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Local Agenda 21 and ecological urban restructuring: An European model project in Leipzig

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FS II 97-408

**Local Agenda 21 and
Ecological Urban Restructuring**
A European Model Project in Leipzig*

by

Ekhart Hahn and Michael LaFond

*Current observations on a Science Center Berlin (WZB) research project on ecological urban restructuring (1988-1991) with an example and in connection with the current discussion about AGENDA 21.

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Abstract

AGENDA 21 as one of the final resolutions of the UN Conference on Environment and Development (UNCED) in June 1992 in Rio de Janeiro stresses in chapter 28 the important role of cities, towns and communities in globally "sustainable development". One of the most important European model projects in this respect was carried out in Leipzig from 1993 to 1997. The "Leipzig Ostraum Project" was supported through the LIFE support program of the European Union with the largest subsidy awarded till that time (4,3 mill. DM, with a total project budget of about 20 mill. DM).

The central goal of this project is the use, testing and further development of present knowledge with regard to sustainable urban restructuring in combination with innovative strategies of economic and employment policies. The scope of traditional urban ecology is extended to comprise adjacent rural areas and to revitalize regional material flows. In the meantime, affiliated projects have won support by the THERMIE program of the European Union and the EXWOST-program of the German Federal Ministry of Construction.

This paper reports on the most important results of the Leipzig Project to date. In particular, the authors show that the concept of "ecological urban restructuring" and the "Local Agenda 21" are in harmony with one another and can play a decisive role in stimulating consensus on future urban development. All urban actors can be "winners" in this process. Difficulties arose, however, through dishonest use of financial support by the project agency.

Zusammenfassung

Die AGENDA 21, Abschlußdokument der UN-Konferenz über Umwelt und Entwicklung im Juni 1992 in Rio de Janeiro, betont in ihrem Kapitel 28 die Rolle der Kommunen, Städte und Gemeinden bei einer global "zukunftsfähigen Entwicklung" (*sustainable development*). Eines der wichtigsten europäischen Modellprojekte zu diesem Thema wurde in den Jahren 1993 bis 1997 in Leipzig durchgeführt.

Zentrale Zielstellung des mit der bisher höchsten Fördersumme aus dem LIFE-Programm der Europäischen Kommission (4,3 Mio DM bei einem Projektvolumen von knapp 20 Mio DM) geförderten "Leipziger Ostraum-Projektes" ist die Anwendung und Weiterentwicklung des Erkenntnisstandes zum Thema des zukunftsfähigen Städtebaus in Kombination mit innovativen Strategien einer ökologischen Wirtschafts- und Beschäftigungspolitik. Die traditionelle Stadtökologie wird erweitert durch die Einbeziehung der Umlandgemeinden und die Revitalisierung regionaler Stoffkreisläufe. Inzwischen sind ergänzende Tochterprojekte mit Förderung aus dem THERMIE-Programm der Europäischen Kommission und dem EXWOST-Programm des Bundesbauministeriums eingeworben werden.

In dem Paper wird über die wichtigsten bisherigen Ergebnisse des Projektes berichtet. Insbesondere wird gezeigt, daß die Konzepte des "Ökologischen Stadtbaus" und der "Lokalen Agenda 21" miteinander harmonisieren und eine konsensstiftende Funktion in der zukünftigen Stadtentwicklung übernehmen können. Alle städtischen Akteure können "Winner" in diesem Prozeß sein. Durch unredlichen Umgang des Projektträgers mit den Fördergeldern war das Leipziger Projekt in jüngster Zeit allerdings in Schwierigkeiten geraten.

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1. Preface

The AGENDA 21 as a final resolution of the UN conference on environment and development (UNCED) in June 1992 in Rio de Janeiro stresses in chapter 28 the important role of cities, towns and communities in globally "sustainable development". Following this, the 169 signatory countries, including the Federal Republic of Germany, agreed that every municipal authority should carry out a consultation process with all representatives of its citizens by 1996, in order to build a consensus on effective programs of action for sustainable development. In this respect an issue has again become topic, that already was the focus of a research project at the Science Center Berlin (WZB) in 1988/91: ecological urban restructuring.*

In 1997, which lends itself as "Rio + 5" to being a year of taking assessment, almost all assessments have come to the conclusion that at the local, the national as well as the international level there exists a huge deficit in carrying out the commitments agreed upon at Rio, so that the dangers for the future of our living environment continue to increase. In Germany for example, no municipality has presented a ratified Local Agenda 21 following the Rio commitments, and there are only a few examples of cooperative programs of action being set up and running. In this situation two questions are of special interest:

1. Are cooperative programs of action following the goals of ecological urban restructuring or AGENDA 21 at all feasible at the local level?
2. Which conditions, procedures and instruments are necessary for the successful implementation of such programs of action?

Both questions were at the core of the WZB research project mentioned above. The results of a recent case study, containing interesting empirical impacts concerning this topic, can now be presented.

*Ökologischer Stadtumbau. Großstädtische Umweltprobleme und stadtteilbezogene Umweltstrategien in unterschiedlichen Gesellschaftssystemen - Eine internationale Forschungskoooperation, gefördert durch die Volkswagenstiftung, Project director Dr. Eckhart Hahn.

2. Ecological Urban Restructuring and Agenda 21

2.1 Ecological Urban Restructuring

(1) In the early 1980s author Ekhart Hahn formulated the hypothesis that the current environmental crisis is intimately related to the evolution of industrial society's urban culture with its particular technologies, supply and waste removal systems and life styles. Cities are now expected to play a key role in the ecological adaptation and restructuring of industrial society. With this perspective we find ourselves in an early phase of a comprehensive rethinking of urban planning. "Ecological Urban Restructuring" is seen as one of the central challenges of the 21st Century and the heralded post-industrial age. These statements are based on arguments such as the following:

(2) Our expansive, modern urban culture is now caught in a seemingly unresolvable conflict with limited resources and ecological life support systems. This culture is characterized by historically unknown, ecologically destructive levels of the consumption of energy, materials, water, soil, and land surface area. As a rule, cities are dependent on extremely high material and energy imports, and produce and export equally high volumes of wastes and pollutants. Urban systems are transformers of valuable natural resources into dangerous wastes and garbage. These processes have been accompanied by a decreasing efficiency in the use of resources and an associated increase in uncontrolled and uncontrollable hazards, the effects of which are sometimes only noticeable after considerable time lags.

(3) Directly related to the development of industrial society's urban technologies are the problem complexes of climate change and CO₂, the globally alarming increases in unemployment, the decreasing opportunities for individual human development and expression, and an increasingly poor and simplified sensory world for human habitation. Also in this context is the growing poverty found in the 'developing' and 'least developed' countries. Cities can thus be understood as a central causal mechanism of the increasing local, national, and global environmental problems.

(4) At the same time, cities and industrial urban agglomerations are also the places where the ecological crises must be solved. They are the centers of life, production and innovation for industrial society. They represent a significant built form of human-environment relationships. Cities are "constructed thoughts"; urban life-styles are an expression of consciousness and an interaction between culture and nature. In cities

we see an intensification of the contradictions between socio-ecological and technological developments, and at the same time we see new solutions being discovered.

(5) These concerns and reflections led to the organizing of the "Berlin Start-up Phase for Ecological Urban Restructuring." Initial pilot projects were realized and theoretical foundations developed with the support of the Berlin Senate, the International Building Exhibition (IBA), and funding from the Federal Building Ministry's Program for "Experimental Housing and Urban Planning" (ExWost). Between 1988 and 1991 the theoretical and practical concepts for Ecological Urban Restructuring were scientifically elaborated through the context of an international cooperative research project at the Social Science Center Berlin (WZB). Following is a summary of the central findings:

1. Ecological Urban Restructuring can not be realized within the framework of contemporary sectoral environmental politics. Strategies which integrate departments and issues are required to overcome the dead-end of linear thinking and acting. Only in the complementary networking of measures from the range of fields do we find the necessary economic effectiveness, ecological efficiency and social acceptance. Through this networking, qualitative improvements are possible for urban environments, which when achieved would further help to motivate and inspire changes in life style.

2. Ecological Urban Restructuring offers significant opportunities for innovative and environmentally-oriented economic processes, for the creation of employment and other situations for individual and collective expression. Such strategies can only succeed when accepted as a common challenge by all local actors and interest groups (residents, NGOs, local government, businesses, etc.). With new forms of co-operation and co-production it will be possible to activate the atrophied and dormant self-help potentials, and overcome paralyzing administrative structures and destructive patterns of consumption.

3. Key actors are expected to be citizens, NGOs and innovative business people. These have been the driving forces of the ecology movement and are expected to remain so in the creative and cooperative processes of ecological urban restructuring. With respect to some exceptionally engaged officials, it can be expected that politicians, local governments and traditional public interest institutions will more likely continue to function as representatives of the outdated linear administrative structures.

4. Key spatial levels for the practice of Ecological Urban Restructuring are city neighborhoods and districts, in which daily human activities take place with all their

interconnected social, economic, and ecological aspects. Lifestyles are influenced and cultural, human-environment relationships are materialized here in terms of daily patterns of consumption, recreation, mobility and investment. It is at this level that infrastructures, technologies and educational systems must be incrementally adapted to ecological and social requirements. Demonstrations of a new quality of urban life will emerge through the various alternative ways of dealing with energy, water, waste, transportation, buildings and open spaces, etc..

5. Great importance is given to new forms of international cooperation and reciprocal support between local initiatives and projects. Processes such as Ecological Urban Restructuring may characterize the beginning of a global "Age of Experimentation and Learning." Although significant activities are expected to be found at the local level, they will be influenced by an intensification of international exchanges. Emphasis is placed on an international sharing of knowledge and experiences, and reciprocal support for the implementation of technical, social and structural innovations. The global responsibilities of local actors thus become comprehensible through a global networking of local efforts.

2.2 Local Agenda 21

(1) The central role of the local initiative in the solving of global environmental problems was recognized in many parts of the world in the 80s and early 90s, as noted by national and international discussions. Such local efforts maintained the quality of a shadow presence however until the Rio Conference on Environment and Development in 1992 (UNCED, or "Earth Summit").

(2) It was convincingly argued in the discussions and working groups in Rio that the many national commitments were only to be achieved through the active participation of communities and the various actors found at the local level. It was acknowledged that reciprocal relationships between national and local activities were indispensable. Accordingly, the countries which signed on agreed that next to the national agendas an equal weight needed to be placed on local agendas. This is expressed by the following statements found in Chapter 28 of the AGENDA 21 document of the Rio conference, which was signed by 170 Nations:

"Because so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities, the participation and cooperation of local authorities will be a determining factor in fulfilling its objectives. Local authorities construct, operate and maintain economic, social and environmental infrastructure, oversee planning process; establish local environmental policies and regulations, and assist in implementing national and subnational environmental policies. As the level of governance closes to the people, they play a vital role in educating, mobilizing, and responding to the public to promote sustainable development." (Chapter 28.1)

"Each local authority should enter into a dialogue with its citizens, local organisations and private enterprises and adopt "a local Agenda 21." Through consultation and consensus-building, local authorities would learn from citizens and from local, civic, community, business and industrial organisations and acquire the information needed for formulating the best strategies. The process of consultation would increase household awareness of sustainable development issues. Local authority programmes, policies, laws and regulations to achieve AGENDA 21 objectives would be assessed and modified, based on local programmes adopted. Strategies could also be used in supporting proposals for local, regional and international funding." (Chapter 28.3)

"By 1996, most local authorities in each country should have undertaken a consultative process with their populations and achieved a consensus on „a local Agenda 21" for the community." (Chapter 28.2)

(3) In response to these agreements a variety of projects were initiated around the world. According to the "International Council for Local Environment" (ICLEI) in Toronto, as of March 1997 more than 1,800 cities and communities in 64 countries had officially begun Local Agenda planning and consultation processes and produced preliminary results. In 44 other countries corresponding measures have been introduced. Most of the work to date has been done in the richer, industrial nations, with 90% of the registered Agenda activities taking place in communities of Canada, Australia, USA, Japan and western Europe. Formal Agenda activities were registered by 15 communities as of early 1997 in the group of the poorest nations. (ICLEI, 1997)

(4) Initial Local Agenda projects were begun in Europe immediately after the Rio conference. In some communities this meant building off of existing work and initiatives. Expansion into a European-wide campaign took place in 1994 with the first "European Conference on Sustainable Cities and Towns," held in Aalborg, Denmark. Coming from

30 European countries, more than 600 representatives of cities, international organizations, governments, associations, and scientific institutions participated in this conference which was sponsored by the European Commission and the City of Aalborg and organized by ICLEI. A "Charter of European Cities and Towns Towards Sustainability" (Aalborg Charter) was approved and signed immediately by representatives of more than 80 European communities. By Spring of 1997 the number of signatory cities had risen dramatically to more than 300. A variety of national and international follow-up conferences have since been held, and many local initiatives have been inspired. The collaboration in Europe is supported by six international city networks, which in many countries are further complemented by those at the national level. A "Second European Conference on Sustainable Cities and Towns" was held in Lisboa, Portugal in 1996. The results presented at this conference regarding the practical progress made on Agenda 21 at the local level were unfortunately rather sobering.

2.3 Implementation Problems

(1) The Lisboa findings, as with diverse other international and national studies regarding Agenda 21, make it clear that there are at least two sides to this history. On the one side are the conferences, the joining of city networks and the celebrated signing of commitments to reduce CO₂ emissions and other conventions from Rio. On the other side is the introduction of concrete measures necessary to achieve these objectives. Often these sides have little to do with each other, or even stand in dramatic conflict to one another. Because of this, there were very few examples of practical success presented at the Lisboa conference. The typical case was characterized by the achievement of non-binding declarations, with little follow-through into practical implementation.

(2) The German "Forum for Environment and Development," as the central coordinating group of the country's Agenda 21 related NGOs, has published a report, "Fünf Jahre nach Rio," which reviews the five years following Rio. In this the following conclusion was reached: "No industrial country has yet to assume a believable role as a forerunner in seriously beginning to change its resource devouring and environmentally destructive patterns of production and consumption."

(3) Regarding the actual situation in Germany, a number of initiatives were identified in the report as making positive contributions to isolated problems, but altogether the

following conclusion was reached: The basic principle of Chapter 8 of Agenda 21, which is an integration of environment and development objectives, has not been realized by the German Federal government... Environment and Development are considered, as before, as departmental and not as cross-sectional challenges... ." In drawing a balance of the Agenda 21 process, the Forum Environment and Development has concluded that in the Federal Republic the Local Agenda process will be primarily initiated by "...local citizens' initiatives, environmental and third world organizations, churches, and motivated individuals... In comparison with the Netherlands, Denmark and Great Britain, the process in Germany has gotten off to a sluggish start, and except for a few popular examples, has received very little support from either local or federal level government."

(4) A primary explanation of this was found to be financial and political structural inflexibility. In this regard it is stated that "Environmental and social programs are often being labled as burdensome expenses, as the economic austerity policies introduced to reduce budget deficits are typically determining the political course of communities... Thus it comes as no surprise that funding has been made available for the Agenda 21 process in so few communities. "Without the financial and political support of the cities, the many Local Agenda processes now underway have no chance of surviving." Political and institutional obstacles are characterized as follows: "Local Agenda projects, where they are organized, typically emphasize environmental protection. This is a reflection of what has not succeeded at the national and international levels as well: the integration of economic, social, ecological, and gender specific concerns..." *

(5) Criticism is also directed at the Federal government for not taking practical Agenda activities seriously, but rather for often taking actions which are counter productive: "The cities need a political and economic context which in some way begins to make decentralized, sustainable actions possible. The Federal government has instead been making gestures which are dramatically contradictory to this (i.e. revised energy regulations, tax reform strategies, false price signals for gas and energy, etc.)".

* Second European Conference on Sustainable Cities and Towns, Lisboa, 6. - 8. October 1996

(6) While Local Agenda processes in Germany were in at least some cases begun with great enthusiasm, now increasing pessimism and doubt are being registered. This uncertainty could already be noted at the first national "Conference of Cities and Towns for the Implementation of the Local Agenda," held in October 1995 in Berlin's Köpenick District. A paper was published by ICLEI and Köpenick which summarized the findings of this conference (Marz, Zimmerman, 1996)*:

- Only the future will reveal whether the articulated political resolutions will actually be used to redirect local policies, or rather end up disappearing in filing systems. It is difficult enough these days to craft a resolution supported by a political majority, but the situation of those in the administration who are responsible for implementation is even more complicated. These people are burdened by extreme expectations, both from internal and external sources. They are further aggravated by finding new tasks lying on their desks, when they are already stressed by personnel and other workplace reductions.
- The production of an LA 21 requires a process that is to a considerable degree departmentally overlapping and that involves the public.
- It is difficult to comprehend the scope of the whole process. How to adequately respect the ambitious goals of sustainable development with respect to ecological, social and economic concerns, without placing the success measures out of reach? How to be sure that LA 21 processes do not drag on too long or become too stressful, so that the once motivated participants fall away?
- It is the beginning that is difficult for many. What should be the first steps? How can goals and expectations be defined in such a way that they are achievable in a predictable time-frame? Which interests need to be integrated?
- Exchanges of experiences beyond the community boundaries take on a significant meaning in a process with so many questions. This can be seen in the large number of requests for information directed toward cities that are known to have experiences as well as toward other institutions such as ICLEI.
- It becomes very quickly clear that a serious LA 21 process at the community level is not to be undertaken without expense. Among the various expenses which can not be underestimated are of course work hours, but also travel costs to exchange experiences, space rental for citizen gatherings, printing of publications, and support from external experts such as facilitators.

* ICLEI Informationspaket zur lokalen Agenda 21, Erste LA 21 - Tagung für Kommunen in Berlin - Köpenick, 11. - 12. October 1995

(7) Reports of this kind from actors at the micro-level are confirmed by corresponding studies done at the macro-level. For example, U.E. Simonis of the Social Science Research Center Berlin (WZB) and for many years a member of the German Advisory Council on Global Change (WBGU), produced a relevant report in 1996 evaluating implementation of the Rio documents, in which it states that "Almost all ecologically significant global trends, from the consumption of energy, water and resources to the emission of climate-changing gases, and from the loss of species diversity to the population growth rates, continue to indicate movement in the wrong direction..." (Simonis 1996). Such conclusions are also confirmed by recent reports of the European Environment Agency in Copenhagen regarding the situation in Europe (EEA 1996), and the current report of the World Watch Institute, "State of the World 1997".

2.4 Procedure and Case Study

(1) A review of Local Agenda 21 activities has led to the following conclusions:

1. A significant breakthrough in the discussions and thinking regarding local environmental politics has been achieved with the Rio Conference and Agenda 21, the Aalborg Charter, the Climate Association of European Cities, and diverse other events and resolutions. This has meant a variety of new chances for local environmental activities.

2. Up until now it has not been possible to take advantage of these new chances, and to further develop the non-binding, voluntary commitments into concrete measure and practical strategies. Neither has the Federal government begun to create the necessary contexts, which were agreed upon in Rio, nor are the local governments ready to come up with the extra financial and other resources. What remains are the minimal measures that neither achieve the Rio goals nor accomplish a transformation in urban planning and local environmental politics.

3. There exists a great need for practical demonstrations which illustrate the feasibility of an integrated and sustainable urban development. These examples are necessary to inspire other visions, and to help address the questions which are emerging from the current atmosphere of futility and resignation in which many local groups find themselves:

- How to get started? Who can initiate the process?
- What do we need to pay attention to?
- What is the role of local government?
- How can the Local Agenda be something more than a new environmental program?

(2) A few comments about the role of the local government, as it is considered important by the author if the current deficits in implementation are to be overcome. In this question there are definite differences compared to the results of the Science Center Berlin (WZB) research and to the empirical experiences of urban restructuring on the one hand, and to the Rio recommendations on implementing the local agendas on the other hand.

It should first be pointed out, that it is generally agreed that only integrated, cooperative thinking and action can be successful in reaching the goal of sustainable development at the local level. It is also generally agreed that local government must play a key role in this process, because it has important personnel, organizational and logistical resources at its disposal and represents a broad spectrum of citizens. However, there exist different opinions as to how to design effective procedures for cooperative programs of action involving the public.

(3) In AGENDA 21 the local government is explicitly named as the leader of the procedure of the local Agenda 21 program of action.

"Each local authority should enter into a dialogue with its citizens, local organisations and private enterprises and adopt "a local Agenda 21." Through consultation and consensus-building, local authorities would learn from citizens and from local, civic, community, business and industrial organisations and acquire the information needed for formulating the best strategies." (AGENDA 21, Chapter 28.3)

The view of the leading role of local government is stressed in the information material on the local Agenda 21 published by the ICLEI European Central Office. The recommendations for action included in the chapter on "Procedure" suggest:

„ The initiative should originate with local policies and government. The task formulated in chapter 28 of AGENDA 21 is aimed at the community, i.e. at the unified citizens with their political and administrative organs. This means that at least in those places where the impulse does not originate with the local groups, the initiative for making up a local agenda 21 should come from the local government. "

„ The local government should further organize and coordinate the process, without giving priority to its own interests or rigidly determining contents and methods. This requires a new understanding between citizens and authorities from the participating actors.“ (ICLEI 1996)

(4) In the practice of local politics, according to our experience, these recommendations usually lead to a single department being entrusted with coordination of the procedure. Under these conditions there can hardly be effective cooperation with other departments and other municipal actors. This means the continuation of previous "ecological policies", with which little can be achieved.

In addition, the "principle of consultation" mentioned in chapter 28.3 of AGENDA 21 for the participation of other urban actors is considered as insufficient. Experience shows that until now citizens' groups, nongovernmental organisations and individuals have been the driving forces behind ecological changes; ecologically oriented firms can be added to this list. They should therefore be integrated into the procedure as equal partners.

(5) According to the insights and empirical experiences of urban restructuring the local government is not suitable to leading the process, in spite of its central position in the whole process. This is not because of a lack of competence or of good will among the responsible persons or their staffs. On the contrary, dedicated experts, valuable knowledge and effective working structures exist there, which are indispensable for realizing the local agendas. Structural reasons instead make cooperative thinking and action in local government especially difficult. These include: linear distribution of tasks and responsibilities, departmental budgeting and success auditing and the structural "pressure" to safeguard departmental power and spheres of influence in times of limited budgets these factors are even more prevailing. The following procedural recommendations were developed for action strategies for urban reconstruction:

1. Urban ecological concepts require an independent project organisation. Only in this way can effective cooperation between the different administrative departments and the other relevant actors succeed.

2. Procedural and mediation instruments have to be developed, which create the suitable conditions for equal forms of cooperation and co-production among the relevant players for the measures and processes of ecological urban reconstruction (or local agendas).

3. It is considered necessary to set up an "eco-station", a new type of urban infrastructure aimed at information, communication and self-help processes at the local level.

By creating such conditions, as the research results of ecological urban reconstruction show, collective strategies of action in cooperation with the different authorities and other urban actors can arise.

About the Case Study:

(6) The goal of the Leipzig model project described below was the initiation of a long term program of action for urban reconstruction with objectives predominantly or completely identical to those of AGENDA 21 or the Aalborg Charta. To implement the project the European Commission supported it through its LIFE support instrument with the largest subvention awarded till that time (2,155 ECU). Following procedure a departmentally independent project organisation was developed, applied for and accepted by the European Commission.

(7) An important component of the project was the use and testing of procedural instruments, specially developed for the effective cooperation with different departments of the local government and other urban actors. These are individually examined at the end of the case study (cf. chapter 3.5). A further procedural goal was the realization of an "eco-station" as a support infrastructure for the middle and long term coordination of ecological reconstruction processes at the local level (cf. chapter 3.4.3).

(8) A serious problem arose from the fact that the independent project organisation was not realized as envisaged. Instead, the City of Leipzig delegated the department responsible for work programs (ABM-Stützpunkt für Beschäftigungsförderung, Eigenbetrieb der Stadt Leipzig) as project agency and charged it with extensive authority. The European Commission accepted this, believing that the City of Leipzig had good reasons for this decision and that the inter-departmental aim of the project was not endangered. This, however, did not occur.

(9) When roughly half of the funded three year period was over, the European Commission saw itself forced to stop funding and order an external evaluation, due to the suspicion that aims, funds and procedural instruments were being manipulated to the advantage of the delegated department. The investigation has in the meantime confirmed the suspicion. A decision as to how to continue the project has not been taken as of June 1997, after an interruption of almost a year.

(10) Disregarding these problems it is worthwhile to report current project results, because they offer a diverse range of methodical and substantive insights into the process of the Local Agenda 21 and also regarding a further development of Ecological Urban Restructuring concepts.

3. European Model Project in Leipzig

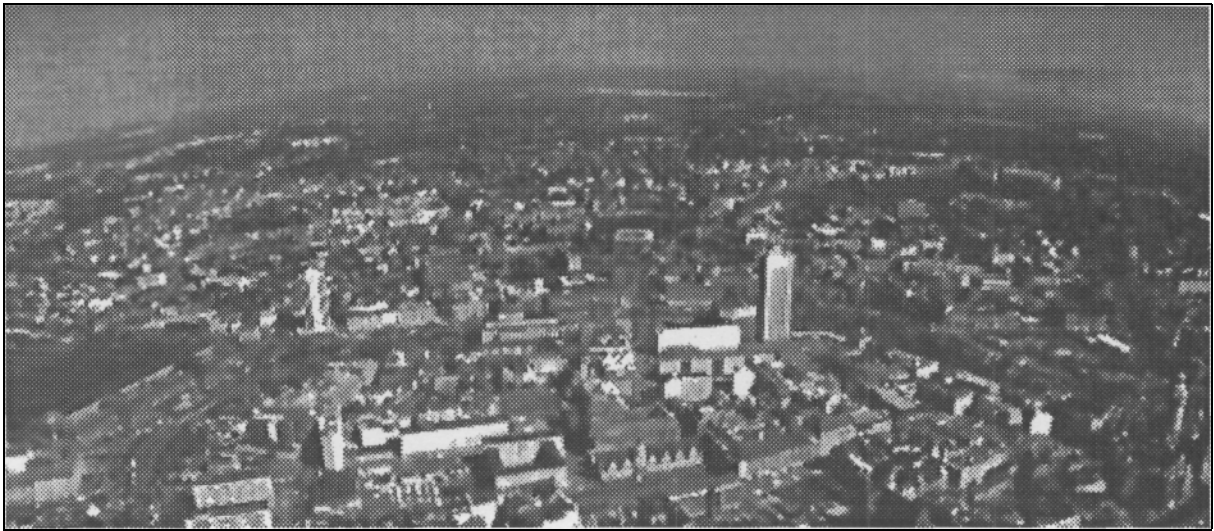


Illustration 1: View of Project Area

3.1 Situation in 1991/92

(1) The City of Leipzig went into the 1990s with conditions that were generally typical of East German cities. About 80% of the older buildings and 60% of the total housing stock were characterized as being in a poor condition. After WWII aging buildings were typically maintained only to meet minimal functional standards. It was common to see leaky roofs, peeling facades, water damaged and molding walls, and missing balconies. Because of this, entire streetscapes were demolished. Approximately 60% of the apartments in Leipzig had no functional bath. Building mechanical systems (water, waste water, electricity) and the heating systems were outdated and usually also in bad condition. The central city supply and waste removal systems, streets and public transportation, as well as public parks also were in great need of renewal.

(2) Real unemployment in 1993 was over 30%. A good percentage of the businesses that were operating prior to 1990 were not able to adapt and survive in the market economy of the West.

(3) Urban air quality in East German cities was burdened by industrial emissions (in particular SO_2), and although this improved due to the closing of many factories, it still remained worse than in comparable West German cities, (see Umweltbundesamt: Daten zur Umwelt 1992/93. p. 267f., 273, 276f.).

(4) Local government was weighed down by a range of problems. Missing almost entirely were planning instruments necessary to guide investment activity, such as comprehensive plans and building permitting processes. Further complicating things in many cases were the unresolved questions of property ownership, for example where past owners placed claims on buildings they had lost or left behind.

(5) At the same time a number of positive factors could be identified in Leipzig along with these deficits. Along with the problems were significant opportunities for initiating Local Agenda 21 processes and sustainable forms of urban design and planning. Noteworthy in this light are the generally well preserved historical street and neighborhood patterns, and in contrast to West German cities the adjacent countryside was largely undeveloped. River flood plains and meadows, expansive agricultural fields and valuable historical villages characterized a cultural landscape that ran directly up to the borders of the dense urban neighborhoods. These land-use patterns for the most part still reflected a pre-war phase of development.

(6) The conditions of political transformation and reunification led to a particularly constructive working relationship between citizen initiatives and local government. In the early 90s there was an awareness that many problems were only going to be solved through cooperative processes, and so people searched for new kinds of partnerships. Consultative processes were organized, including seminars bringing together local and outside experts, to work on specific problems and projects and develop answers in response to the challenges of ecological urban development.

(7) In spite of this special situation and outside events such as the Rio Conference, it soon became clear that the creative transitional period would come to an end. A city bureaucracy was in the process of establishing itself after the model of cities in the West. And so in order for the projects to progress which had already been initiated, it became necessary to create a new development framework specially adapted for this situation.

3.2 Idea and Concept of the Leipzig Ostraum Project

(1) The Leipzig Ostraum (eastern region of Leipzig) Project was conceived between 1991 and 1992 by the author and the Leipzig doctor and citizen rights activist Dr. Christoph Richter. The idea was to bring together a number of citizen initiatives that were organized after the opening of the border between East and West Germany, integrating these projects into a "demonstration of ecologically-oriented, urban-rural development." These various initiatives were otherwise in danger of falling away, and so it was planned to seek external support for their continuation.

(2) Twelve projects were selected because of their particular issues and geographic situations. By integrating these projects a foundation was created for the envisioned regional demonstration project.

(3) In spite of the commitments made in Rio and elsewhere, the support for such demonstration projects was waning by political decision-makers and City administrators. This was attributed to budget deficits, overworked staff, and an increasing orientation toward the traditional West German administrative model. In order to be politically feasible and gain approval from City agencies, the project was conceived according to the following principles:

1. The concerned officials would only be expected to give their approval to the project after being convinced that it would in no way lead to extra workloads. If the project were to lead to extra work, then it would at least have to mean an increase in prestige and status.

2. In particular, the Project could in no way lead to extra financial burdens for the City. It was necessary to conceive the Project in a way that it would only draw on resources already budgeted by the City. In other words, it was expected that already existing City responsibilities were to be reinterpreted, and reorganized in the context of the demonstration Project.

3. In order to go forward with an integrated and interdisciplinary approach, it was necessary to avoid having the Project become attached to a particular traditional department in City government. Instead of this, an independent Project Association was envisioned that would guide the Project, being directed by a departmentally overlapping steering committee. This was required to fulfill the demands placed on the Project, in terms of financial and legal requirements and because of the nature of the planning challenges.

4. The long-term nature of the planning objectives required that the initial Project funding be used strategically to help secure future resources.

(4) In the Summer of 1992 it was possible to obtain financing for a preliminary study from the Aufbauwerk Sachsen foundation. Upon completion of the preliminary study, this foundation provided funding for further research and supported the preparation of an application to the European Commission. The City of Leipzig was thus able to submit the prepared application to the Life Fund of the European Commission in the Spring of 1993 without any additional expense to itself. In November of 1993 approval came for the largest sum awarded by LIFE up until that time for the Leipzig Ostraum Project (4.3 million DM funding with a total Project budget of about 18 mill. DM).

(5) In the following couple of years the project initiators were successful in applying for two additional Grant Projects with a total funding of 1.2 mill. DM. This financial support provided the first steps toward a long-term guarantee for the realization of the Project's concepts and proposed measures. This was to lay a foundation for the building of a European Workshop for ecological urban development in the sense of the Local Agenda 21.

(6) A problem was to develop however, in that the City of Leipzig, in spite of the grant application and conditions of funding, was to contract a City agency to manage the project instead of developing an independent project management association.

3.3 Project Areas and Objectives

(1) Four objectives were emphasized by the Leipzig Ostraum Project.

1. An implementation-oriented, model development of the twelve selected individual projects. An emphasis placed on taking advantage of synergistic potentials that could be gained through a networking of the various initiatives, with an orientation toward an ecological, urban-rural development.

2. Testing of new public involvement approaches, as well as new forms of co-operation and co-production among the various interest groups in order to increase the competence levels of all participating and to mobilize dormant self-help potentials. "Eco-station" envisioned as a new form of infrastructure that would enable these processes.

3. Development of the project as an ecologically-oriented economic process in close cooperation with local business interests, the Association of Ecological Enterprises in Germany (B.A.U.M), and other national and international expertise. Experimenting with new forms of ecological employment.

4. Organization of international workshops, for example to explore and demonstrate sustainable planning and development processes. Encourage the exchange of experiences with other communities, and bring together the most advanced projects and ideas from the national and international levels for the purpose of solving local problems through extended seminars and workshops.

(2) The 12 individual projects were categorized into 3 project areas, according to their respective issues and organizational relationships:

Project Area I: Urban ecology (Individual projects 1 - 5)

Including the Renewal area Neustädter Markt, neighborhood development Reudnitz/Anger, Eilenburger Bahnhof, Model ecological settlement Obersdorfstraße, and Ecostation/Green-workshop. This area prioritized a systematic application and further development of ecological urban restructuring methods and practices.

Project Area II: Rural Development (Individual projects 6-9)

Including the Linke-Hof Baalsdorf Farm, Municipal Farm Mölkau, Probstheida/Östliche Rietschke, and Green Radial with networked paths.

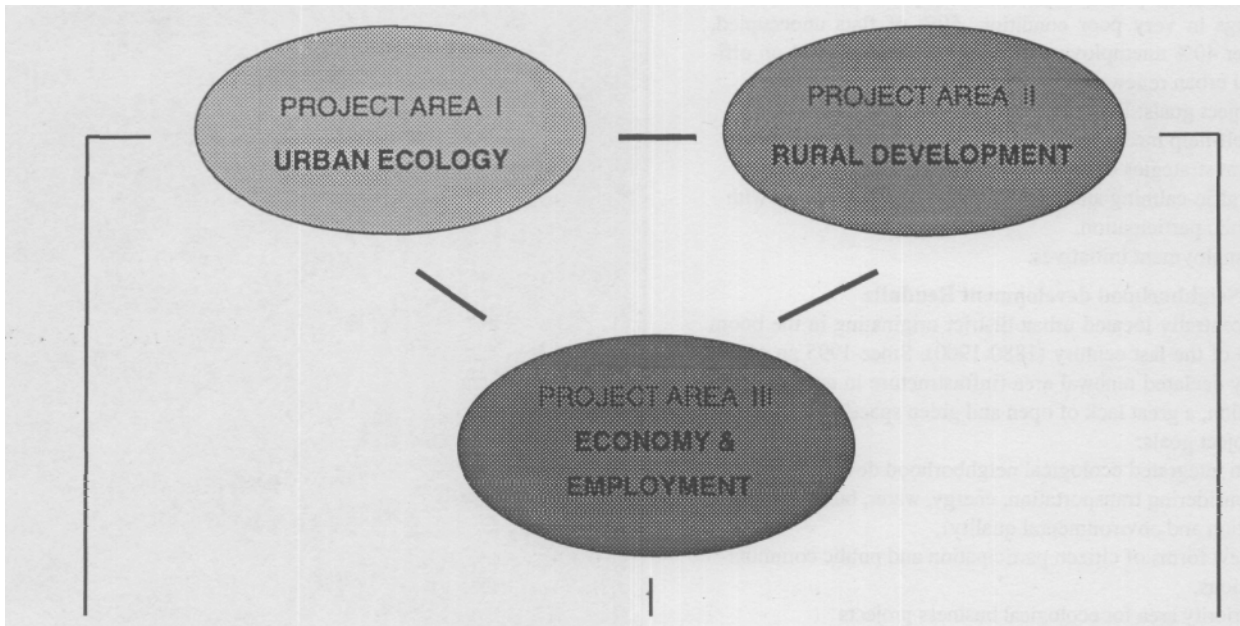
These projects are concerned with the design and implementation of demonstrations of ecological, urban-rural development processes.

Project Area III: Economy and employment (Individual projects 10 - 12) This area encompasses an Eco-social business and service center, Eco-social building contractors, and Regional business and employment programs. Emphasized here is a systematic development of and support for innovative economic processes.

Summaries and locations of projects are found in Illustration 3.

Illustration: 2

Leipzig Ostrau Project, Project area and individual projects



1. Renewal Area
Neustädter Markt
2. Neighborhood
Development Reudnitz
3. Eilenburger Bahnhof
4. Model Ecological
Settlement Obersdorfstraße
5. Ecostation
10. Eco-social Business and
Service Center
11. Eco-social Building Contractors
12. Support for Regional Economic
6. Farm Linke-Hof Baals-
dorf
7. Ecological Municipal
Farm Mülkau
8. East Rietschke
9. Biotope & Green
Path Network

Hahn, 7.97

3.4 Concepts and results of the Urban Ecology Core Projects

(1) The Area of Urban Ecology was conceived as the core of the Ostrau Project, corresponding with the overall Ostrau objectives as well as the philosophy of the LIFE funding program. The Urban Ecology emphasis also relates to the locations and significance of the projects Eilenburger Bahnhof Green Radial, Neighborhood Development Reudnitz/Anger, and the Ecostation. It was expected that the other individual projects would be developed in close connection with those of the core area. This expectation was explicitly communicated by a project advisory council to the City of Leipzig and to the Project Contractor.

The following is a summary of the project concepts and preliminary results that were achieved during the first half of the project's existence.

Illustration 3:

PROJECT AREA I

1. Renewal area Neustädter Markt

Particularly problematical inner-city area (83% of buildings in very poor condition, 50% of flats unoccupied, over 40% unemployment). Since the end of 1991 an official urban renewal area. Project goals: Develop demonstrations of,

- self-help measures for building renovation and improvement strategies of residential environments,
- traffic-calming and reconstruction of street-scapes with public participation,
- employment initiatives.

2. Neighborhood development Reudnitz

A centrally located urban district originating in the boom era of the last century (1880-1900). Since 1995 an officially declared renewal area (infrastructure in need of renovation, a great lack of open and green space). Project goals:

- an integrated ecological neighborhood development (considering transportation, energy, water, building renovation and environmental quality),
- new forms of citizen participation and public communications,
- priority area for ecological business projects (see projects 10 -12).

3. Eilenburger Bahnhof

The former train station and rail yards are the most significant areas remaining to be developed in east Leipzig. Land use plans for this area had envisioned the construction of a major new arterial road here. Project goals:

- Revision of the land use plan to allow for a Green Radial that would connect the city with the countryside (integrating foot and bicycle paths, and nature reserves),
- developing a citizen-oriented and affordable use concept, with appropriate ecological commercial activity

4. Model ecological settlement Obersdorfstraße

Construction of an ecological residential community with 30 new housing units at the city edge, in the historical village of Stötteritz. A project of the "Association for Ecological Architecture." Project Goals:

- demonstration project for conservation of urban nature,
- participatory, self-help construction with appropriate building methods (i.e. stacking technologies, Prof. Natterer)

- lowering the costs of ecological construction with new models of financing and use

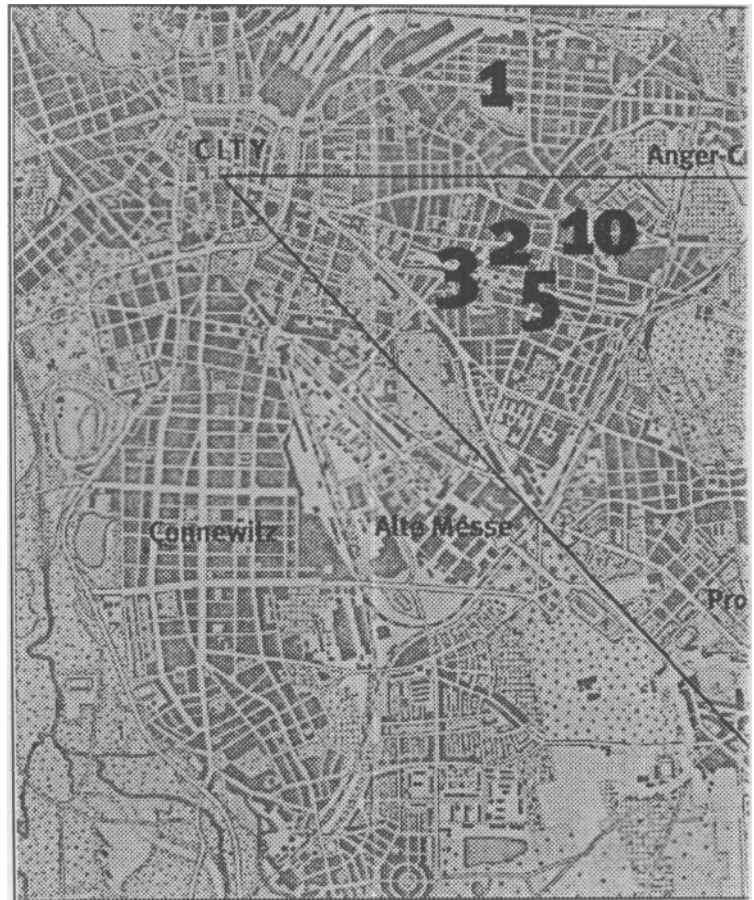
5. Ecostation / Greenworkshop

Playing a key role in the overall project, an Ecostation is envisioned for the former Lokschuppen (Locomotive Bam) which is found in the planned Eilenburger Bahnhof Green Radial. Project Goals:

- Creation of an infrastructure that will support the necessary information and communications activities, and
- institutions that will help mobilize self-help processes and encourage new forms of cooperative planning and decision-making.

PROJECT AREA II

The Individual Projects II



6. Linke-Hof Baalsdorf Farm

An organic farm (bio-dynamic) in operation since 1990. A model project for applied nutritional ecology and near-city ecological farming. Project goals:

- Growing, processing and marketing high-quality food stuffs,
- Conservation of landscapes, nature and resources, socio-therapeutic and pedagogical functions (work with disabled and disadvantaged young people) along with job creation.

7. Ecological municipal farm Mölkau

A former manor farm with numerous out-buildings and 150 hectares of arable land, only 6 km from the city center. Managed along with two other municipal farms by a City employment agency (ABM-Stützpunkt). Project goals:

- Expansion of the processing and marketing of local ecological agricultural products,
- creation of job and training opportunities as well as housing for the long-term unemployed, and disadvantaged, • a renaissance of traditional voluntary practices of maintaining landscapes and agricultural areas, as well as conservation of cultural and natural resources



8. Probstheida/East Rietschke

The East Rietschke is a heavily impacted and polluted stream which meanders through the entire project area in both the rural and urban areas. Project goals:

- Renaturalization of the stream bed, shore and adjacent areas combined with accompanying foot and bike paths,
- incremental realization of a nature park designed for recreation, and the maintenance of natural and cultural landscapes

9. Biotope & Green way network

An automobilization has taken place over the last few decades which has led to the destruction of or the neglect of foot and bicycle paths, including those connecting city and countryside. Project goals:

- Creation of an attractive network of green corridors, bikeways and paths which will connect the urban neighborhood projects with the countryside
- integrate urban environmental protection initiatives with rural ecosystem planning efforts
- green network is envisioned as connecting old villages and ecological agriculture with a variety of sport and recreational opportunities, hobby gardens and new settlements

10. Eco-social business and service centers

Practical support of economic and job creation strategies through the building of two business and service centers. Firms should locate here which are dedicated to the goal of ecological urban renewal, and which pursue ecologically-oriented business activities (organic foods restaurant, retail outlets for natural products, training and educational institutions with seminar and conference facilities for an ecologically-interested public)

11. Eco-social building contractors

An instrument for the realization of selected projects with ecological building and renewal. Ways are to be developed and tested for reducing costs and creating affordable floor space for residential and commercial purposes through innovative and cooperative economic practices, job creation programs, and participatory construction. Target groups for the use of the buildings are in the first place socially-disadvantaged groups (long-term unemployed, unemployed youth, homeless, etc.). The building users should also be involved in the construction process.

12. Regional business and employment funding

Project to support ecological business and employment in combination with the development of the various initiatives throughout the Ostrava. Included here are job training programs, the introduction of eco-audits and eco-balances of products, businesses and institutions, a development of local energy production, waste, and water associations and, ecological product and service innovations

(The Individual Projects 9, 11, and 12 relate to the entire region)

3.4.1 Green Radial Eilenburger Bahnhof

(1) The key element of the Ostraum project is the redesigning of the former Eilenburger Bahnhof (Train Station) into a multifunctional, action-oriented Green Radial that connects city and countryside. The idea was to create a new urban design element that would lend a strong identity and presence to the process of revitalizing the urban-rural relationships.

This approach is based on the conviction that is not enough to envision the rehabilitated cycles of production and reproduction, including ecological, social and cultural relationships between city and country, only in technical and organizational terms. Along with the solving of concrete problems, it was expected here to offer concepts of visionary change, in order to enlarge the awareness of possibilities and inspire greater participation and interest in experimentation. With this in mind, the rebuilding of the Eilenburger Bahnhof was intended as an integrating, symbolic focus for the entire Ostraum Project, and to which all the other individual projects would be fundamentally related.

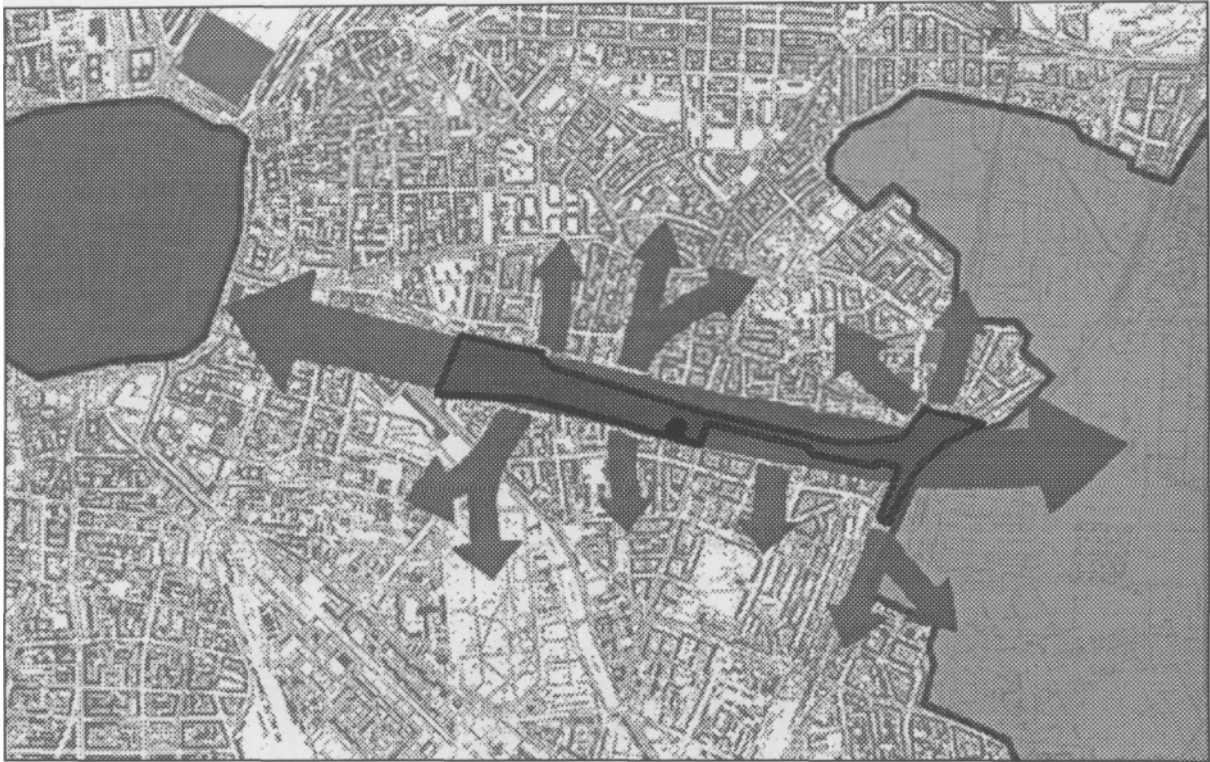
(2) Once the central train station for Leipzig, train activity for the Eilenburger Bahnhof was sharply reduced after the turn of the century when a new station was built elsewhere. Much was destroyed in the Second World War, and in the 1950's the Eilenburger Bahnhof was closed for good. During the GDR years the rail yards were extensively occupied by industrial uses in temporary structures, but much of the land remained vacant. After the reunification of East and West Germany in 1990 a heated struggle

took shape over the future use of this valuable land. The City Planning and Economic Offices wanted to see new construction on this site. The Transportation Office proposed the construction of a new traffic arterial which would connect city and countryside and additionally serve as an Autobahn connection. Citizens' groups and a City office dealing with open space called for the creation of more green and open space for this already densely built-up neighborhood. Finally, the City Council committed itself in a land use plan to building the arterial along with some new construction and committing the left over spaces to being parks. No one was happy with these compromises, and so the conflict continued on, and intensified. This situation became one of the great challenges for the comprehensive urban ecology concept.

(3) Directly after work began in November of 1994 on the Ostraum Project, a comprehensive mediation process was organized by the project coordinators to deal with the planning for future uses of the Eilenburger Bahnhof area. This process involved all concerned City officials, citizen initiatives, property owners, urban planners and other interest groups. An interdisciplinary working group was created which met monthly. Hearings took place for citizens and owners, and a three-day international planning workshop was carried out with the participation of leading experts from Germany and abroad and more than 80 participants altogether. Alternative development strategies were compared and a search was made for consensus and common ground.

Illustration: 4

Green Corridor Connecting City and Countryside



City Center

Historical City Center City
Hall / Market Place Theater
/ Opera Museums /
Concerts University
Central Services Trade /
Transportation / Ad-
ministration

Neighborhoods

New visible and experiential
relationships between city and
countryside
Opportunities to experience
both urbanity and nature
High quality, healthy neighbor-
hood spaces in the proximity
Attractive bicycle and pedestri-
an routes
Infrastructure that strengthens
local identity
Local democracy and coopera-
tive decision-making

Countryside

Leisure and recreation oppor-
tunities accessible by bike and
public transit
Valuable landscapes and
cultural sites
Ecological Agriculture Socio-
ecologically oriented public
spaces
Infrastructure for an ecological
economics
Ecological Urban Resources
Conservation of environment,
landscapes, and ground water
Landscape appropriate settle-
ments

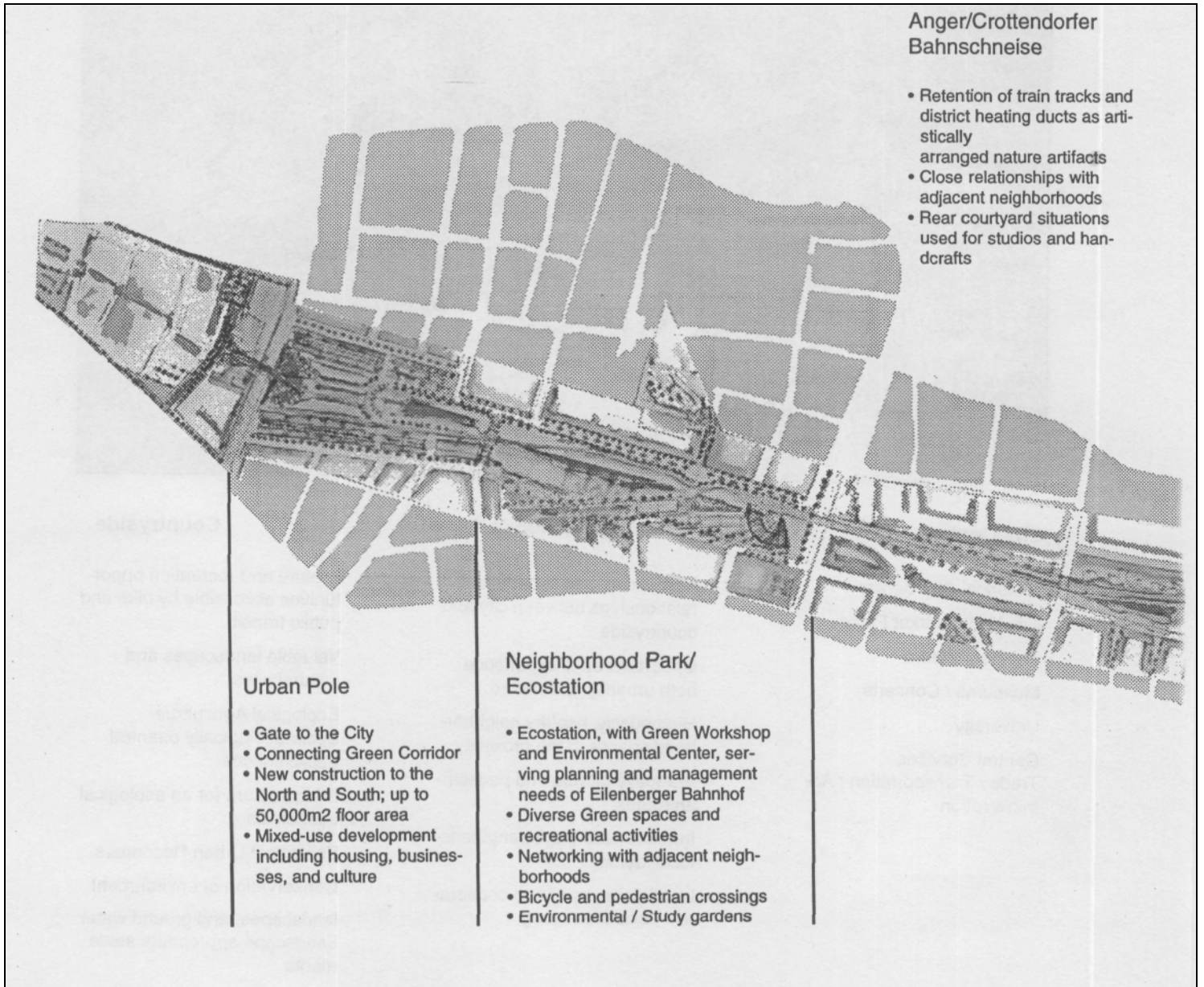


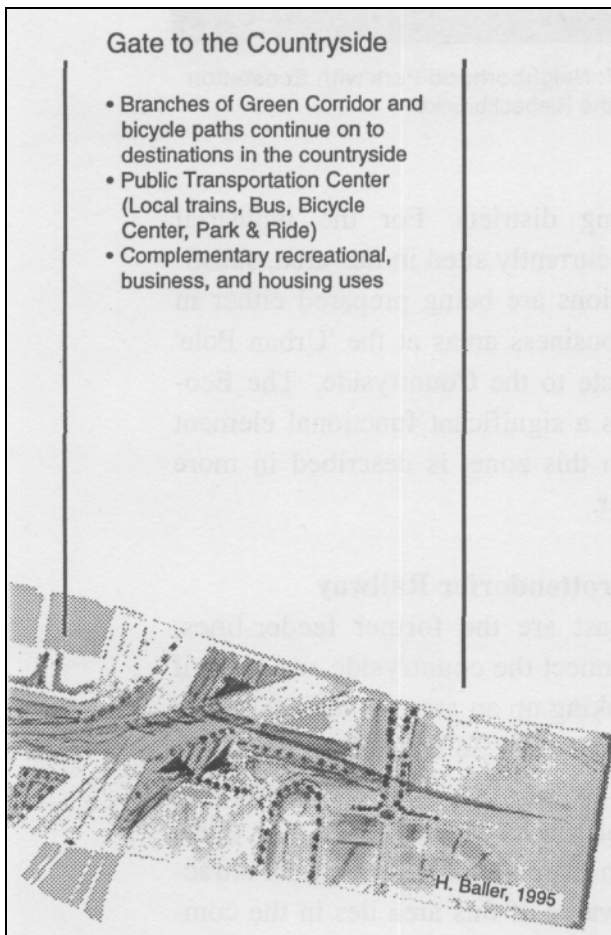
Eilenburger Bahnhof



Ecostation

Illustration 5:
Four Experiental Zones





(4) Progress was translated into temporary framework plans, and was presented and discussed through exhibitions and hearings at the City Hall and through the "Ostraum Forum," which was set up in the on-site Ecostation. By February of 1996 the concerned parties had reached consensus and endorsed a plan which was placed in front of the City Council. This concept for restructuring the Bahnhof area into a Green Radial connecting the city and country then received approval by the Council.

(5) The Green Radial Concept for the Eilenburger Bahnhof, which stretches over about two kilometers, from the city-center out to the eastern city limits, involved the restructuring of the approx. 16ha large area into four sequentially organized use and experience zones.

Urban Pole

Consisting of about 4.2 hectares, this area of the former train station finds itself only a few hundred meters away from the historic city center. Noteworthy are the remaining historic buildings including part of the Main Hall, a freight-shipping hall, and a small residential settlement for rail employees, with attractive small gardens and courtyards. The Green Radial is to pass through this area with a width of from 80 to 100 meters, and then make a connection with the old downtown.

Urban design and feasibility studies envision to the north and south the construction of up to 50.000 m² floor area. Seen as an appropriate amount of new building relative to the overall concept, this is intended to be a mix of residential, business and cultural uses. The design is based on socially-and ecologically-oriented business organizations and interactive, residential com-

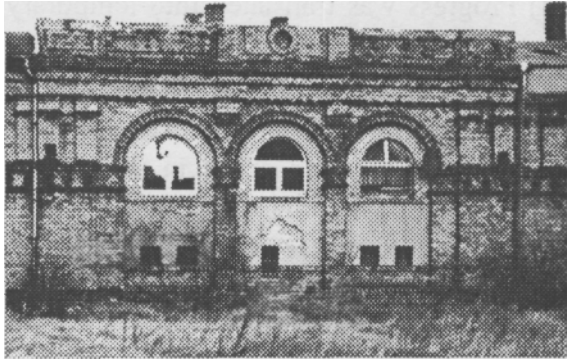


Illustration 6: **Urban Pole** - Former Main Building of Eilenburger Bahnhof

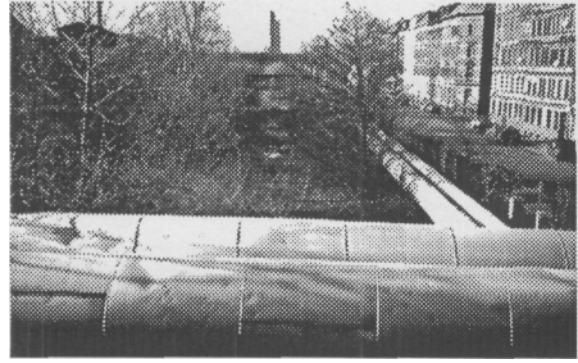


Illustration 7: **Neighborhood Park with Ecostation** -View from the Riebeckbrücke

munities which for example integrate single-parent families with senior citizens. The initial ideas were formed through the international planning seminar. Later, an urban ecology design competition for architects and investors was to be organized.

Neighborhood Park and Ecostation

Between the Urban Pole and the Riebeck Bridge, this 5.6 hectare second zone of the Green Radial is about 600 meters long and 85 meters wide. The location and dimensions of this area have predestined it to be a neighborhood park. Planned here are a variety of green and open spaces consisting of diverse, park-like sections, natural biotopes and freely designed creative, experiential zones; spaces for people and habitat for animals and plants; path networks and quiet areas for pedestrians and bicyclists; playgrounds, half-wild conditions for children and youth; zones for the development of sensory abilities (Kükelhaus) as well as ecological training and demonstration gardens in connection with the Ecostation in the former locomotive barn and signal house. The adjacent streets are to be partially reduced in size, in order to bring about aesthetic as well as functional connections between the neighborhood park and the

surrounding districts. For the industrial activities currently sited in this area, substitute locations are being prepared either in the new business areas at the 'Urban Pole' or the 'Gate to the Countryside.' The Ecostation, as a significant functional element located in this zone, is described in more detail later.

Anger-Crottendorfer Railway

To the east are the former feeder-lines, which connect the countryside and the rail yards, making up an area about 800 meters long and between 36 and 65 meters wide. This land is largely vacant and in the ownership of the Deutschen Bahn AG (German Train Corporation). The special attraction and value of this area lies in the combination of picturesque courtyards, the adjacent coach-houses, gardens and factories which are half-way in ruins. The planning concept sees the maintenance and further development of the existing qualities. The courtyards and workshops as well as the existing vacant lots offer interesting possibilities for a networking of residential and business uses as well as market-oriented recreational opportunities. Encouraged here should be new craft and service companies that are connected with the tasks of



Illustration 8: **Anger-Crottendorfer Bahnschneise** - View from the Martinsbrücke



Illustration 9: **Gate to the Countryside** - Crossing of Railway Ring with Auxiliary Railway Eilenburger Bahnhof

ecological urban restructuring. Of special emphasis is the opening of this section of the Green Radial for public use as soon as possible and with an absolute minimum of resources (trash removal, establishing public access, creation of simple paths, protection of existing water areas, adventure playgrounds, organization of school and residential sponsorship of individual areas). Accompanying the first measures have been negotiations between the Deutschen Bahn AG and the City for the establishment of long-term use agreements.

Gate to the Countryside

This area of approximately 9 hectares has until now received relatively little attention. Here at the edge of the city this urban section of land opens out onto the eastern countryside with its attractive settlements, and cultural and recreational opportunities. Old villages and beautiful landscapes with meadows, streams, lakes and forests characterize this region, which is easily accessible even without an auto. With respect to the overall Ostraum Project for an ecologically-oriented urban-rural development, this particular area of the Green Radial takes on a special significance. The network of bike paths and green corridors that

passes through here, connecting destinations in city and country, poses special functional and urban design challenges. 'Park and Ride' and 'Bike and Ride' facilities are to be established in connection with the locally existing mass transit train station, street car and bus stops. The qualities gained by this area through its renewal and reconstruction are expected to be able to attract a variety of additional investments and uses. Possibilities include: sport, recreation, health, new services and environmental business, and new housing. Studies are underway to determine the optimal urban development strategies with respect to these objectives.

(6) Implementation: Acceptance of the Green Radial concepts depended on finding solutions that were clearly affordable. To this end ideas were proposed in the International Seminars and then further developed in the framework of the project. An incremental realization process was envisioned which involved citizens' associations, local schools, and the various Leipzig colleges. Also important to the implementation were Leipziger employment associations, local businesses as sponsors, and the new institutional form of the Ecostation.

Materials for the park reconstruction: The park reconstruction was to be carried out with affordable or free materials when possible. The Hollander LeRoy has shown in his own country the high design quality and ecological value that can be reached in the creation of park spaces, pathways and other projects with recycled resources and building demolition materials. These concepts are to be further developed with LeRoy's participation in the construction of the Green Radial.

District-heating pipes: The high costs are seen as prohibitive that would be required for the burying of the district-heating pipes that run the length of the project area. Instead, the pipes are to be integrated into the green- and open space planning and redesigned as an 'art object'. They are to be made visible as functional, structural elements that originated in the GDR years. This redesigning should be organized as a socio-ecological process through which students, youth, citizens and those in job-training programs all can participate, under the direction of professional planners and artists.

(7) Project Process & Participation: The Green Radial Eilenburger Bahnhof is not to be developed as a park designed exclusively by contracted firms, but rather as the result of the long-term, cooperative efforts of a great number of people working together with nature. After the beginning phase of project initiation, the development is expected to reflect a process of continual change and transformation, with the objective of realizing an increasingly diverse system over time (LeRoy).

The initial phase includes such measures as: cleanup of pollution, path construction, and a rebuilding of meadows and woods.

This work can be carried out in cooperation between project managers, citizens, local schools and environmental organizations and programs for unemployed. Further steps are also intended to be based on public participation processes, such as the creative redesigning of the district heating pipes, the building of open spaces and sport facilities and the realization of the local water concept. Individual interest groups are to be provided with the opportunities to sponsor and develop particular areas, in which case the project management is to take on a consulting role. For example, schools are invited to garden, mountainbikers to build their own courses, graffiti artists to do graffiti, etc.

(8) In spring 1996 from the side of the Ostraum-Project all activities concerning the realisation of the Green Corridor were stopped.

3.4.2 Ecological Neighborhood Development in Reudnitz /Anger

(1) Identifiable, comprehensible urban neighborhoods are the most important level for Ecological Urban Restructuring (Hahn 1991). It is at this level that people are directly and visibly confronted with the increasing environmental problems. Here where the concerns are the greatest is where the goals of the Rio Conference's Agenda 21, and the accompanying Local Agenda 21, need to be pursued. This calls for a variety of small-scale measures as well as necessary changes in culture and life-style. The necessary conditions also need to be created to encourage these actions, and this is the responsibility of local and national governments as well as other international organizations. Most importantly, actions need to be supported at the level of city neighborhoods, as these are the most immediate human environments for living, working, planning and acting. Here the variety of concerned interest groups need to be brought together to find common ground and common solutions.

A typical neighborhood example is that of waste, whereby ecological development could mean a set of coordinated measures including waste reduction and separated collection systems and composting programs for the variety of wastes. Experiences with urban recycling centers and 'resource'¹ collectors have shown that such programs are effective to the extent that they are appropriate to the local neighborhood conditions.

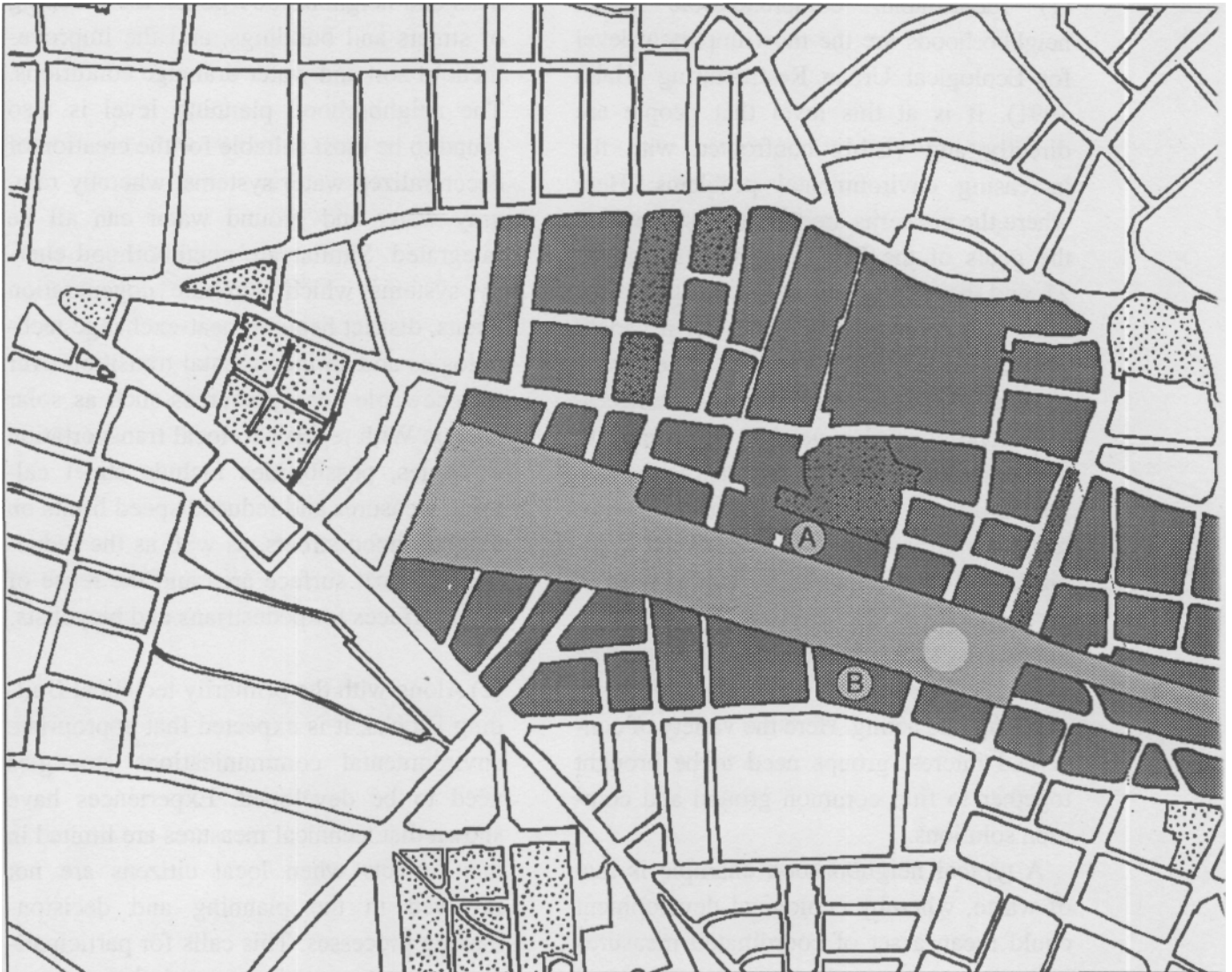
Another example is that of measures intended to improve residential environments and micro climates. Possible solutions here are the creation of community gar-

dens and neighborhood parks, the greening of streets and buildings, and the improvement of soil and water drainage conditions. The neighborhood planning level is also found to be most suitable for the creation of decentralized water systems, whereby rain, gray water and ground water can all be integrated. Similar are neighborhood energy systems which combine cogeneration plants, district heating, heat-exchange technologies and an incremental transition over to renewable energy sources such as solar energy. With regards to local transportation strategies, possibilities include street calming measures and reduced speed limits on neighborhood streets, as well as the reduction of street surface area and the reuse of such surfaces for pedestrians and bicyclists.

(2) Along with the primarily technical Building Blocks, it is expected that appropriate environmental communications strategies need to be developed. Experiences have shown that technical measures are limited in their effects when local citizens are not involved in the planning and decision-making processes. This calls for participation concepts, environmental information and education. An objective is to further motivate an individual sense of responsibility for the local environment, as well as to create new training and employment opportunities through the variety of ecological restructuring measures. Real chances for a fundamental restructuring will only come about when a dynamic, socially and ecologically-oriented economic process is first set in motion. The necessary conditions for this process are found at the level of the city

Illustration: 10

Ecological Neighborhood Development Reudnitz/Anger Project Area,
Individual Projects and Following Projects

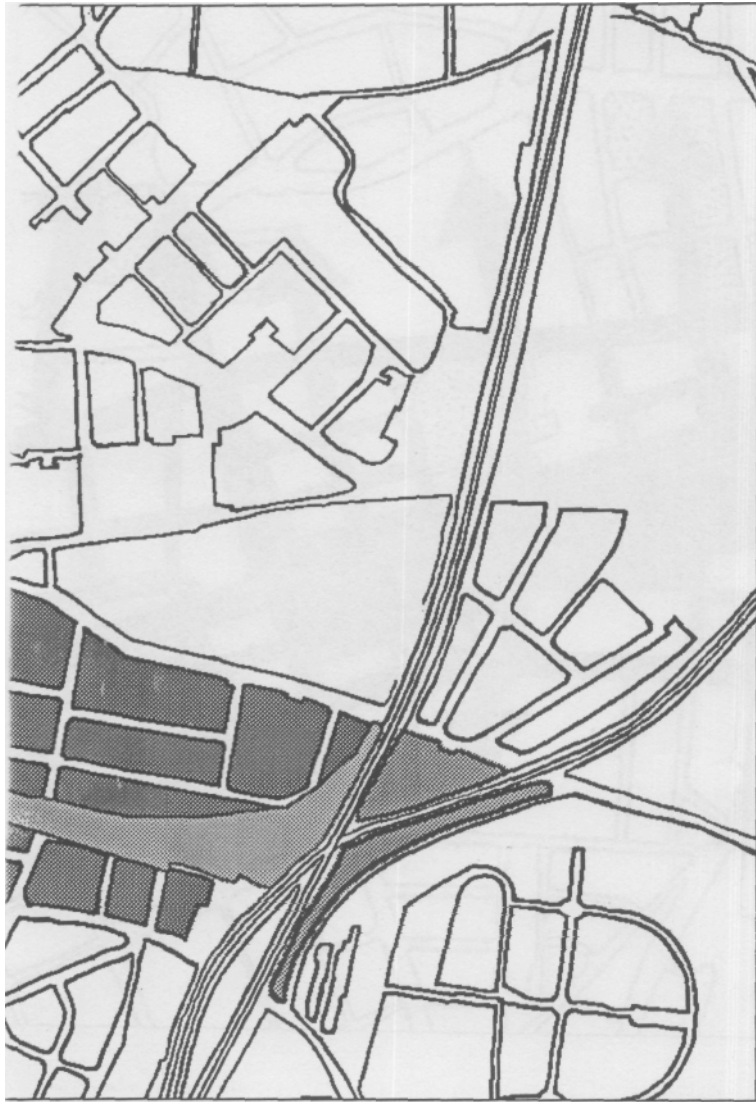


Neighborhood Development

Reudnitz Eilenburger Bahnhof

Ecostation / Greenworkshop

Model Project
energyefficient ecological construction



EXWOST 6.96

East Area Project

supported by: LIFE, EU
duration: 1994 -1996 (1997)

Subproject 1: renovation of the Reudnitz neighborhood

Subproject 2: Eilenburger train station

Subproject 3: Eco-station Grünwerkstatt

"Reducing Harmful Substances in Urban Construction"

supported by: EXWOST,
duration: 1994 -1997

Project Goals: Measures to reduce CO2

- Energy: Measures in renovation of existing buildings and construction of new buildings, model supply concepts and utilization concepts.
- Transportation: model master concept, alternative to street construction Eilenburger station, procedure proposals.
- Urban Construction: Development goals, concepts of measures, procedural and implementation issues, public relations work.

Energy-Efficient Ecological Construction

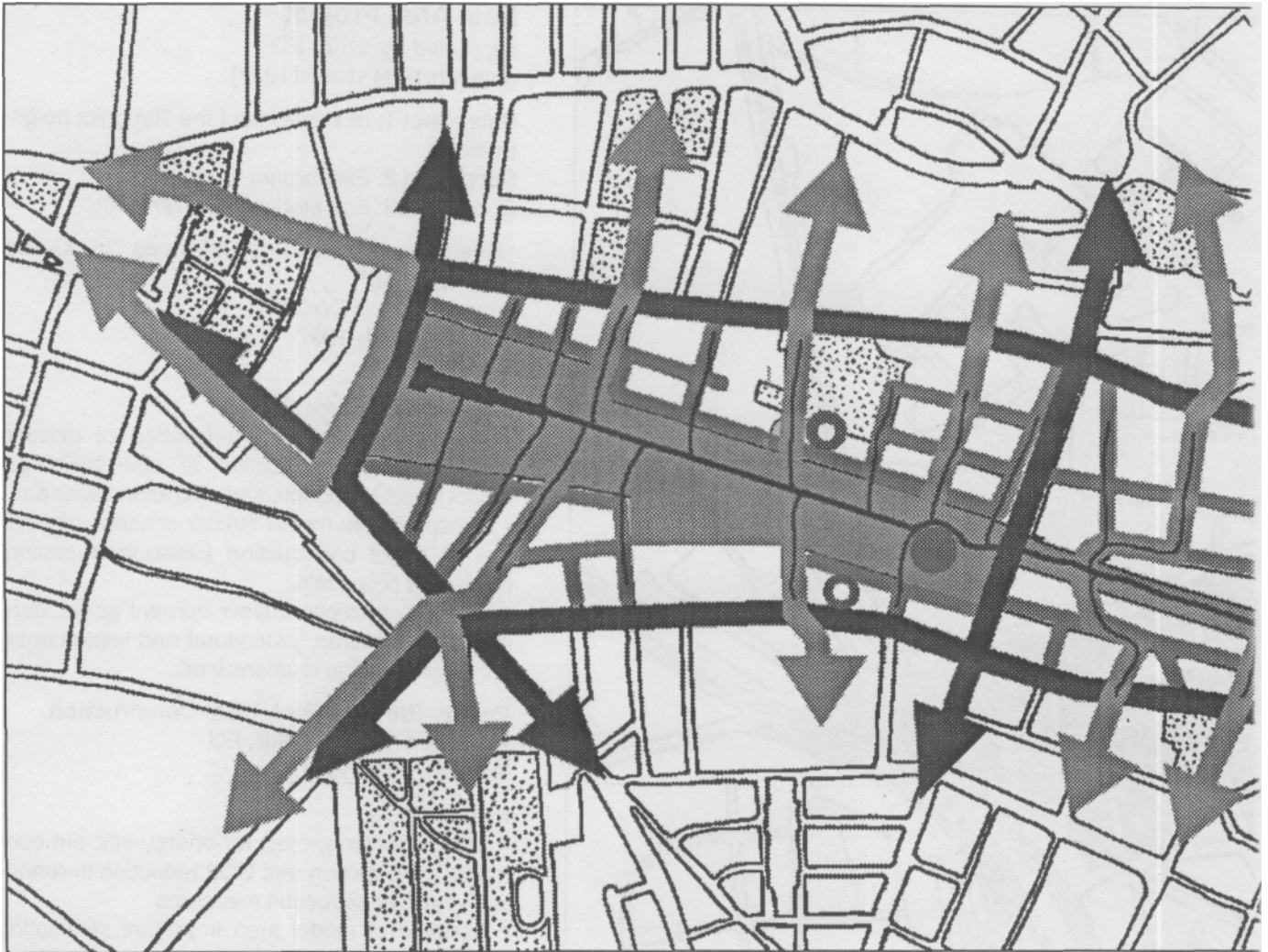
supported by: THERMIE, EU
duration: 1996-1997

Project Goals:

- » Demonstration project for energy-efficient ecological construction and CO2 reduction in renovation and construction measures.
- Example of model area important stimulating function for public relations, owner consultation and training measures.

Illustration: 11

Neighborhood Development Reudnitz/Anger Planning Goals 1



Main arterial streets with attractive
pedestrian & bicycle crossings & paths

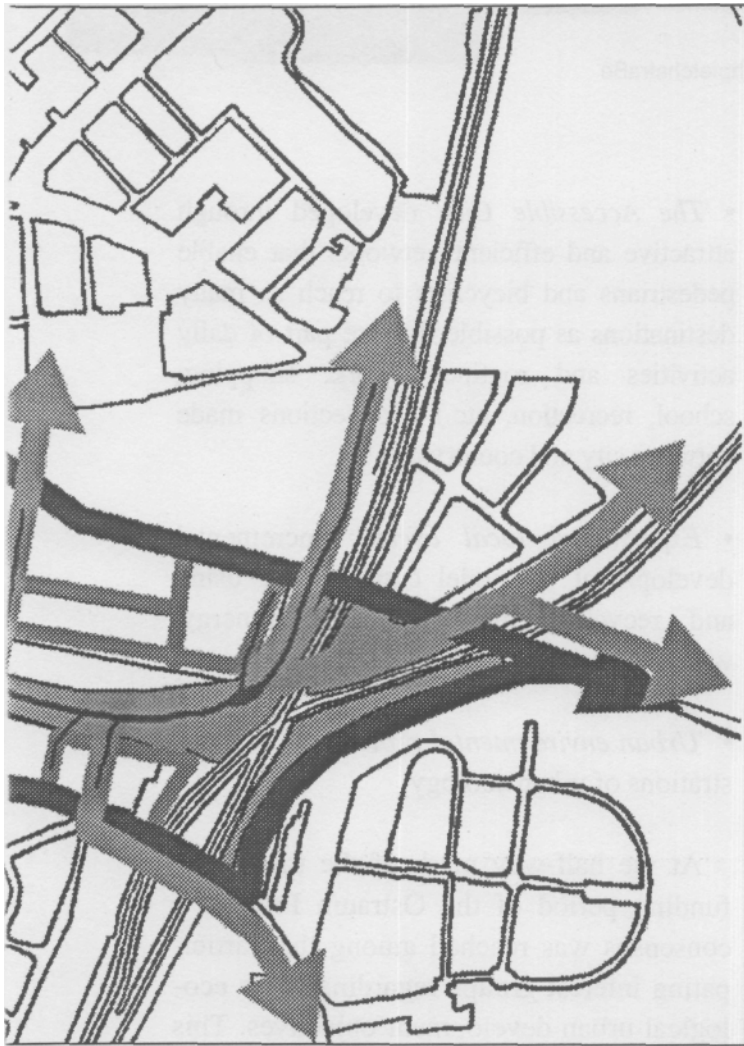
Green Radial and bicycle network

Quieted neighborhood street network
with high qualities for pedestrians

Water system

Ecostation

Demonstration & learning projects of energy efficient, ecological construction



Ecostation



Demonstration & learning projects of energy efficient, ecological construction

district, where through the constant investments for new construction and renovation a great deal of private and public capital is active. In addition, a good number of institutions are found in the neighborhoods that could assume tasks associated with ecological urban restructuring, such as schools, gardeners and parks officials, planning offices, artisans, and a variety of clubs and associations.

(3) Three demonstration neighborhoods, which are adjacent to each other in the Ostraum Project area, have received support from the European Commission to test these ideas of ecological restructuring. Prioritized is the Reudnitz neighborhood (Individual Project 2), which is in the center of the Project area, finding itself on both sides of the planned 'Green Radial'. This is a typical, turn-of-the-century neighborhood, with five story buildings that enclose and frame entire blocks. There is a mix of residential and commercial uses, and the buildings as well as the local infrastructure are in dire need of renovation as they had been neglected for several decades. Identified as significant problems are the lack of accessible green spaces and the lack of recreational opportunities.

(4) Along with the general strategy of ecological neighborhood development, a main objective of the European demonstration project is the refinement and testing of synergistic planning possibilities. There are opportunities here associated with the integrative, urban design concepts of the Green Radial. For example, through a significant improvement of the local environment it is expected that the local identity would be strengthened and residents would be further motivated to participate. A quality local

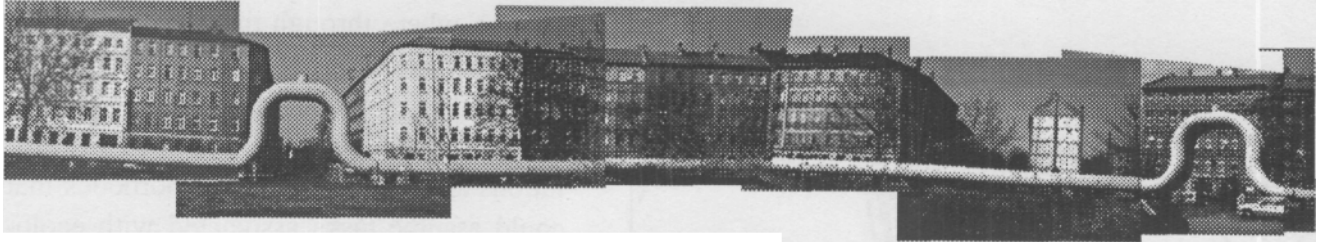


Illustration 12: North side of future Neighborhood Park, Reichpietichstraße

environment is also identified as an incentive for businesses to locate in a particular neighborhood, and as connections are further made with new ecologically-oriented employment opportunities.

(5) The following urban planning objectives were developed and incrementally refined through cooperative processes including the monthly project meetings and the International Planning Seminars.

- *Urban Design:* A primary objective of the urban design and development concept is the creation of a new urban quality through the integration of a diversity of "urban events" (urban streets to the north and south with retail, commerce, and business) with "nature experiences" (Green Radial with connections to landscapes and countryside, quiet, recreation activities). Other goals:

- *'Mix of living and working'* uses with prioritized zones for commerce on the 'urban streets', at the "Urban Pole" and the "Gate to the Countryside." Experimental residential situations are to be demonstrated in the areas between the.

- *'Attractive public spaces'* created through the redesign and rebuilding of street-scapes, and a reduction of street surface area, especially in the areas between the Green Radial and the urban streets.

- *'The Accessible City'* developed through attractive and efficient networks that enable pedestrians and bicyclists to reach as many destinations as possible that are part of daily activities and routines (work, shopping, school, recreation, etc.). Connections made between city and countryside.

- *'Experiential local cycles';* incremental development of model concepts for using and recycling local resources, (energy, water, materials, etc.)

- *'Urban environmental protection;'* demonstrations of urban ecology

At the half-way mark of the three year funding period of the Ostrum Project, a consensus was reached among the participating interest groups regarding these ecological urban development objectives. This provided the basis for a comprehensive planning framework for the Ostrum. Again, the International Planning Workshop played a role here in emphasizing the importance of a development concept that would integrate the Green Radial with the adjacent neighborhood renewal. The framework plan provided a convincing foundation which inspired City Council support.

(6) Urban ecological "District Building Blocks" were articulated regarding Transportation, Water and Energy.

Transportation: The initial challenge here was the development of a viable alternative strategy to the planned construction of a new arterial through the Eilenburger Bahnhof rail yards. This was a significant requirement of the comprehensive urban development concept, and was necessary to resolve the conflict with the Transportation Bureau. Consensus was reached on the following points:

- a demonstration of transportation concepts through the redesign of the Urban Streets, the creation of traffic-calming areas between the Green Radial and the Urban Streets, and the metered parking zones refinement of the network of bicycle paths and green corridors
- technical and social concepts for reducing CO₂ emissions
- public transit centers at the "Gate to the Countryside", integrating Park and Ride', and 'Bike and Ride' with train stations, street car and bus stops, and the branching out of the Green Radial into the countryside
- a Mobility Center to be located at the Ecostation

Water: Envisioned was an incremental realization of an integrated, neighborhood-based water system with the following characteristics:

- Water conservation technologies and the development of local water cycles in commercial and other buildings, and the introduction of consumption-based utility billing

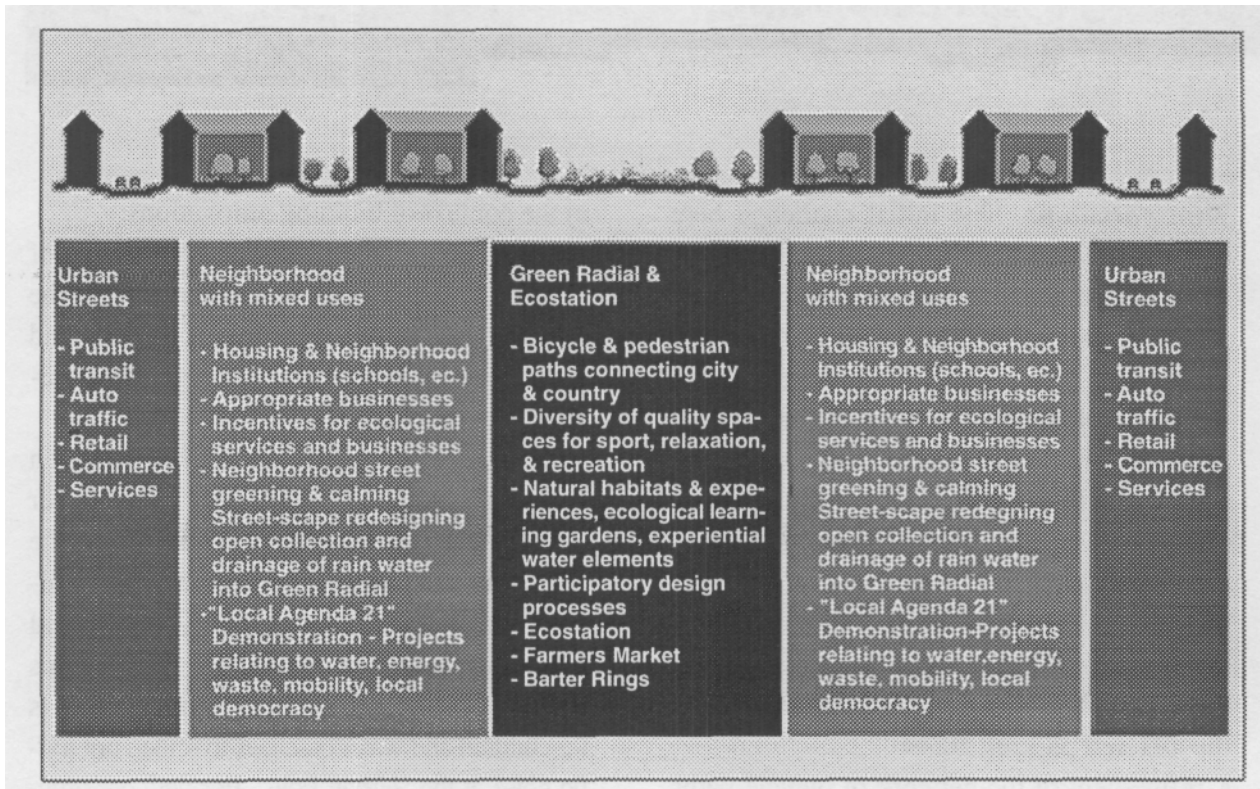
in the context of building renovations; • Rain water concepts integrating groups of building; retaining all rain water within the area for local reuse (watering of gardens and plants, partial reuse in buildings, local recharge of ground water)

Of significance here is a planned open collection and drainage of rain water through the quieted side streets into the Green Radial, where plans include the building of artistically designed, biological treatment ponds. Included in the designs are playful and educational water elements for children and water cascades to screen out traffic noise at the "Urban Pole." For new construction it is planned to include a reuse of gray water for toilets as well as for watering plants and for natural climate control.

Energy: A primary objective here was to investigate the possibilities for meeting the Rio Criteria for reducing CO₂ emissions and saving energy within the context of integrated neighborhood development. This objective was supported with additional funding by the Federal Building Ministry. After completing the necessary studies, a plan was proposed including the following measures:

Applying concepts of energy efficiency and ecological architecture to the development of three demonstration buildings, representing the typical building types in the area. These included renovation work on old

Ecological Neighborhood Development Reudnitz/Anger Planning Goals 2



structures as well as a new infill project. Support for these initiatives came from the Thermie-Programm of the European Commission, with the goals of providing models for the renewal of the rest of the district, and to function as a source of information and inspiration for local residents and property owners.

Another demonstration project is the systematic introduction of co-generation (simultaneous production of energy and heat) and heat exchange systems, taking advantage of available 'waste heat.' For example, the heat discharged by the local brewery is enough to affordably provide more than 2,000 apartments with hot water and heat through a district-heating system. The envisioned local energy and heating

network is planned to be able to incorporate a variety of small energy producers in the future. In this way, the district can incrementally shift over to being supplied by local, renewable energy sources, such as solar energy.

Also planned is the creation of a local energy utility, and the development of a commercially operated solar energy workshop which provides consulting and assistance to solar projects.

(7) The next phases of the Project are to prioritize realization strategies that give special attention to the economic and employment objectives of Project Area III. Further work is to be done with neighborhood greening and waste reduction initiatives, and with the deve-

lopment of new comprehensive city block concepts.

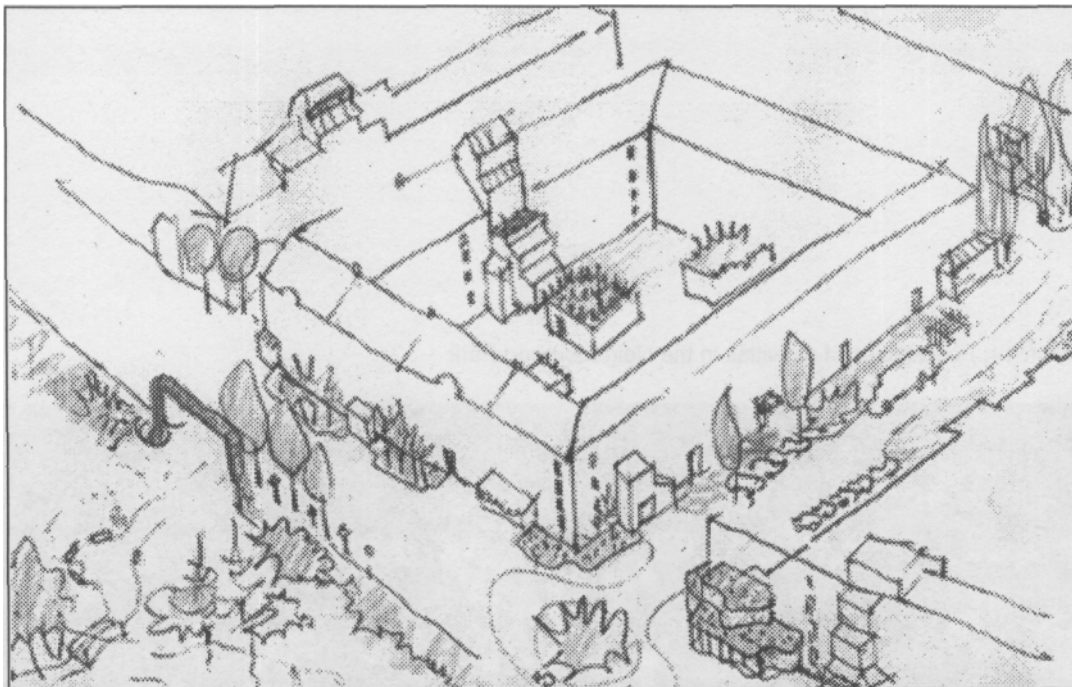
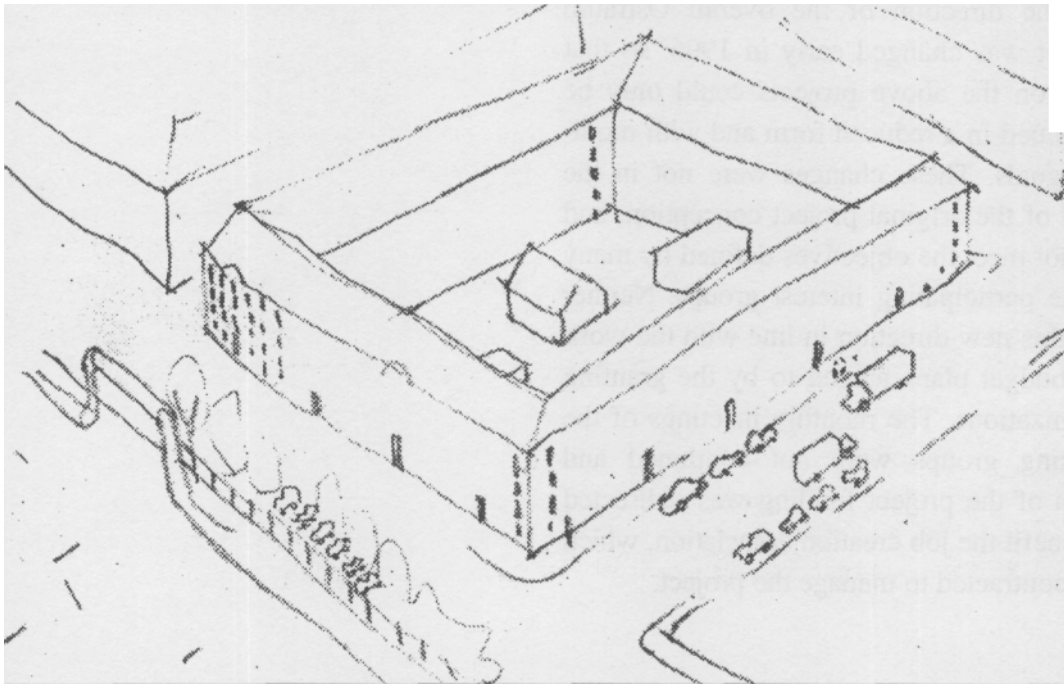
(8) The direction of the overall Ostraum Project was changed early in 1996, so that work on the above projects could only be continued in a reduced form and with modified goals. These changes were not in the spirit of the original project conception, and did not meet the objectives defined by many of the participating interest groups. Neither was this new direction in line with the work and budget plans agreed to by the granting organizations. The monthly meetings of the working groups were not continued and much of the project funding was redirected to benefit the job creation association, which was contracted to manage the project.

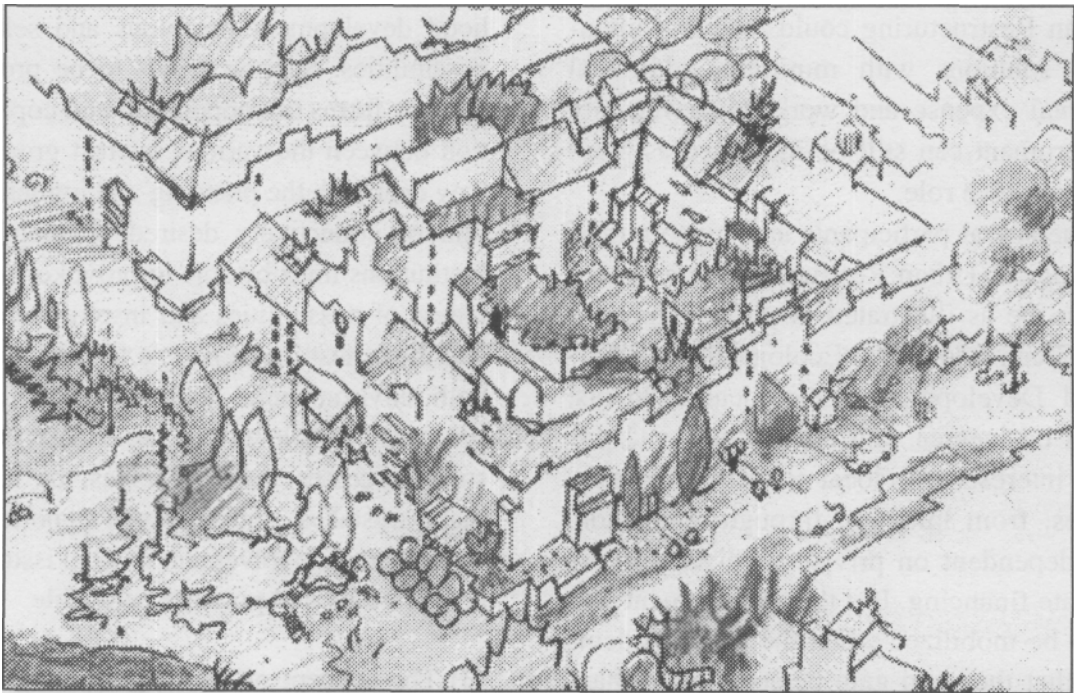
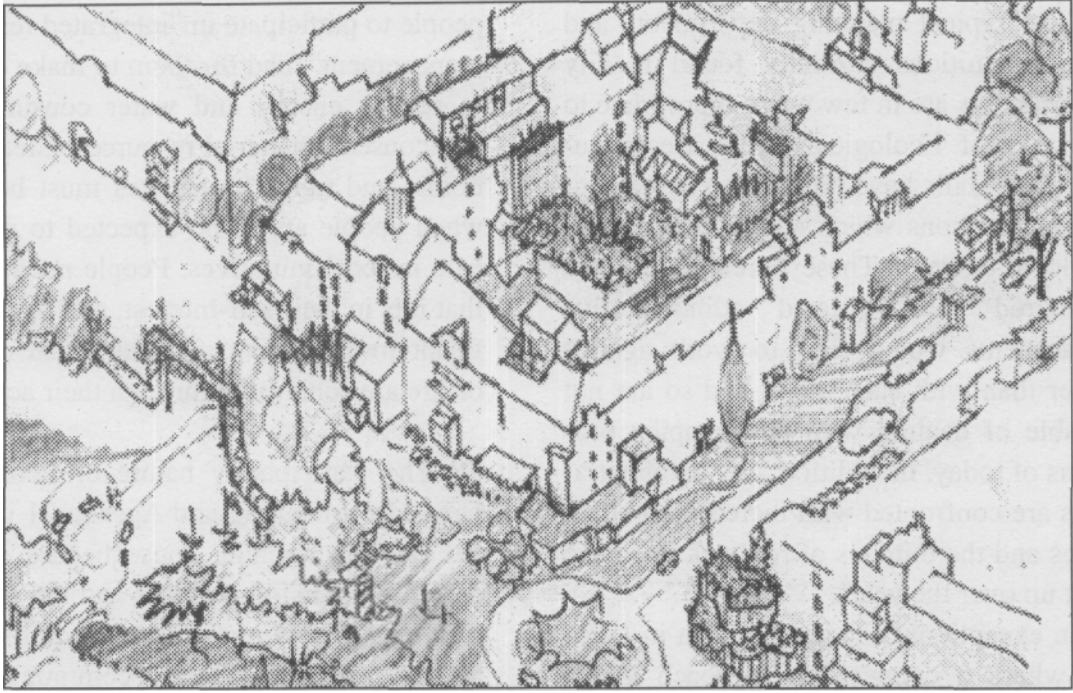
Illustration 14 : Possibilities of activities in the Neighbourhood Park



Illustration: 15

Four Steps of Change at Reichpietschstraße in Reudnitz





Lucien Kroll, Leipzig 1995

3.4.3 Ecostation / Green Workshop

(1) The typical planning departments and other institutions currently found in city governments are in few ways appropriate to the tasks of Ecological Urban Restructuring. City Halls have turned into bureaucratic organizations which are distanced from the local citizens. These bureaucracies are structured into isolated administrative departments which tend to work against rather than with each other, and so are not capable of dealing with the complex problems of today. In addition, city administrations are confronted with increasing budget crises and the burdens of routines that have built up over the years.

An exceptional situation is seen in Leipzig where a cooperative approach and a general openness was inspired in city government and other decision-makers. Officials were shown how Ecological Urban Restructuring could lead to convincing solutions with minimum additional internal expense and work. However, city government can still be identified as playing a passive role.

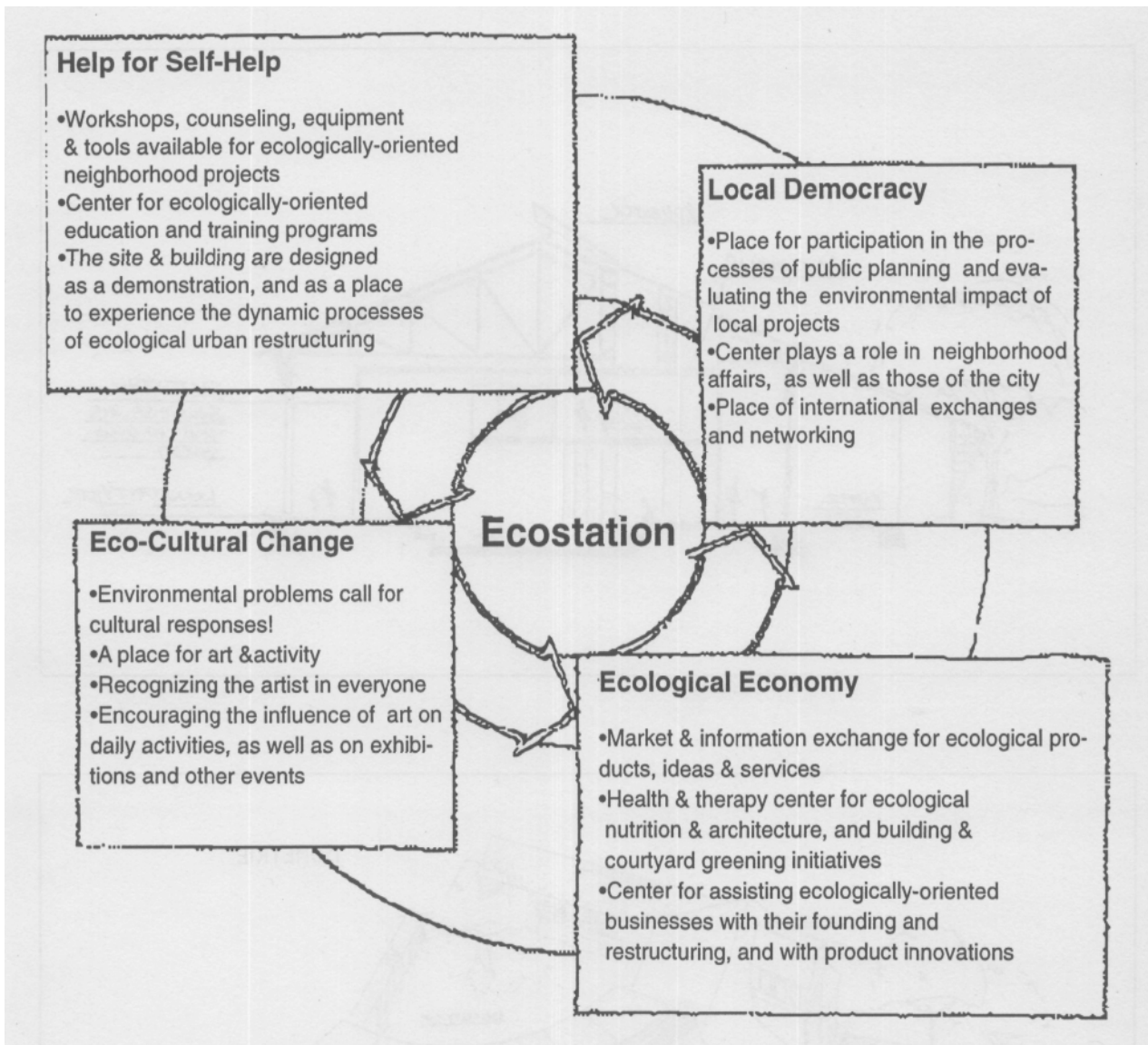
The actual participants and supporters of Ecological Urban Restructuring are expected to be as illustrated in the examples of the Green Radial and Ecological Neighborhood Development - the local residents, local businesses, and other public and private interests with local concerns. The strategies, from initiation through realization, are dependent on private involvement and private financing. But this involvement will only be mobilized when the local residents see that they can gain personally by changing their behaviors of shopping and investing, and habits of mobility and recreation. It has to be 'worth it' in order for

people to participate in "integrated resource management", and for them to make efforts to reduce energy and water consumption and conserve material resources. Clear economic and other advantages must be seen when people are to be expected to participate in local initiatives. People need to see that it is in their self-interest, and that significant improvements in their local quality of life are achievable through their actions.

(2) The participatory nature of Ecological Urban Restructuring and Agenda 21 initiatives has far reaching consequences on the design of planning methods and the shaping of relevant local institutions. Required here are information systems, communications structures and management approaches that are oriented toward local initiatives and economies, and that mobilize specific neighborhood development potentials and self-help possibilities. Support needs to be provided for new forms of cooperation and coproduction between the various interest groups, as they deal with the planning and implementation of collectively desired developments. Institutions must be able to provoke an awareness of possibilities and inspire creativity, and they must invite people to participate in both environmental and social rebuilding processes. People must be able to experience such processes for themselves, be able to make mistakes, and be given opportunities to see that an involvement in local issues can be rewarding and possibly enjoyable.

(3) The concept of the neighborhood-based Ecostation as developed by the author concerns itself with new, process-oriented infrastructures that support economic, organiza-

Ecostation



Further Tasks

Research station for the initial "experimenting and learning society"

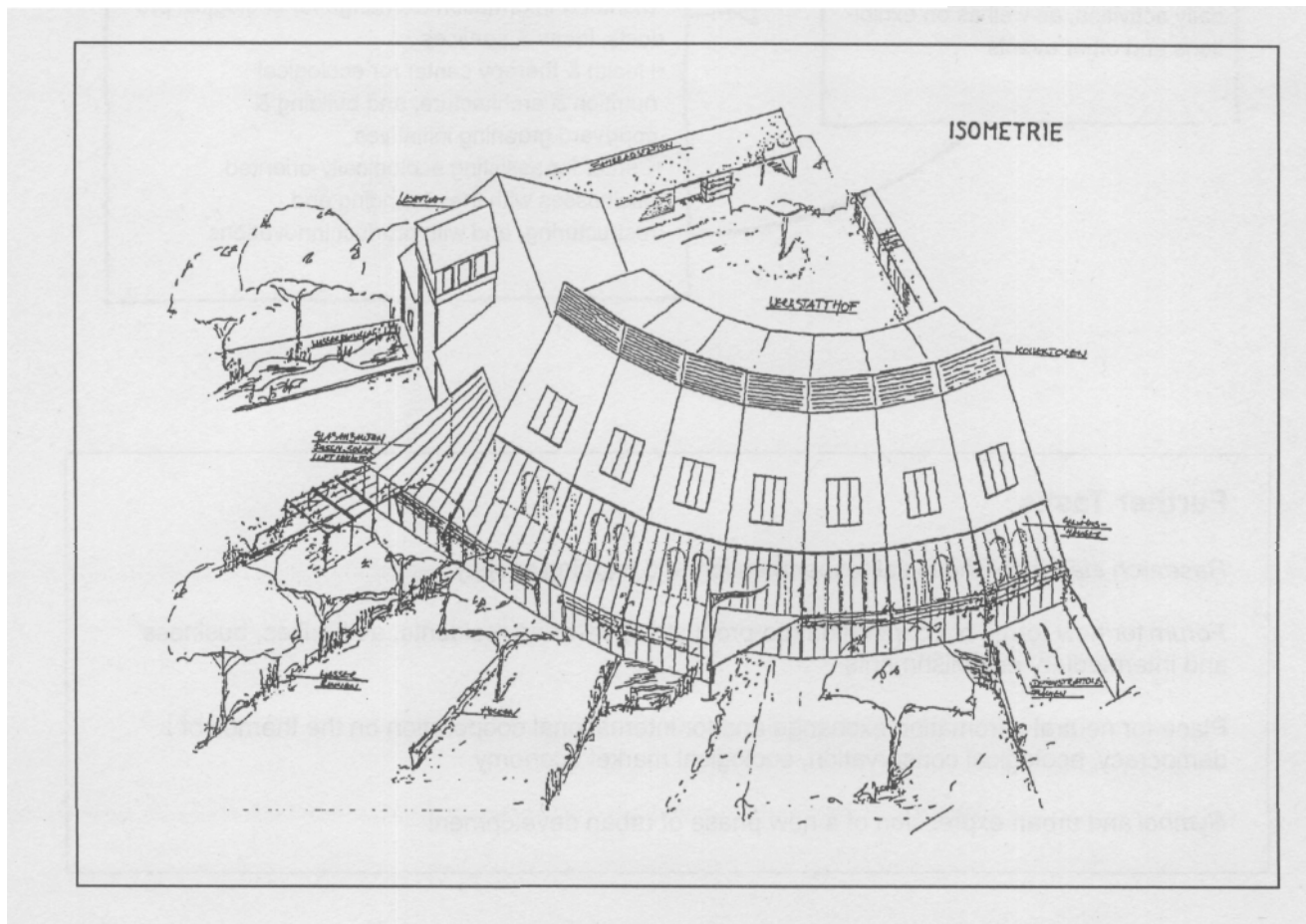
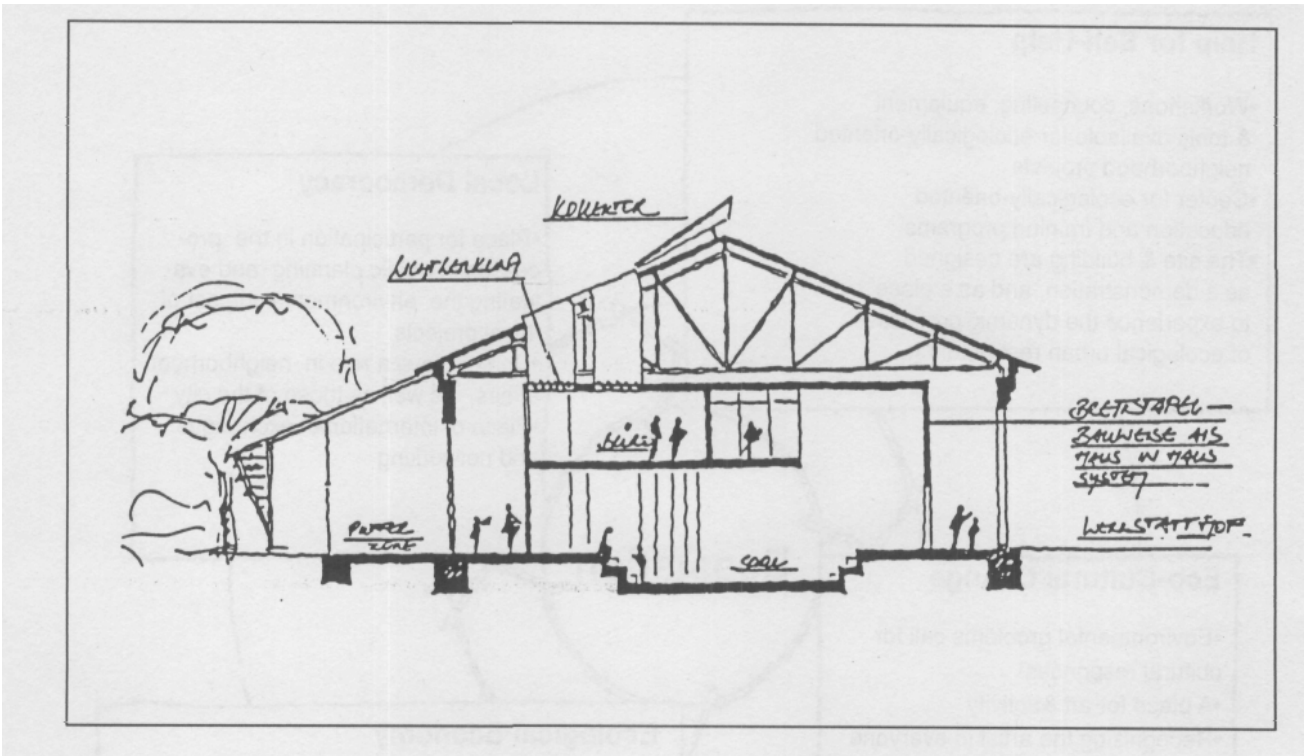
Forum for new forms of cooperation (co-production) between residents, authorities, business and intermediary establishments

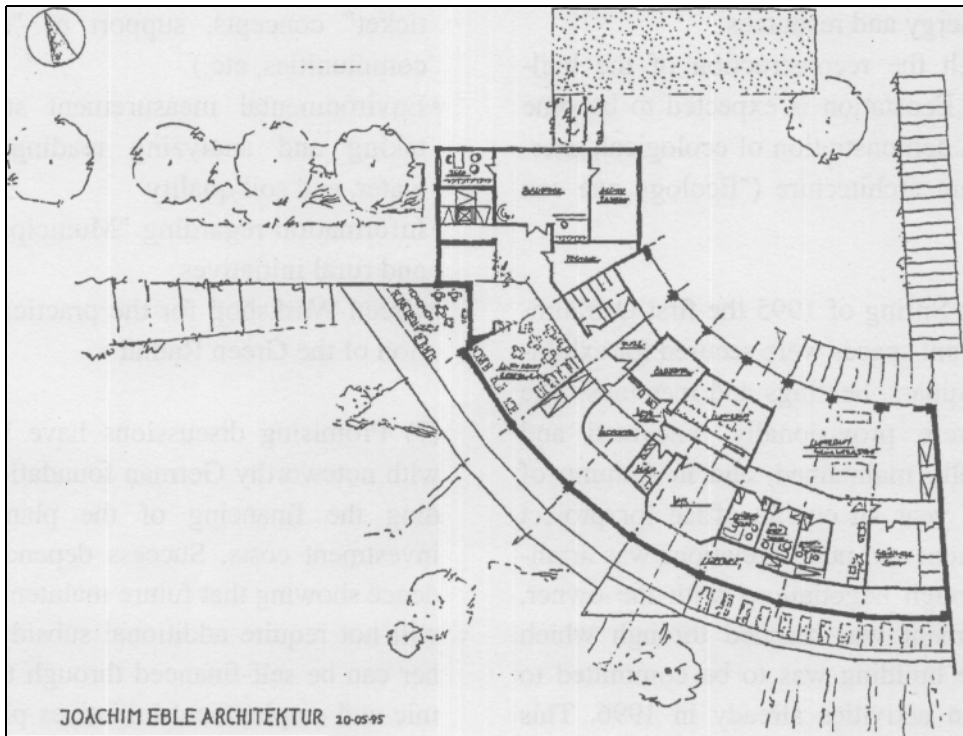
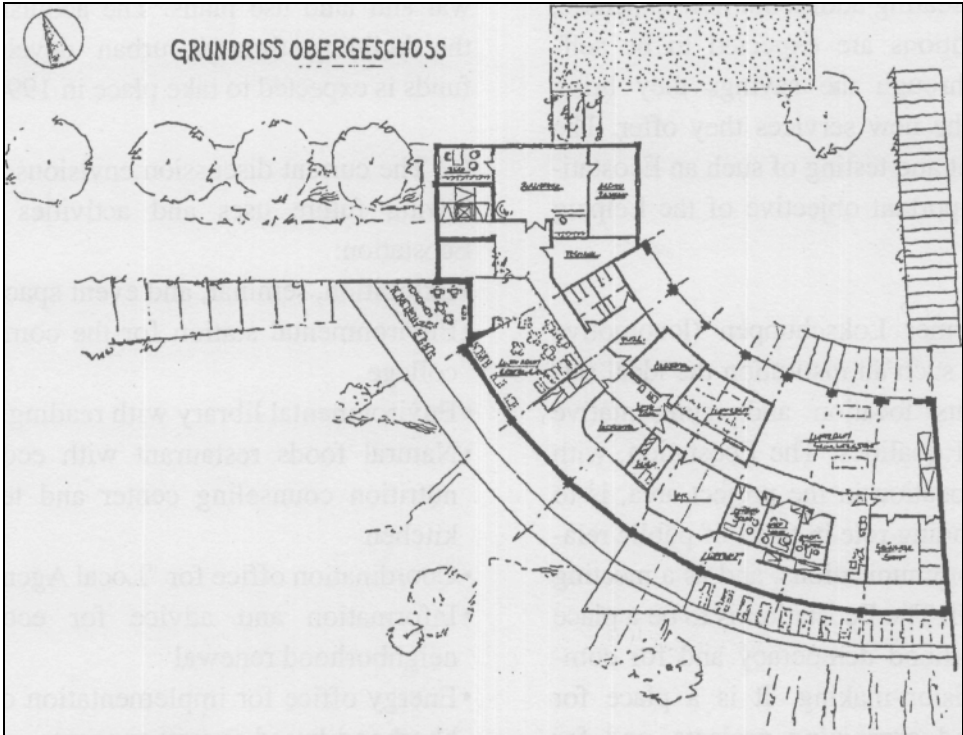
Place for neutral information exchange and for international cooperation on the terms of: democracy, ecological conservation, ecological market economy

Symbol and urban expression of a new phase of urban development

Illustration 17

Design Proposal for EcoStation





tional, social and cultural innovations. Instead of creating additional new expenses, these institutions are expected to be self-financing through the savings they bring about and the new services they offer. The development and testing of such an Ecostation is an important objective of the Leipzig Project.

(4) The former Lokschuppen (locomotive barn) offers such an institution the ideal setting with its location and representative architectural qualities. The Ecostation, with its central location in the project area, is to assume a leading role in tasks of public relations and communications, and as a meeting place as well. The Ecostation is to be a place for neighborhood democracy and for community decision-making. It is a place for initiating and organizing projects, and for discussions, festivals and performances, presentations, exhibitions and seminars. Also to be found in the Ecostation are workshops and other programs which serve to mobilize citizen energy and resources.

Through the reconstruction of the building, the Ecostation is expected to become in itself a demonstration of ecological, energy-efficient architecture ("Ecology one can touch").

(5) In the Spring of 1995 the first Ostraum-Forum event spaces were secured for exhibitions, seminars, hearings and meetings. The rooms were provisionally renovated and successfully maintained, and in Autumn of the same year an on-site office for project management and public relations was arranged. Through negotiations with the owner, an agreement was reached through which the entire building was to be committed to Ecostation activities already in 1996. This location has also been legally secured as an

"Environmental Center" through local renewal and land use plans. The acquisition of the building through urban development funds is expected to take place in 1998.

(6) The current discussion envisions the following future uses and activities in the Ecostation:

- Exhibition, seminar, and event spaces
- Environmental station for the community college
- Environmental library with reading cafe
- Natural foods restaurant with ecological nutrition counseling center and teaching kitchen
- Coordination office for "Local Agenda 21"
- Information and advice for ecological neighborhood renewal
- Energy office for implementation of neighborhood-based energy concepts
- Water and Waste agencies
- Mobility service bureau (Car-sharing, car-pooling, bicycle center with rentals and self-help workshop, coordination of "Job-ticket" concepts, support of "auto-free" communities, etc.)
- Environmental measurement station for taking and analyzing readings of air, water, and soil quality
- Information regarding "Municipal Farms" and rural initiatives
- Green Workshop for the practical realization of the Green Radial

(7) Promising discussions have been held with noteworthy German foundations regarding the financing of the planning and investment costs. Success depends on evidence showing that future maintenance costs will not require additional subsidy, but rather can be self-financed through the economic and employment initiatives planned for the next project phases.



Illustration 18: Former Lokschuppen (Locomotion Barn), South Side, state in 1996

Although City administrators were at first skeptical, they became more supportive of the project proposals when they could see that the realization and maintenance costs of the Green Radial concepts would be reduced by at least 50 - 70% when coordinated through the Ecostation and Green Workshop, as compared to a conventional development approach.

(8) Ecostation related work was stopped in the spring of 1996, and the leasing contract for the building was cancelled.

3.5 Planning and Mediation Instruments

The results achieved by the Eilenburger Bahnhof, Neighborhood Development Reudnitz/Anger, and Ecostation projects are largely attributed to the scientific planning methods developed for the Ostraum Project. These methods served to help create an appropriate planning context, when combined with existing institutions and city planning instruments.

Objectives:

- create collaborative learning processes which bring together local actors with outside experts and the general public
- increasing the competence of project participants with respect to socio-ecological concerns and urban development possibilities
- creating the conditions necessary for interdisciplinary and comprehensive solutions with respect to sustainable community development

The Project work was consciously organized with an orientation toward making decisions and getting to results. In order to achieve this we introduced and tested the following six complementary planning and mediation instruments.

1. Project Groups

Concept: Interdisciplinary Project Groups were the central working bodies. For each of the twelve Individual Projects, these Groups were committed to involving all relevant interests, to initiating collaborative learning processes and to developing planning concepts that would find consensus. While the make-up of each Project Group varied, they generally included the following actors: various departments of local and regional government, citizen initiatives and NGOs, local planners, property owners and business spokespeople.

Realization: The work of the Project Groups related to the Eilenburger Bahnhof, Neighborhood Development Reudnitz/Anger, and Ecostation projects was particularly successful. Regular monthly meetings took place between November 1994 and the beginning of 1996. The half-day events tended to meet with great interest on the part of the participants. However, this type of group work was not continued due to the changes in the project's direction.

2. International Workshops

Concept: Twelve international, multi-day workshops constituted a methodical and theoretical core of the Ostraum Project. These brought leading national and international experts together to help refine the planning concepts and work on the local, specific issues. These workshops were also important to the work of the Project Groups.

Realization: The success of the Eilenburger Bahnhof workshop, at which there were more than 80 participants, confirmed the significance of these collaborative activities. The three day intensive cooperation of the local participants with the external experts led to substantial exchanges of information and the development of new practical solutions that were capable of gaining the consensus of all concerned. The presentations of the workshop results at the City Hall and the Ecostation led to intense public debate and eventual common ground, which in turn helped to influence the positive decision by City Hall. The success of the workshop was largely due to the coordination of preparatory work done in the respective Work Groups, the public relations work, and the summary of the results in the form of 'consensus encouraging' documents for City Hall.

3. Ostraum Forum

Concept: This Forum functioned on a continual basis to prepare public documents and reports reviewing project goals, activities and results. The search for a location for the Forum was a priority in the first months of the Ostraum work. Along with the Ecostation and the Project Coordination Office, a site needed to be found of public significance. This led to the leasing of the former Lokschuppen (locomotive barn) in the center of the Eilenburger Bahnhof area.

Realization: In 1995 three public exhibitions were organized at different phases of project work. Two hearings were held for citizens and two for property owners to discuss the proposals and various alternative development strategies. Some public participation also took place through the Forum in the context of the International Planning Workshops. Most of these events were held in the Lokschuppen, which steadily gained in popularity as a community place.

Due to modifications made to the Ostraum Project early in 1996, further related events were cancelled, such as a number of seminars and hearings, and an action weekend to green the yards around the Lokschuppen in connection with a neighborhood festival.

4. Steering Group

Concept: The Steering Group functioned as an interdisciplinary review committee, and included participants such as department directors and other significant decision-makers. This group meet quarterly to review progress and discuss alternatives.

Realization: Through the first half of the planned for project life-span, the Steering Group succeeded in carrying out their responsibilities as intended. The interdisciplinary group proved significant in refining the urban ecology initiatives and helping to build support for proposals that went before the City Council and other decision-making bodies.

5. Advisory Council

Concept: The Council provided technical advice on the various initiatives, helped to form the project goals, and garner support. Represented on the Council were renowned academics, the offices of the mayors of Leipzig and the surrounding political districts, and citizens' groups. Meetings were planned twice a year.

Realization: The meetings were held as planned until August of 1995, having an important influence on the project work. After this time the mission and make-up of the Council was revised, and only one more meeting was held in June of 1996.

6. Project Coordination Office

Concept: This Office was understood to play the actual coordinating role of the Ostrau Project according to the original project applications and the approval statements of the European Commission. The tasks of this office were defined as being the coordination of the overall project in terms of contents, methods and organization. It was also intended to assist in coordinating the corresponding Individual Projects and the planning methods. Other tasks were the integration of the Ostrau Project into international networks, the organizing of international exchanges of experiences with selected partner projects, and the preparation of project reports and assessments. Originally envisioned as an organizational form for the Coordination Office was an independent Project Association. This Association was expected to be located in the Ecostation. Necessary financial and legal requirements for the founding of such an association as a competent and capable coordinating body were met by the grant of the European Commission.

Realization: Such a coordinating office was never established. Instead of this a project bureau was set up in the offices of the project agency (ABM-Stützpunkt Stadt

Project Groups:

Inter-disciplinary workgroups for the individual projects on -contents and methodology of model goals -preparation and introduction of implementation measures
Involving: Authorities, experts, action groups, owners, investors and other actors.

International Workshops:

Instruments to integrate external expertise for the wider exchange of experience
Involving leading national and international authorities for the precision of central project goals, including representatives of eastern European partner projects.

Project Coordination Office:

Overall coordination of the contents, methodology and organization of the projects, (project group work, workshops, „Ostraum“ forum), preparation of meetings of the steering group and of the advisory committee, reports, book-keeping and personal administration.

Ostraum Forum:

Responsible for the systematic public relations work
Providing the public with information about the on-going project work (including exhibitions, information material, media work)
Initiating accompanying qualification measures

Steering Group;

Coordinating project goals and project work with the relevant city authorities, as well as with the local authorities in other districts affected and with local organisations

Advisory Council:

Leading representatives from the worlds of politics and science ensure that the progress of the projects is in accordance with the declared objectives, and control the proper use of funds

Structure of the Project Coordination Office

Project agency: Stadt Leipzig, ABM Stützpunkt, Betrieb für Beschäftigungsförderung, Hans-Driesch Str. 2, 04179 Leipzig; Director: Matthias von Hermann!

Project headquarters:

Project manager
Overall planning and European contacts:
Local contacts/ PR
Office Manager
Finances

Matthias von Hermann
Dr. Ekhart Hahn
Dr. Christoph Richter
Nora Porsche
Bernd Eble

Project Area I

Urban ecology Head:
Dr. Ekhart Hahn

Project Area II

Peripheral development Head: Dr.
Klaus Würdemann

Project Area III

Commerce and employment
Head: Irmgard Grüner

Members of the Advisory Council: Prof. Jürgen Breuste, Environment Research Centre (UFZ), Leipzig; Ralf Elsässer, Ökolöwe Umweltbund Leipzig; Eric den Hamer, European Union, Brüssels; Dr. Hinrich Lehmann-Grube, Mayor of Leipzig; Prof. Bernd Lötsch, Vienna, Dr. Jürgen Riedel, Ifo Institute, Dresden; Dr. Roland Siegemund, Mayor of Molkau; Walter Christian Steinbach, Chief administrator, Leipzig Region.

Leipzig) on the other side of the city. Substantial influence was exercised over the project from this perspective, for example frustrating the efforts of the urban ecology initiatives, which eventually came to an end in early 1996.

3.6 Conclusions

Summary of results

(1) The Leipzig Model Project has shown that the processes of Ecological Urban Restructuring and Agenda 21 can play a significant role in encouraging consensus in the context of urban development. It was possible in a city district rife with conflict to bring together the divided city departments, citizen initiatives and business representatives in a common process, much as talked about in Agenda 21. After 14 months an integrated plan for urban ecological development was agreed to and presented by all of those participating.

(2) The overall concept was the result of a careful integration of a range of projects in the areas of urban design, transportation, energy, water, open space, citizen participation and local economic and employment strategies. In every one of these areas it was possible to organize innovative and concrete measures that basically complemented each other and that were comprehensible and acceptable for all participating.

(3) Consensus building was possible mainly because all of the participating interest groups were able to recognize aspects in the overall concept from which they would benefit. This integration of perspectives thus satisfied a main project goal, and was even achieved in cases that would typically be unresolvable conflicts. For example, where a new arterial street was already committed to in a land use plan, it was possible to replace this with a green corridor, connecting city and countryside in a way that would benefit everyone in some way .

(4) As of January of 1997, all concerned departments of the city government and city hall had given their approval to the urban ecology plan with majority decisions. Binding commitments had been made to incorporate important project development steps into legal planning documents. (For example, the formal recognition of the described

concepts and measures into supplementary renewal objectives as part of a development plan for the former rail yards; also the legal securing of the Ecostation planned for Locomotive Barn with the purchase of the property, using urban development funding.)

(5) The interdisciplinary nature of the planning and mediation instruments played a central role in the project successes. Particularly productive was the regular cooperative work of participants taking place in the "Project Groups." Offering consensus building ideas, and in a significant way supplementing and motivating the Project Groups were the three day "International Planning Workshops" for the Eilenburger Bahnhof and the Model Neighborhood Reudnitz/ Anger. Also playing important roles were the Events of the "Ostrumforums" (hearings for citizens and property owners, exhibitions, and seminars), the quarterly discussions to agree on project results with main decision-makers in the "Steering Group," and the support of the "Advisory Council."

(6) With respect to securing long-term objectives and to project expansion, it was possible in a short period of time to add two complementary projects to the central urban ecology areas of Reudnitz/Anger:

1. "Pollution Reduction in Urban Design, Demonstration Project Leipzig Reudnitz" (Support program EXWOST of the Federal Building Ministry),
2. "Demonstration Project for Energy Efficient, Ecological Architecture" in the demonstration district of Leipzig Reudnitz (Support program THERMIE of the European Commission).

Problems

(1) As mentioned above, the independent and interdisciplinary Project Association that was envisioned in the project applications and called for by the funding organizations did not materialize. Instead of this, the City of Leipzig granted decision-making powers to the city agency responsible for job creation (ABM-Stützpunkt, Betrieb für Beschäftigungsförderung, Eigenbetrieb der Stadt Leipzig).

(2) This situation led to a major reorientation of project objectives, funding resources, project instruments, etc. in a way that would benefit the interests of the project contru-

cor instead of the project. After about 1 1/2 of the planned 3 years of the project, most of the project resources had been redirected towards projects of the project contractor. In doing so, the original project initiators were excluded and the coordination office was staffed for the most part by contractor personell.

(3) Instead of carefully selecting a person independent of city administration to preside over the Advisory Council, as was recommended in the project application, the director of the department responsible for the project contractor was selected. Serious conflicts of interest soon emerged, and the mission and make-up of the Advisory Council were revised. Only after significant protests and the official expression of concern by the Advisory Council did it come to consequences: In July of 1996 the European Commission, as funding agency, motivated by the findings of the Advisory Council decided to stop further funding and to carry out project evaluation. The results of the evaluation confirmed the concerns, and after about a year of interruption, a decision to continue with the project has still not been made.

(4) The Leipzig Model Project in this way confirmed the kinds of problems that can be expected when such comprehensive and interdisciplinary projects are managed by traditional administrative departments. It is more usual that the self-interests of bureaucratic departments manifest themselves in ways that are more difficult to follow. Unfortunately, the conclusion most people jump to in such situations is that integrated urban ecology projects are too complex, unrealistic, and not worth taking on.

4. Perspectives

The Leipzig Model Project offers a variety of conclusions, with many lessons regarding comprehensive urban ecology concepts and the organization of Local Agenda 21 initiatives. Above all, this project has demonstrated the following:

1. Potentials: Local Agenda 21 initiatives are feasible. They are capable of helping to develop consensus in the complex processes of rebuilding urban and social structures. These initiatives can assist in solving environmental problems and in the creation of jobs.

2. Integrated Concepts: Isolated and minimal strategies typically proposed in the context of environmental planning are incapable of solving fundamental problems. In this respect, the integrated concepts of Ecological Urban Restructuring offer a range of ideas and experiences for alternative approaches.

3. Project Organization: The success of Local Agenda 21 as well as Ecological Urban Restructuring efforts will depend on the creation of organizational structures which have the required capabilities and at the same time are independent from governmental administration. The Leipzig project has shown that such structures can be created, given adequate attention and commitment by those in positions of authority.

4. International Dimensions: Overcoming the obstacles of traditional structures can be assisted by new forms of international exchange and cooperation. A context-specific refinement of the concept of subsidiarity also plays a significant role vis a vis this challenge. Important are also the further development of international networks, and reciprocal forms of support between local initiatives and projects.

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