scenario shows the development of even more segregated areas with few green and open spaces and no improvement of the urban structure.

### 3. Guidelines and Proposals for the Development of the Area

The concerned area is in a bad shape today, hindered by several structural and ecological shortcomings. The sudden improvements in infrastructure and availability of land won't be enough for a better image and thus for a quick and satisfactory improvement of the area.

Comprehensive planning of the entire area is important for two reasons:

It is, more or less, one coherent piece of land (or should be seen as such, otherwise the disadvantaged, cut-off part would never have a chance to actually be a part of the city).

Incoherent speculative developments impairing the potential of the place need to be prevented.

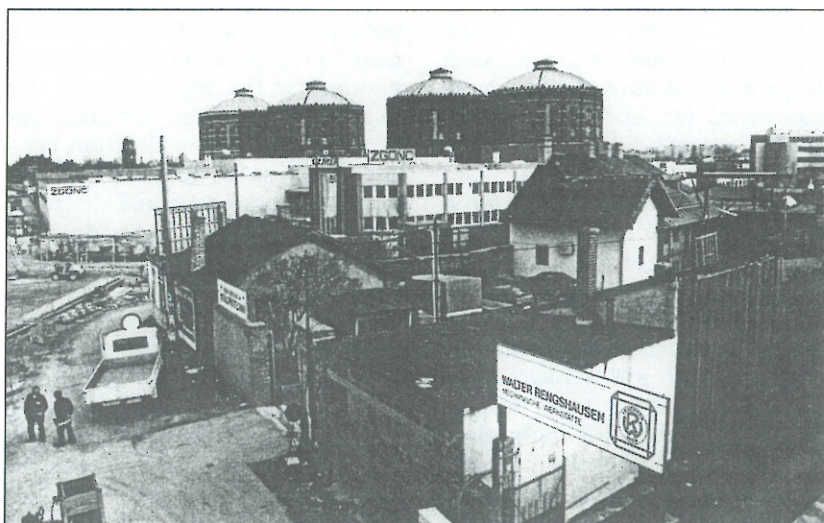
#### Land Use

For visualising the mix of land uses, a particular solution for every situation has to be found. The mixed land use as the principal land use pattern therefore needs to be differentiated, depending on specific circumstances and situations, into desired types of mixtures (trade-oriented, production-oriented, housing oriented, ...). This is supposed to create modified solutions for a site which is on one hand close and well connected with the city centre, and on the other hand heavily influenced by highways, railroads and existing uses. Obviously, be-

cause of its shape it is not easy to attract high quality uses (offices, housing), which would relate to its situation in the city. Therefore, it is very important that the sites' qualities are used to their optimum.

Placing pollutants (e.g. highways) as close to each other as possible, makes protecting-measures easier, and restrains emissions locally (primarily noise). However, it doesn't seem to be realistic to de-

mand a complete mix of uses all over a city; segregation in many places has grown too far. A new method therefore could be, to induce a kind of chessboard - pattern, where mono-structured and mixed uses vary. Existing mono-structured quarters could be completed by mixed areas. Nevertheless, this is just regarded to make sense, when the distance to the next mixed used quarter is not longer than easy walking distance (about 300 m).



**Picture 4:** The industrial part of the "Erdberger Mais" is characterised by a railway connection-line, primarily storage and transport-oriented companies, some horticulture, many fallow or underused plots, and the "Gaswerke Wien" (Gasworks Vienna) with four huge buildings for gas-storage ("Gasometer") and 25 hectares of extensive used land



**Picture 5:** After the removal of the Slaughterhouse, the protected Cattle-Hall and 25 surrounding hectares are left unused

### Urban Structure

The urban structure plays an important role in terms of the ecological quality of a quarter. Sufficient densities in urban areas are necessary to prevent other quarters in the green environment from being needed for developments. Thus natural landscape can be saved by dense urban structures.

Further the structure of urban open space influences the quality of the air and the climate in the city. Taking care of the natural shape and existing structures is important for sufficient airing within the built environment.

The public authority primarily has the duty to enhance quality and quantity of urban space (which means also streets), and of the green space (also in industrial areas). What this means is that existing green spots have to be maintained, and – most important – connected with each other. The character of these connections may vary, but should at least enable the interchange of plants and animals. That requires a certain quality in terms of size and design. New green quarters have to be integrated in this system, until a satisfactory level of green space is reached. It is important not to distinguish the amount of needed green space in working and housing areas.

For the Erdberger Mais this means to keep an existing green "heart" of the quarter, which has been used for horticulture for centuries, and still partly is in this use. By keeping this structure (small houses in a generally green environment) in this specific place, the micro-climate can be maintained, even when the use changes (e.g. housing). When the space is partly public, this part can fulfil also recreational functions. Where the existing structure of the buildings admits it, additional parks need to be placed and connected, because lack of green space is a particular shortcoming of this area.

### Traffic Structure

Traffic and Transport naturally are the topics deeply concerned with ecological matters. The existing highway (actually this is the Sued-Ost-Tangente – the busiest street of Europe) is putting certain limits on measures trying to reduce the negative effects of traffic (emissions, separation, and aesthetics). Still, the inner-quarter transport organisation and its connections with the city can be improved. By situating larger or transport-oriented companies next to the existing railroad-connection or the highway exit the use of those existing facilities can be improved. A distribution centre adjacent to the railway (no long-term storage) could distribute smaller companies' goods. This job could be overtaken by an existing forwarding agency, which is located in the centre of the area, and already has a connection to the railway.

As a further important point, public transport facilities for employees have to be improved. This can considerably reduce the amount of traffic in the quarter, especially if it is combined with a short-term parking policy and an exemption from the rule requiring companies to provide parking lots for employees.

But also the structure of the roads themselves need to be reorganised. Due the development of the area, it's roads today don't communicate any hierarchy, some of them are too small, although they carry much traffic, others appear too big. Due to this system, the traffic is distributed evenly over the entire area. Therefore, a hierarchy of roads needs to be induced, including measures to bundle up the traffic on the big roads, and keep it away from the small ones. This is necessary to prevent the traffic from further impairing the use of the remote parts of the area.

Today's huge blocks make a quick passage through the Erdberger

Mais almost impossible. Planning for pedestrians is an important point in making this area liveable. Therefore, a permeable pattern of paths (50 – 100 meters) needs to be created, which again shows the need of comparatively small lots. Additional roads will be necessary as well, but they are supposed to be small, and passable by car only for inhabitants.

### Design Guidelines

The design of the actual buildings and objects naturally is an important point in terms of ecological aspects. On the other hand, it's not possible to cover all ecological measures in detail, so the requirements stated below should be understood as the absolute minimum of ecological standards, which shouldn't be exceeded (e.g. by demands of the concerned authority) wherever possible. Nevertheless, there are not only ecological requirements which need to be met; in terms of a mix of land uses it's just as important to prevent uses from disturbing each other and thus impairing existing high quality uses.

Since the companies are benefiting from an environmentally sane surrounding, the private sector actually should play the active role. Each owner or investor can contribute to a more attractive and a healthier environment by greening measures (e.g. courtyards, parking-lots, etc.). Energy waste should be prevented by building good quality buildings, which don't need air-conditioning and exaggerated heating. Rain is supposed not to be induced in the sewage system, and greening of roofs and facades can help in improving the micro-climate as well as the visual aesthetics of the buildings. These guidelines especially addresses companies and works, which usually do not meet any of those standards.

The public authority on the other hand is demanded to support individual endeavours of using so-

lar energy and respectively re-using rain-water. Of course it is also demanded to fulfil the same requirements in its own buildings and in the construction of public space, e.g. the greening of streets and public spaces.

#### 4. Project-oriented Implementation

Considering what was said in the beginning, the implementation of the guidelines and proposals should be project-oriented. Nevertheless, there should be an umbrella project, where general directions and guidelines are set. The people responsible should come from the public (city planning office, various departments, official representatives of interest,...) as well as from the private sector (investors, landowners, ...).

Due to the size of the Erdberger Mais, it is suggested, that after a starting period, the project should be divided into several sub-projects (with their own responsible persons and their own budgets), which again have different priorities. This makes many of the proposed projects affordable and also keeps the structure flexible enough to react to changing circumstances.

Each of the sub-projects is supposed to have complete organisational freedom within the set framework. Two initial-projects can be confirmed: the Slaughterhouse and the Gasometer. Because of their prominence both in appearance and in situation, they need to be dealt with first. Further, their development will supposedly have a strong effect on the surrounding places ("Snowball effect"). The detailed planning of each sub-project should be done together with inhabitants, owners and users and of course the local authority. The planning authorities can steer the development through subsidies, contracts, and legislation.

#### Step by step with final quality

It is essential, that each step in the project's progress has the quality of a final step. This means that if at a certain time construction stops, the quality of the already built up areas mustn't appear as an intermediate result. Thus, adjacent areas to already built up quarters should be developed first, and the projects should only have a size which enables the project manager to provide the necessary infrastructure and facilities. After each construction phase a coherent piece of the city should emerge, which does not necessarily need another not yet built-up piece to function.

#### 5. Conclusion

Today's planning issues shifted from the green field developments of the last decades to inner-urban brown field development. Former industrial, military or railway areas need now to be redesigned for new uses. In this context, it seems to be clear, that the way of dealing with urban areas shifted as well. The segregation of uses has alternated into a mix of land uses having the advantage of higher quality of living, less traffic, and a generally more flexible urban structure. The last is important, because the quality of an urban quarter is not only defined through aspects of design and accessibility; it also demands sustainable structures to be flexible and robust enough to face changes and problems occurring due to economical and social changes.

Nevertheless, compared to the mono-structural development of the last years, this approach seems to be rather difficult in terms of implementation. Not only organisational matters like the private involvement into the planning process, but also the planning itself, the visualising of the planning ideas, is getting more difficult the more differentiated the desired structures are. In any case, the co-operation between

the public and the private sector is essential for the organisational implementation.

Therefore, a shift towards more project-orientation in the planning practice should take place in order to enable a flexible development of urban areas. To implement development planning, the division of large urban developments into several sub-projects and the co-operation between the public and the private sector is essential to differentiate activities with regard to time and priority. This should make affordable, flexible, and coherent developments possible, which continuously improve the concerned quarter ecologically and economically.

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#### Note

The article is based on a thesis written by Claudia Csepan and Barbara Bory at the Institute of Urban Design and Urban and Regional Planning at the Vienna University of Technology.

#### Literature and Sources

- Buero fuer Stadtplanung und Stadtforschung, Rahmenplanung Gewerbegebiet Gruener Weg - Aachen, Dortmund 1996.
- Feldtkeller, A.: Wohnen und Arbeiten in der Stadt. In: Die Stadt der Zukunft, Dokumentation des 5. Internationalen Kongresses fuer Altstadt und Baukultur, Ministry of Urban Development, Culture and Sports of the Land Nordrhein Westfalen (Publisher), 1996.
- Hoffmann-Axthelm, D.: Anleitung zum Stadtumbau, Campus Verlag, Frankfurt 1996.
- Peterek, M.: Staedtebau ist mehr als nur 'vergroesserte Architektur'. In: Die Stadt im Diskurs, Beitrage zur aktuellen Staedtebaudiskussion, Karlsruher staedtebaul. Schriften, Band 5, Karlsruhe 1994.
- Schultes, W.: Standortmarketing und Projektentwicklung, Lecture at the University of Technology Vienna, 1996.
- Wachten, K.: Ueber das Verhaeltnis von Stadtplanung und Development. In: Die Stadt der Zukunft, Dokumentation des 5. Internationalen Kongresses fuer Altstadt und Baukultur, Ministry of Urban Development, Culture and Sports of the Land Nordrhein Westfalen (Publisher), 1996.