THE CITY TRANSFORMS: CHANGING PERCEPTIONS OF URBAN IDENTITY
(CASE STUDY - THE PATH OF REMEMBRANCE AND COMRADESHIP IN LJUBLJANA)

THÈSE N° 4038 (2008)
PRÉSENTÉE LE 15 AVRIL 2008
À LA FACULTÉ DE L’ENVIRONNEMENT NATUREL, ARCHITECTURAL ET CONSTRUIT
LABORATOIRE D’ARCHITECTURE ET MOBILITÉ URBAINE
PROGRAMME DOCTORAL EN ARCHITECTURE, VILLE, HISTOIRE

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE
POUR L’OBTENTION DU GRADE DE DOCTEUR ÊS SCIENCES

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ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE
Suisse
2008
The City Transforms: 
Changing Perceptions of Urban Identity
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Ecole Polytechnique Fédérale de Lausanne

Ecole Doctorale | Architecture, Ville, Histoire
20 February 2008

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**ABSTRACT**
The city in the twenty-first century is in the midst of dramatic changes, and yet many have yet to fully manifest themselves, still concealed in technology and distributed enough to escape general understanding within the existing context of built form. Technology may be outpacing urban architectural theory, and large populations (primarily the young generation who are growing up with computers and mobile phones) are altering the identity, use and ultimately the form of cities. What is this changing identity? The present thesis asserts that if the "first generation" of cities was characterized by built forms and spaces, and the "second generation" defined by mobility, then the "third generation" of cities will certainly be "hyperdynamic", that is, technological, dematerialized, unprogrammed, emergent, adaptable and virtual, if they are to serve the needs and behaviors of their inhabitants. A theory of these three generations coexisting, much like archaeological strata, in the form of three conceptual urban layers is presented, along with consideration of the possible relationships between them. A case study set in the city of Ljubljana highlights emerging changes in the perception of the city and focuses specifically on the Path of Remembrance and Comradeship, a unique urban feature set against the background of Ljubljana's history, technologies and ways of thinking about cities. The case study forms a basis for talking about future trends and the potential for an expanded lexicon of urban dynamics.

**Keywords:** cities, urban identity, urban theory, communications technology, mobility, Ljubljana, Path of Remembrance and Comradeship

**RÉSUMÉ**
Les villes du 21ème siècle font l'objet de changements spectaculaires, pour certaines d'entre elles ces changements sont en cours, encore dissimulés dans la technologie et suffisamment intégrés dans le contexte actuel de la forme architecturale pour échapper à la compréhension générale. La technologie a dépassé la théorie de l'architecture urbaine, et de populations importants (principalement la jeune génération qui a grandi avec les ordinateurs et les téléphones mobiles) est en train de changer l'identité de la ville et, par conséquent, la définition des villes. Que signifie ce changement d'identité ? Cette thèse affirme que la
première génération de villes est caractérisée par des formes des constructions et par l’aménagement des espaces, la seconde génération est soumise à la mobilité, et la troisième génération de villes sera certainement hyper dynamique, c’est-à-dire technologique, dématérialisée, non-programmée, émergente, adaptable et virtuelle, pour qu’elle puisse couvrir les besoins et les comportements de ses habitants. Une théorie de la coexistence de ces 3 générations, un peu comme une strate archéologique formée de trois couches urbaines conceptuelles, prend en considération ces relations entre elles. Cette étude dans le cadre de la ville de Ljubljana met en évidence ces changements émergents dans la perception de la ville et souligne spécialement sur « Le chemin de la commémoration et de la camaraderie », une caractéristique urbaine unique dans le contexte de l’histoire de Ljubljana, les technologies et les façons de penser nos villes. L’étude de ce cas constitue une base de discussions sur les futures perspectives et le potentiel d’un lexique élargi de la dynamique urbaine.

**Mots-clés:** villes, identité urbaine, théorie urbaine, technologies de communication, mobilité, Ljubljana, Path of Remembrance and Comradeship
ACKNOWLEDGEMENTS

The remarkable thing about a life is the way in which its details come together to form a dynamic flow of experiences. You never know when even the smallest event will later become a pivot point, sending life in an entirely new direction. Along with the people you meet, the places you travel to and the things you do or even imagine doing, these details join with unexpected circumstances and seemingly random interventions, all of which have to be equally acknowledged in the process. So it is with my life and this doctoral thesis.

Had by chance I had not seen a copy of a certain design organization's newsletter in 1996, I would never have read about my now friend and colleague Šaša Maechtig, professor of industrial design at the Academy of Fine Arts and Design at the University of Ljubljana, I would never have contacted him, almost on a whim, five years later when, in planning a holiday trip to Europe at the end of 2001, proposed to meet in Ljubljana. And had Šaša, a gifted educator, been skiing in Austria for the holidays, as he usually does, and had he not by chance come to visit California two months later, and not, probably equally on a whim, invited me to come teach for a semester in Ljubljana, I would never have been writing the present and unexpected chapter of a phase of life abroad. Had Hanadi Ikhlassi not accompanied me on that first trip to Ljubljana to witness the attractions of this magical place firsthand, and later, almost on a whim, proposed the idea of a doctorate at EPFL in Lausanne, her city of residence, the idea of this study, some thirty years after my masters in architecture, would undoubtedly never have occurred to me. Had Professor Bruno Marchand, former director of the doctoral school in architecture at EPFL not been in his office on the day I visited the school and not been so wonderfully encouraging, and had he not made the suggestion to meet Prof. Inès Lamunière as a potential advisor, I would never have made the acquaintance of my inspired mentor for this thesis, whose wisdom and intelligence, guidance and trust has proved absolutely essential for being able to finish this long process. Had I never joined the Harvard Club of Slovenia (!), I would never have met my friend and colleague Dr. Davorin Gazvoda, head of the department of Landscape Architecture, a very smart man who in his typically friendly and generous way agreed to be co-mentor of the thesis. Had Iztok Žagar not wanted to hire a professor of industrial design from Pasadena as an editor, I would probably never have been able to reside in Ljubljana for as long as I have, nor would I have been able to publish two books without the support of Amidas, the translation company he co-founded some fifteen years ago. Iztok's generosity and friendship have been an important part of my experience here. Had Wallace Diskin not given her blessing with such understanding, I wonder if I would have left. I am also grateful to Ela Juić for the invaluable information in her thesis and for her help in translating Slovene sources, as well as to Katarina Cerar, Tena Rebernjak and Rada Kikelj for their assistance in recording the interviews.

So, to Šaša, Hanadi, Bruno, Inès, Davor and Wallace go my special thanks. And to my family and friends in Los Angeles, some of whom are still wondering why I left and what I am doing, and yet who sometimes even in their silence expressed their approval, I must tell you that I am indebted to you.
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Part One

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13 INTERACTION, EMERGENCE AND THE MENTAL MAP
While it may be hard to justify a definition of interaction with the city as "repeatedly leaving it", it does point to the fact that the identity of city dwellers here corresponds to an expanded conception of the city and their roles in it.

19 IDENTITY AND SOCIETY
So as the city as an organism matures, it passes through stages of development. We have to wonder how this development will progress in the future, as chaotic, intriguing conditions change radically and as the model of the city in the image of human development diverges from the model proposed by Reisman into much different territory.

23 PERSISTENCE AND IDENTITY
As the city lays its attributes out before us, it is possible to make an inventory of the elements that contribute to the physical components of urban identity.

26 THE REGION AND THE SPECIAL CASE OF A SMALL COUNTRY
The identity of the city, apart from the day-to-day operation of its infrastructure, overlaid on the physical, architectural and urban elements of buildings and spaces, must certainly also be viewed in the context of the much broader issue of country and regional identity.

30 PORTABLE IDENTITY
In contrast to the influence of technology and devices, the familiar symbols of currency and flag may normally not seem very important to the identity of the city; however, in a small country, the vocabulary of identity encompasses not only the built form of the capital city but the entire territory, and its history, all the way up to the border.

33 THE URBAN LEXICON
The resulting complex identity transforms into individual perceptions in the minds of inhabitants, further setting the city, as it is thought to be, against the background of individual lives, behaviors and experiences. What are the terms in the lexicon of urban experience, and how has technology added to (or changed) that experience?

CHAPTER 2: PERCEPTION AND THE CONCEPT OF THREE LAYERS

37 INTRODUCTION
The city is a complex construction, an amalgam of many often-paradoxical forces, actors, physical, intellectual and emotional, not to mention historical features.
IDENTITY OF THE CITY = PERCEPTION OF THE CITY
Obviously, perception varies dramatically from individual to individual; however, in the last hundred years, with the advent of technology of image-making and communication and with the exploding use and ubiquity of the Internet, the range and manner of human perception of the environment, particularly the urban landscape, has changed.

IMAGE
Along with flight as a new perceptual medium came photography, which also tended to flatten the "identity" (in the sense of a concrete reality on the street or in a building) of the city into an "image" (a portable snapshot without a third [depth and height] and fourth [time] dimension).

LAYERS: A WORKING METAPHOR
Can the city really be thought of as an accretion of layers that include hypothetical and virtual elements such as motion and consciousness? And then, why layers and not axes, or other form of diagram?

LAYER 1: THE STATIC CITY
The city is built with hand tools and machinery for heavy lifting; people see the image of the city in this first layer as its body, its physical form.

LAYER 2: THE DYNAMIC CITY
If it is people walking who give vitality to the sidewalks of the city, then it is surely drivers who energize the streets. Literally making a quantum leap by virtue of speed alone, drivers of automobiles are clearly traversing the city in a cinematic sense.

LAYER 3: THE HYPERDYNAMIC CITY
If the second, dynamic layer set the city in motion, then what is this movement really all about? And if the issue is perception, then in the third layer technology provides the means for that perception and new mechanisms of behavior.

CONNECTIONS
The virtual and real are not separated in the city, and thus the concept of layers, which serves here as a theoretical metaphor and useful starting point, is obviously more porous and more complex.

Part Two

CHAPTER 3: CASE STUDY PRESENTATION
THE PATH OF REMEMBRANCE AND COMRADESHIP

INTRODUCTION: SELECTION OF A CASE STUDY
With the development of the idea of the identity of cities, evolving into a theory, it is logical in terms of methodology to situate the theory in a real environment and to find examples in an urban space that begin to illustrate the theoretical claims. To begin with, this thesis originated in Ljubljana…

LJUBLJANA, CAPITAL OF SLOVENIA
With a population of 300,000 in a country of 2,000,000, Ljubljana also has an enormous university, and the population of its numerous faculties and three academies energizes the city. This activity does not only involve academic preoccupation, but also virtual networking, appointment-making and image-conjuring by users of mobile phones and senders of SMS text messages, especially popular with students.
THE PATH AROUND LJUBLJANA (POT)

Pot okoli Ljubljane, the path around Ljubljana, historically also known as AST, POT, PST (Pot Spominov in Tovarilna) is a partly gravel-paved recreational foot and bike path that threads its way circumferentially through the entire city, sometimes blending into the street grid, doubling with pedestrian routes and blending with sidewalks, and as such is really only conceptually a complete circle.

HISTORY OF THE PATH

In an astonishingly short space of time, Ljubljana was surrounded by nearly 30 km of barbed wire. This dramatic move had been completely unexpected by the population of Ljubljana. Mussolini had declared Ljubljana a strictly controlled military area and General Robotti ordered that Ljubljana should be so perfectly wired that even a mouse could not get out.

THE COMPETITION OF 1984

The winning solution emphasized the joining of contexts and suggested the name POT as the logo, and made the Path the spine of the city green system. Despite the approval of the winning proposal, the design did not end up being fully implemented.

INDEPENDENCE

No one referred to the Path as PST any longer, and maintenance was reduced to an absolute minimum. Instead of the designation PST, the Path was now referred to simply as POT, given that it carried much less political baggage.

COMMENTARY IN THE PRESS

Excerpts from a variety of articles about the Path give a sense of the immediacy of the issue of the Path among the public. Most of the articles appeared around May 9 each year, on the occasion of the traditional pohod, or march around the Path.

THE FUTURE PATH?

A gentle identity of the Path has been established, along with its "persistence", despite the fact that the historical memory of its origins may be waning among younger populations of the city. The debate continues about whether the Path really ought to be celebrated and preserved.

CHAPTER 4: ANALYSIS

INTRODUCTION

So in fact, what is the Path of Remembrance and Comradeship? Its nature is arguably multifaceted and therefore multidisciplinary, and as such offers rich potential for this case study. This issue will be considered in light of other examples in other cities in the world.

SPACE AND LINEARITY IN LJUBLJANA

Prešeren Square is not a classic European square in terms of geometry; it is an intersection to pass through more than a place to congregate in. The riverbanks are much more attractive and dynamic, with a string of cafés and an endless promenade of people.

LINEAR PARK

The linear park is a typology of open space that forces a given way to move, like a railway track. The Path is also a hybrid, since it is not only characterized by natural landscape elements but also traverses urbanized residential and industrial areas.

COMPARATIVE ANALYSIS (LINEAR AND ANNULAR LANDSCAPES)

A survey of 12 examples of linear parks, some of which are closed loops. A discussion of the special nature of linear parks, and comparison of several interesting solutions.

CONCEPTUAL PROTOTYPES

Clearly, the Path is not simply a linear park, nor is it in fact a park at all in some areas. Apart from issues of ownership of parcels of adjacent land, the future planning of the Path will likely mean new programming and various interventions.
Is the Path a monument? Strictly speaking, a monument ought to be "a sculptural object or building or other edifice created to commemorate a person or important event", and here the Path corresponds in spirit yet not in physical form.

It is evident that a richer model is necessary to capture second- and third-layer issues, such as interactivity and urban mindspace, supportive of the activities of the people who use it. Thus, one possible source of inspiration here might be the work of Cedric Price (1934–2003), particularly the proposal for the Potteries Thinkbelt.

From these general observations based on visitor input, we can see that people become attached to a landscape or elements of a space, obviously perceiving a personal connection to it. This translates into a "conservative" approach, if it is necessary to call it that, in which people want a certain identity preserved, not undermined.

One of the major areas of research for this thesis was interviews with 13 Ljubljana architects, artists, urbanists and designers, all of whom were trained initially in architecture, landscape architecture and urban design.

The point of the analysis in this chapter is to begin to recover the full urban lexicon and to reinterpret "take it as it is" as "take it as it can be", and transform the immaterial into the material, and vice versa. Otherwise, the Path just becomes a long and imperfect green swath, a green peculiarity.

This synthesis has two parts, the first being a discussion of the issues raised, while the second is an outline proposal, a number of schematic guidelines actually, to embody the synthesis as a series of projects.

One point of view that has emerged from this study, from thinking about the identity and perception of cities and from the history and situation of the Path itself, is that the Path already exists in the three layers, and moreover that it passes through the three layers as a powerful and unexpected urban element.

A possible explanation for the stasis of architectural projects is that the culture of private real estate development is not mature, or that the city budgets are too meager and the government lacks a clear vision of what might or should be done.

In the spirit of speculating about the identity of cities and theorizing about the dynamics of cities, this chapter culminates in a series of reasoned proposals for the Path, along with hypothetical interventions that highlight important issues.

The format of the proposal is in the form of six "toolsets", which capture, mix and "crystallize" the conceptual content of the three layers with the various realities of the Path itself.

The diagram summarizes the interventions of the preceding sections, specifically also comparing the present Path with its potential future development, allocated to the three urban layers. This might also serve as a partial paradigm for the future of cities in general.
AN AFTERWORD

Whether any strategy for the Path can succeed is a question. Historically, the development of the Path has been a series of failures, despite the initial realization of a memorial dream of a group of architects. Some conclusions about the thesis and about the Path, as well as considerations for future study.

Part Three

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INTRODUCTION

In the center of Fedora, that gray stone metropolis, stands a metal building with a crystal globe in every room. Looking into each globe, you see a blue city, the model of a different Fedora. These are the forms the city could have taken if, for one reason or another, it had not become what we see today. In every age someone, looking at Fedora as it was, imagined a way of making it the ideal city, but while he constructed his miniature model, Fedora was already no longer the same as before, and what had been until yesterday a possible future became only a toy in a glass globe.

-Italo Calvino, "Invisible Cities" (1974)

It would seem to me that the new models of public space and public behavior will depend on some sort of subtle interrelationship of the quotidian with the exalted experience.

-George Baird in "From Public Space to Social Space(s)" (Harvard Design Magazine, 1994)

Globalization and the hungry speed-of-light media that transmit the message around the world... ought to be of great concern for a country like Slovenia, fearing the loss of its cultural identity and individuality to Europe and the world. However, identity isn’t just a static or finite quality; it must be allowed to advance, develop and change. A dynamic sense of identity is a sign of vitality, provoked by important cultural tremors, even with the risk that might come with it. All forms of reconstruction must involve the transformation of a former perception of identity.


Two circumstances led to the ideas in this thesis about the changing nature of cities. The first is the perspective of an architect who migrated to being an industrial designer and professor, seeing the scale of design in a multidisciplinary way, looking for the commonalities, zooming from the cosmic to the microscopic. So it was natural, later, in considering a thesis topic to start to deal with larger schemes, i.e. cities. The second circumstance was the beginning of a life in Ljubljana as a visiting professor and the privileged, if often naive, perceptive slant of the foreigner, as yet unburdened by "truth" and more subject to impressions than facts.

And thus this study in search of a metaphor about the transformation of the urban landscape under the influence of technology is set squarely in Ljubljana as an interesting model of a relatively small European city. In Ljubljana, capital of Slovenia, architectural history reveals itself along a varied continuum from its Roman beginnings to the modern skyline that articulates the current rendition of the city much like any other city in Europe, but against the contrasting backdrop of the seductively beautiful Slovenian landscape, including its castle on a hill, positioned virtually in the center of the city. With an enormous student population, the street environment and cultural offering of Ljubljana are rather dynamic. Watching skateboarders making good use of the broad steps in Trg Republike (Republic Square) and observing students on the street listening to music on their iPods and sending text messages from their mobile phones, constructing a "private world" while riding bikes or taking the bus, seeming to be in touch with a parallel but far-off reality, makes one wonder whether this generation is thinking about cities in a different way (if at all), and whether perhaps conventional urban design is beginning to miss the point. To put it simply: technology is clearly beginning to influence the perception and dynamics of the city.

In a manner of speaking, there is very little that can be said about the urban landscape that has not been said by Italo Calvino in Invisible Cities, at least in a poetic way, excluding of course the body of political treatises, documentaries or financial analyses that largely and
coldly seem to distance themselves from the soul of cities "on the ground" and their meaning. No text has offered a better series of metaphors that take the organism of the city outside of itself, that really do visualize the "richness" of cities (the beautiful, the ugly, the exuberant and the infernal) that people dream of and puzzle over but often have difficulty actually capturing. Beyond the streets, the buildings, the public spaces and parks, the city is most probably more a mental, or even literary construct than a design project, both in the sense of being narrative (reporting on all the collective imaginations of those who visit or reside in cities) and imaginary, as elusive perhaps as any other fictional tale. In the end, just as in a sense artists depict the world as it really is, poets are the only true theorists. It is in that context that this work unfolds.

Seated at the outdoor café known as "Pločnik", in the exact center of Ljubljana, one gets the impression of having landed in paradise, at least a small paradise in Central Europe, a city of human scale, quietly buzzing with activity and most definitely furnished with an ample architectural heritage, where façades of a variety of historical periods wrap around inhabitants like a colorful textural quilt. It is also in a sense a perfect location to contemplate the city as an organism, and to begin to formulate a hypothesis and to characterize the nature and future metamorphosis of this organism.1 As a resident, one also wonders what visitors make of this city, as they snap their photos, follow routes on maps and make the inevitable comparisons with home. Unconsciously for the most part, they are participating in a collective mental urban experience, concentrated here on-site, but also linking them to myriad mindspaces and places on the globe, a process that clearly has very much to do with the question of the

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1 This thesis is as much a meditation on cities as it is a hypothesis, and relies as much on observation as it does on appropriated theories of urbanists. The work was perceptively described by Prof. Inès Lamunière at the EPFL in Lausanne, primary mentor for this study, as "the observations of an architect with a glass of red wine in hand, watching the activity of the city and wondering, in depth, about how it functions and what it is really about".
identity of the city and the ways in which that identity is generated, perpetuated and variously perceived.

The buildings that surround the center define an irregularly shaped space adjacent to the Ljubljanica River, which rather than cleaving the city center into two separate agglomerations on river banks, such as in Prague, simply embellishes the center with another element, much like a large piece of street furniture. The famous Triple Bridge furthers the connection, essentially expanding the terrain of the center in different directions more than declaring its function as a bridge over water. A palette of styles gives the buildings a variety that invites the scanning eye and wandering brain to puzzle over the heterogeneity. (The earthquake of 1895 led to the combination of Baroque and Secessionist architecture.) The sun warms the space and casts its rays on numerous projecting elements, setting an urban scene not so dissimilar from others in smaller European cities, yet unique in its colors and stylistic diversity of the urban landscape.

Aerial panorama of Ljubljana, showing the castle and Ljubljanica River. Prešeren Square, at the very center of the old town, shows in the lower right of the photo, along with the Triple Bridge (www.burger.si).

Such a small square had generated a lot of traffic: while cars and buses are now excluded, pedestrians still dodge the cyclists that emerge and disappear in seven different directions from this star-shaped node in the center. Physically, this node is irregularly configured (and hardly square) and metaphorically replicates the layout of the city at larger scale, one that radiates, star-fashion along seven roads that give access to and from the city, some named for the destinations they actually or formerly led to: Dunajska (Vienna), Celovška (Klagenfurt) and Tržaška (Trieste).³

Ljubljana quite modestly displays the layering and density of its complicated past, as well as its recently acquired role as capital city of Slovenia, as of 2004 a Member State of the European

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² This change took effect at the beginning of September 2007. Previously, several bus lines traversed the space, and taxis were permitted to park there.
³ See various city maps in Chapter 3.
Union. The complex social, political and historical archive of Slovenia is the background against which the special heritage of Ljubljana as a culturally important "education city" shines, with its young population of students, active professionals, academics and working people alike collectively searching for identities themselves. Ljubljana is also a small city with a large population of architects, and while its search for identity has come up against some frustrating impediments, the potential for creating innovative urban solutions does exist.

As the city lays out its physical charms before us, it is possible to make a sort of inventory of the elements that contribute to the physical components of urban identity. They are visible, tangible and concrete, and hence constitute recognizable, even treasured elements for the city, including green space, the castle on the hill, a bisecting river, cars and people on the streets. Other factors, psychological and perceptual ones, however, are harder to define, especially with the rapid and pervasive "invasion" of communication devices and new media, and their potent and as yet not fully understood influences:

The explosive development of the Internet and related information and communication technologies has brought into focus the problems of information overload, and the growing speed and complexity of developments in society. People find it ever more difficult to cope with all the new information they receive, constant changes in the organizations and technologies they use, an increasingly complex and unpredictable side effects of their actions. (Heylighen, 2002)

One need look no farther than personal observation to realize that the problems of engagement with technology are partly generational; for every older skeptic there is a younger enthusiast, and without doubt technology has at least been responsible for furnishing media entertainment, if nothing else, to urbanites. With the aging of one generation of theorists and the emergence of another younger one, it is evident that former ways of thinking about the city must be replaced or at a minimum complemented with new ones. In order to accomplish this, new metaphors or characterizations or perceptions will be necessary, and these might lead to new kinds of projects and interventions, responding as much to the "mental state" of the population (their perceptions to be sure) as to their future physical and environmental needs.

In order to better understand and express the issue of urban identity, a working theory is launched as part of this thesis that attempts to consider the urban environment as a layered phenomenon, a complex amalgam of factors of perception. This hypothesis facilitates consideration of a variety of urban characteristics or elements, how they may or may not interact and how they may or may not contribute to the identity of the city.

The goal of the study, in the end, is to imagine a theoretical expansion of the traditional lexicon of urban design (and perhaps even a workable "tool" for planners) with the hope of gaining insight and direction from the issues or methodologies of diverse fields, both technological and sociological; these include networks and virtual communities, the mental map of the city, the city as an element in educational development and how education might be an important factor in modeling the city, as well as how human senses, perceptions and different mindspaces might deepen the urban experience.
With the hypothesis of the layered city, and with a sense of the potential scope of an expanded urban lexicon, a case study is derived in Ljubljana as an example of how the component layers of the city might interact. Here, the Path of Remembrance and Comradeship, a special feature of Ljubljana's urban landscape, unique also among most European and international cities, affords a means of developing both an analytical and experimental point of view and addressing the question of how alternative visions of urban design might evolve.

With reference to the theoretical background and analysis of the Path, the case study concludes in the form of a project framework, a series of possible interventions of a technological and hyperdynamic nature for activating the Path, and proposes developmental alternatives that may suggest how cities may begin to construct or reshape their identities in the future.

OBJECTIVES
- To understand the identity of the city in light of technological and sociological change
- To expand the current urban lexicon for architects and planners
- To consider a specific case study set in Ljubljana, a city looking for its own new urban identity, as a prototype for development of cities in the future

HYPOTHESIS
The identity of the emerging modern city comprises not only visual and architectural elements, but also abstract, sensual, social and technological ones, which must be understood in a different way, via contemporary scientific and sociological theory. Ironically, the result may be that the city in its built form has merely become a backdrop for an agglomeration of numerous, highly mobile, diverse, conceptual and virtual communities, that taken together form a new or completely transformed version of the classical "sense of place" and constitute an argument for the existence of "mental urbanism". This hypothesis is based on consideration of the idea of urban identity itself and develops in sequence as a theory that the city is a layered construct, the sum of the collective perceptions of its residents.

METHODOLOGY
1. Research: Review of existing literature (in print and on line) concerning issues relating to the future of cities, including basic texts that in a sense have established the field of urban design (Lynch, Gideon, Arnheim and others) as well as recent writers from technological fields who have extended their studies to urban issues such as emergence, communication, technology swarms, connectivity, presence and community (Johnson, Rheingold, Mitchell,

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4 The basis of urban experience in the physical sense, in consideration of fundamental human needs, from the observations of Edward T. Hall in *The Hidden Dimension* (Hall, 1969) to Castells' characterization of the "space of places" (Castells, 2002).

5 Norberg-Schulz puts it thus: "...a place is an apparent manifestation of the world of life, since it ensures the spatial and temporal stability of that world. As an apparent manifestation, it must have an identity of demarcation and of character..." (Norberg-Schulz, 2000:31)

6 A term coined in this thesis to describe the aggregate of personal perceptions of city residents, their mindmaps of the urban landscape, according to their lifestyles and internal conceptions of their connections, nodes and "presence" (i.e. identity in cyberspace), a personal "virtual reality" which shapes a reaction to the use of the concrete reality of the city.
Watts and others). The goal of this phase is to understand current thinking, especially contemporary speculation about people's behavior in cities under the influence of technology.

2. Interviews: Thirteen videotaped interviews were conducted with Ljubljana architects, as well as with artists, designers and planners with a background in architecture. Questions dealt with the identity of Ljubljana, issues in urbanism, and specifically, with the Path of Remembrance and Comradeship as the case study of the thesis. The full transcripts of these interviews is presented in Appendix 1, with a summary and analysis of key issues in Chapter 4. This is a distinguished group of thinkers and for some the first time that they have had a forum to comment informally and openly, outside the direct professional environment and in informal relaxed conversation. These transcripts constituted extremely valuable input for the conclusions of the thesis, specific project proposals and general understanding, and now represent a precious archive.

3. Theory: Formulating a theory is a method of synthesizing and expressing the ideas being considered in the thesis, intellectually and metaphorically, deriving from reading and research. The theory presented here is a speculation, a working hypothesis that serves as a tool of analysis and a vehicle of communication.

4. Case Study: The case study of the Path of Remembrance and Comradeship in Ljubljana evolved as a site for application of the theory proposed, in that it met the criteria of a unique, intriguing and in a sense unexpected major urban feature of the city. The intent of the analysis of the case study was also to derive a model that might be useful for extrapolating to other cities and as a means of applying the ideas in the thesis to a concrete example. Complete photographic documentation, as an important element of the research, is presented in Appendix 2.

5. Applied conclusions: The final chapter of the thesis is cast as both a general conclusion and as specific proposals for the case study that together constitute a sort of outline project. It is clearly in the nature of architects to experiment and hypothesize via projects, and while the conclusions here only represent a hypothetical framework of interventions, they serve the spirit of architecture-based project research as well as general intellectual inquiry.

ORGANIZATION
PART ONE (basis)
Chapter 1: An exposition of the issue of urban identity in view of very rapid and recent technological and sociological change. Theorists have begun to deal with the city in different ways, and evidence of new phenomena is everywhere.
Chapter 2: Defines the identity of cities as the aggregate of the individual perceptions of residents, the question of how the city actually is perceived arises. To address this, a theory of three urban layers is proposed: "static", "dynamic" and "hyperdynamic". After considering the nature and justification for these layers, the question then becomes how these layers interact.
PART TWO (application)
Chapter 3: (case study presentation) The Path of Remembrance and Comradeship in Ljubljana, a 33-km-long memorial, recreation path and linear park, passing through a variety of neighborhoods and urban (and rural) experiences. Historical timeline and description. Chapter 4: (case study analysis) Consideration of the typology of linear park, comparison with examples in other cities, analysis of features and potentials. Chapter 5: Theoretical proposal: "Wireless Ljubljana".

PART THREE (primary research and documentation)
Appendix 1: Interview transcripts
Appendix 2: Photographic survey of the entire Path, coordinated with aerial photos and maps.
Appendix 3: References

Organigram of the logic and construction of the thesis: arrows indicate the general workflow and connections of certain content and tasks, with the vertical axis roughly representing time.
CHAPTER 1
Identity of the City

Every life has its climax, a period when causes are at work and are in exact relation to results. This mid-day of life, when living forces find their equilibrium and put forth their productive powers with full effect, is common not only to organized beings but cities, nations, ideas, institutions, commerce and commercial enterprises, all of which, like noble races and dynasties, are born and rise and fall.

-Honoré de Balzac, "Cesar Birotteau" (1837, www.gutenberg.org)

As an enduring framework that is used habitually, architecture provides an obvious basis for a more context-based approach to interaction design...A culture's perennial spatial forms perpetuate a particular cognitive background. This is why one of the best criteria for appreciating architecture is whether it is memorable.


Where the telescope ends, the microscope begins. Which of the two has the grander view?


THE URBAN ORGANISM

It is now possible to see the Earth from above on the Internet (www.earth.google.com), and with satellite photos seamlessly stitched together with conventional aerial photographs, it is possible to "fly" to any city, zoom in on any location, leaving in a sense nothing to the imagination, despite the low resolution images. As utterly fascinating and even "voyeuristic" as it is, the Earth, more than being shrunk, has been unclothed, without the mystery that somehow would in the past have characterized travelers' accounts, both documentary or fictional (e.g. Calvino, 1974), of places we have never ourselves visited. The view from above, abstract as it is, differs greatly from the view at ground level, and comes to us only by means of the technology of real flight, or now with virtual flight, thanks to Google Earth.¹ This view

¹ See Harmon, 2004 for a discussion of maps and "personal geographies". Maps, aerial photos and the abstract representation of a building or site in orthographic projection, are documents of identity and interpretations of "reality". Google Earth satellite photos and GPS moving-map displays are changing the way we perceive the environment. While these technological solutions ostensibly present data, they in fact challenge the very notion of WHERE WE THINK WE ARE. Any sorts of mappings, idiosyncratic mindmaps or precise coordinates of latitude and longitude accurate to many decimal places, are at once real and unreal.
has changed the image of the Earth forever, not to mention the cities on it, which now are comprehensible, decipherable and knowable: site, infrastructure, architecture, open space, adjacencies, cars on the streets, planes on airport taxiways, and the shadows of trees. It is nothing less than a profound change in "cognitive background" (McCullough, 2004). The previously understood magnitude and scale of the Earth has thus become dramatically attenuated, with the result that its immensity amounts to nothing more than a view of a cell or living organism to be studied under a microscope. And arguably, in the scope of the universe, it is.

... to me cities are natural phenomena: Ants make hills, bees make hives, humans make cities. Each of these colonies is a meta-organism, really. They all must survive by taking in resources and then figuring out what to do with the waste that comes out the other end. (Rushkoff, 2006)

With cities thus laid bare and in the face of meter-by-meter visual evidence, the impulse to make theories or educated guesses about the previously unknown or unknowable diminishes. The issue of identity\(^2\) in general is so abstract and potentially complex that it amounts to an issue for wide speculation and interpretation, and, given the wealth of literature on architecture and urban theory, this clearly extends to cities. But now the situation may have changed, as the cognitive background has changed. We are used to learning from conventional maps and texts, and are aware of the ways in which photography and film have changed the image of cities (Schwarzer, 2004), but what happens when software and the Internet, via Google Earth for example, let us zoom in on reality itself, our eyes scanning every square meter of the planet as if through a microscope? Suddenly, Hugo's statement at the beginning of this chapter takes on some power, and the cognitive background itself becomes of great interest to us. The city may be, in fact, becoming only a backdrop for the individual mental maps of its residents.

Despite the fascination of Google Earth, the abstraction of the city by portraying it as a flat organism seen only from above, as do the plans of urban designers, is not exactly the way we experience the city at ground level. Yes, the abstract layout of buildings and functional elements can be deduced from experience and translated into an image, a construct of mental urbanism\(^3\) or mental space (how else would we be able to find our way on streets, maintain orientation or measure distance and speed?)...

\(^2\) What something actually IS, what it represents or means, or the sum of its characteristics.

\(^3\) For an explanation of the term as used here, refer to footnote 5 in the previous chapter.
representation clearly ignores depth and verticality: sectional and elevational views indicate the third dimension, of course, but are equally abstract and constrained. And what of interior spaces? Are these and their relation to the city of no importance in the question of identity of the city? Nollis plan of Rome, which includes the revealed interior plans of buildings on an equal par with exterior open space dramatically illustrates this point in a view of the city that we are not generally accustomed to reading, of a much more open and complex organism, one that foreshadows the transformation of the "space of places" into the "space of flows", as developed by Castells (2002).

Nollis 1748 plan of Rome (www.a-aarhus.dk) was a remarkable departure from the usual site plan, with its indication of exterior solid and void, in that interior spaces are shown, revealing a much more powerful and pertinent view, more resonant with the human use of space (left). Rene Magritte, Eloge de la Dialectique, 1936 (http://dadoululu.skyblog.com/5.html), as referred to in (Boyer, 1994:370). The image of the city is monumentalized in the painting as an interior and personal space (right).

The issue of including interior space within the purview and working vocabulary of the city is also raised in the contemporary commentary of Andrea Branzi on the vitality of interior personal spaces of the city and the "disappearance" of purely external space (Branzi, 2006):

The quality of an urban place is no longer therefore formed by the effectiveness of its architectural setting, but rather by the sophistication of its various interior designs, by the products of its shop windows, and also by the public who invade streets and squares, bearing a constant flow of uncontrollable expressiveness. (Branzi, 2006)

Only later in the investigation of the identity of the city do we realize that, no matter how you view it, from what height or angle, inside or out, the physical make-up of the city may in a sense be the least important aspect of its identity, provided you accept the notion that the concrete reality of most every city is really a collection of well worn images (cathedral, river, public square, streets, façades and green spaces) and that ultimately one physical manifestation may be as good as another. Reading only the urban archetypes, even extending to sites (cities on rivers, cities on sloping or hilly terrain, for example), however, amounts to nothing more than the classic "judging a book by its cover". Where are the inhabitants in all of this? And what of their activity and multiple paths, the agglomeration of private visions?

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4 Less so in the case of shadowed plan-view drawings, which at least roughly simulate a bird's-eye-view axonometric projection, and in that regard are quite useful.
Only rarely (some architects, some planners, some visionaries) do these visions become truly public or truly concretized. The image of the city of vibrant public squares and busy streets, with shopkeepers hawking their wares and people lingering for coffee and conversation, is a romantic one, and of course still valid, but the image appears to be taken over by other vibrant environments in which mental activity replaces animated "occupation" of the city.

Physically and aggressively "occupying" architecture and urban space, in an image from the 2006 film Perfume

Of course, in daily life it is very tempting to take the city as we find it, as building materials arranged and organized for certain functions or aesthetic expressions that have shifted over decades and centuries, and the spaces in between, green space and infrastructure without any further agenda. Yet such an approach, especially now in a rapidly changing cognitive and technological environment, the intensity of which far outpaces the rate of physical change, except perhaps in the case of China, would seriously miss the point. The future as we once imagined it in science fiction has arrived, only it has arrived cloaked in the guise of forms past, dragging the artifacts of past times along with it. As cities grow and as media shape our idea of the world and as technology gives rise to new expectations, we can't help but ponder an altogether new sense of urban identity that takes into account as a primary factor the collective personal identities of the inhabitants of cities (both ancient and now globalized) and the all-pervasive issue of individual identity that advertising, though various media, has so dramatically inflated, perpetuated, depends on and in a sense manufactures in the form of images. What is more, the hard-wired perceptual apparatus that makes human beings able to recognize their own offspring, the capacity for fine detail and the necessity of it, is shifting dramatically via the signs, symbols and form of the city (both positively and negatively) as well as, and even more importantly, via a competing virtual construction of human environments (see Second Life below), a mental urbanism that transcends physical barriers and no longer travels exclusively down city streets and through public squares. Evidently, the dictum of "form follows function" or conventional approaches to urban planning were only transitory subsets of the different ways in which human beings, consciously and unconsciously, have tried to make their world. Despite the emergence of technologies that threaten to make existence on Earth entirely virtual, the concrete realities of cities do in fact exist, and given that cities are populated by human beings whose activities, more than buildings perhaps, actually define the urban identity, contemplating a new interpretation or gaining new understanding of the identity (or identities) of the city is inescapable.
If as characterized here the city is an organism with an almost biological character, then as the population of Earth increases, and as shifting economies from rural to urban move greater and greater numbers of inhabitants to the cities, the consequence of this change on the organism must be anticipated. Not only is there an influx of residents, but also tourism, whether conventional or virtual, in reality or from the vastly mobile platform of the computer screen (the vehicle of the "armchair traveler") brings new visitors, who explore and even shape the identity that is revealed to visitors in person or discoverable on line. Urban expansion generally calls for strategies of managing that expansion in the form of new construction or renovation, or the creative repurposing of existing buildings or spaces, and yet the relevance of traditional urban design approaches must certainly be called into question. Technology in the expanding dimensions of cities must also be addressed. Budgets for projects must be found, yet the scope and urgency of urban scale interventions, and a general lack of vision about implementation and the range of possibilities and a certain failure of the professions to supply this vision, have led to stasis, or worse to inferior or misguided or unused construction. Hence, the greater context and meaning of cities must be considered. To quote Michael Sorkin:

Urban design has reached a dead end. Estranged both from substantial theoretical debate and from the living reality of the exponential and transformative growth of the world's cities, it finds itself pinioned between nostalgia and inevitabilism, increasingly unable to confront the morphological, functional, and human needs of cities and citizens. While the task grows in urgency and complexity, the disciplinary mainstreaming of UD has transformed it from a potentially broad and hopeful conceptual category into an increasingly rigid, restrictive, and boring set of orthodoxies. (Sorkin, 2006/2007:12)

Clearly, for both cities and for biological organisms, "what you see is not exactly what you get". Even in the extended metaphor of the cell, a biological mechanism may have a kind of soul, and if not exactly that, it certainly has a set of behaviors – the invisible forces at work at the cellular level that only become clear at micro, nano and pico scales. The city, like the cell, is also possessed of its unique DNA, its embedded code that either through evolution or the accumulation of tradition and architecture over the centuries has generated, cultivated and preserved a concrete identity. And is it really possible to understand a cell out of context, i.e. apart from its relation to other cells and apart from the various mechanisms of transmission or persistence of identity? Cells do not end at their outer membrane; animal cells possess an extracellular matrix (ECM), a meshwork of macromolecules outside plasma membrane consisting mainly of glycoproteins, especially collagen (www.ncbi.nlm.nih.gov). The same could obviously be said of cities, especially now, and especially when Google Earth shows exactly how those cities are connected physically, not only diagrammatically as on a map.

Apart from its built form, the city is a laboratory for its residents, in which the multiple activities, aspirations and dramas of human beings are played out and tried, and in which the results of the experiments define the physical structure and parts of the whole. Yet more and

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5 WYSIWYG: the well known phrase emerged in the computer world with the advent of Apple's contention that onscreen images or text should exactly replicate the same content when printed out on paper.

6 The concept of persistence as developed by Gazvoda (1996) with respect to the landscape environment.
more it appears, if daily observation of the behavior of younger populations in cities is any indication, that the aspirations of urban inhabitants may be originating and directed elsewhere, and that the physical carcass of the organism seems to have been left behind, in a sense, as activity moves more and more from the body to the head, and that where activity does involve the physical body, it is at its best in repurposing, reinhabiting and renovating that body, interpreting it and testing it for new uses.

Meanwhile, if the "collective head" in cities is elsewhere than in buildings and public plazas, where exactly is it? Surely, one answer is: on the phone. In cars and buses, much less on trains and not at all on planes (although this will change), in cafes, on the street, in supermarkets and small shops and of course at home, people are communicating with each other. Information is being exchanged, plans and decisions are being made, while at the same time a new "image" of the city (in terms of where one is, where one is going and how to get there, etc.) is assuredly being formed in the minds of each user as he or she takes positions or establishes coordinates in virtual space. When not communicating, many urbanites are listening. Quoting journalist Steven Levy, Farhad Manjoo writes of the seemingly ubiquitous MP3 player, particularly the Apple iPod:

…the iPod isn’t just the iPod – it’s a stand-in for the more general phenomenon of media going digital, leaving the physical realm and coming under the dominion of computers… things align just right, and a song comes on, and the music and the world around you seem to sync up in a kind of cosmic way. The music becomes a "soundtrack" for the scenery, which is a good way to put it. The iPod turns ordinary life – riding the bus, waiting in line at the post office, starring at a spreadsheet for 12 hours a day – into cinema… The main jag isn't escape, but, instead, enhancement. (Manjoo, 2006)

Urban identity, for all intents and purposes, seems to be expanding into a more ungraspable notion than ever before. One can first of all ask the question: Where does the identity of the city actually reside? Is there really an urban DNA that contains the keys to a city's uniqueness and that guides its growth according to a certain character? And if so, what are the factors that have altered the expected character of the city and shifted it in various directions? And how does the environment, from the immediate surroundings to the scale of the country itself and the larger region, and finally the global context, transmute any city into an
unrecognizable new organism, far different from the form it might have been expected or predicted to take?

Enter Second Life. The Second Life experience, as a form of virtual inhabitation really, starts with the very issue of identity itself, that is, creating a presence in the virtual world in the form of an avatar,\textsuperscript{7} by now a familiar concept in virtual reality of a human representation of a participant, or more properly, inhabitant.

Second Life is a 3-D virtual world entirely built and owned by its residents. Since opening to the public in 2003, it has grown explosively and today is inhabited by a total of 4,517,116 people from around the globe. Second Life is about personal expression and your avatar is your persona in the virtual world. Despite offering almost infinite possibilities, the tool to personalize your avatar is very simple to use and allows you to change anything you like, from the tip of your nose to the tint of your skin. Don't worry if it's not perfect at first, you can change your look at any time. (http://secondlife.com, 2007)

Similar to the way previous media dissolved social boundaries related to time and space, the latest computer-mediated communications media seem to dissolve boundaries of identity as well. 

Started by the developer Linden Labs in San Francisco, Second Life offers users\textsuperscript{8} all the conventional parallels to life we have come to expect in real cities: buildings, vehicles, real estate, possessions and above all an "urban identity", however ersatz. In Second Life you can buy an island, conduct commercial transactions and more. Second Life has generated provocative activity in the media, from press release to critique, clearly reinforcing the idea

\textsuperscript{7} Virtual surrogate representation of a person, typically in an on-line computer game, a term now in common use that appeared in William Gibson's 1984 work *Neuromancer*.

\textsuperscript{8} The question arises of exactly what to call computer users, linked via high bandwidth Internet connections who participate in simulations or virtual world experiences, no longer simply video games. These users are in fact virtual urbanites, or residents of the"metaverse" (see note on metaverse below).
that "art imitates life", as in this "metaverse" the topical issues of the "real world", particularly the real urban world, are quite easily and naturally replicated. Note, for example:

Shortly before midnight (CST) on Monday, February 26, a group of republican Second Life users, some sporting "Bush '08" tags, vandalized the John Edwards Second Life HQ. They plastered the area with Marxist/Leninist posters and slogans, and a photoshopped picture of John in blackface, all the while harassing visitors with right-wing nonsense and obscenity-laden abuse of Democrats... (http://gamepolitics.com/2007/03/01/edwards-sl-hq-trashed/)

And the following newspaper articles:

**Home-grown terror group wants democracy in the virtual world**
The Second Life Liberation Army, or SLLA, detonated bombs outside a virtual American Apparel store and a Reebok store. The bombs appear as white balls to block out part of the screen; unlike real world bombs, they don’t cause fatal damage. The SLLA want to replace Linden Lab rule with a democracy so that the four million residents could have a say in what goes on in the virtual world. (Amber Maitland at http://www.pocketlint.co.uk/news, Feb 2007)

If you had the drive and the imagination – not to mention the absurd amount of free time – to create a business or design a product, why wouldn't you do it in real space? If you could find friends and brainstorm good ideas and fuel a love affair, why wouldn't you do it in the here and now? Come back from Second Life, people. First Life needs you. (Dan Neil, "My Avatar", http://www.latimes.com, Mar 4, 2007)

Online 3D virtual worlds are progressively becoming mainstream; in many ways, the game worlds … are mainstream gaming, with millions of subscribers. The non-game virtual worlds like Second Life therefore have a credibility gap to get over where most people are concerned: many people (both subscribers and non-subscribers) view them and talk about them as if they were "just" games, referring to users as "players" and so on. What will turn the corner for virtual worlds as "platforms" or more simply "places you go to do stuff"? will not be their adoption by pure technologists like myself …. It will be their acceptance as sensible places to go to do ordinary things by people who don't already have a bias towards the geeky coolness of this kind of solution…. I suggest that we're well on our way towards integrating Stephenson's metaverse into our everyday life. (http://www.iay.org.uk/blog/2005/10/barnett_in_seco.html)

This transfer of energy, so to speak, from public space to private must ultimately have the effect of reducing the vibrancy of "real" activity and hence the importance of built form and urban space. More now than before, the Nolli-style map of the city must surely take into account the activity of interior space, as the collective flow of activity tends to move even more deeply indoors, not only to covered malls and interior spaces of buildings, both public and private, but moving into bedrooms and living rooms, into desktop and laptop computers,

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9 Neal Stephenson coined the term "metaverse" (a virtual universe) in his 1992 novel *Snowcrash.*
10 *Capital*, 28 February, 2007; see also www.capital.de
11 Not merely an on-line computer game, Second Life has exploded into spheres of business and education, replicating "reality" in a virtual world of real financial transactions. As interest shifts to the Internet, companies are attracting the serious attention of companies looking for profitable economic opportunities.
in short – home. People are participating via their fingertips on keyboards, working at home, accessing e-banking, watching films, filling out forms and conversing with each other. The disappearance of bookshops and cinemas in city centers, with the rapid proliferation of online book shopping (amazon.com), downloads of films and watching amateur or pirated films (youtube.com), for example, is evident. In a way, it is hardly necessary to go to the library any more, except perhaps that, curiously, it is more "social" and perhaps more serene to do so. The paradox, of course, is that the density of available services and attractions in the city is decreasing, either through spreading of such services to suburban areas or simply disappearing altogether, replaced by services on line. And every city dweller who remains home thus removes him or herself from the density of population that we think of as part of the critical mass for animating the city physically. This animation has evidently been displaced to "second lives", to parallel universes of activity that through digital media and electronics have simultaneously shrunk and dramatically expanded the world, at least in the form of parallel concrete and virtual realities.12

If these realities are parallel, then so must be the media that construct those realities. It is then tempting to think of the city as a medium of expression itself, and one could then speak about "urban media" as well as "digital media", and both are now intersecting in the urban space. The city also "mediates", in a sense allowing the worlds of real activity and mental states of its inhabitants to coexist. Urban media thus metaphorically constitute a form of writing on the land, and the "space" that has changed throughout history in the way that this writing is expressed. Historically, this involved construction, the movement of real material according to need or plan. Thus, to use the case of early Ljubljana, for example, the main intervention of city making was the building of a wall to define (and protect) the space in the form of the Roman outpost of Aemona. Once established, the need and desire for community led to densification and further spatial definition. Even from the beginning, one could argue, the parallel reality of mental urbanism was operative: walls define, but do not protect absolutely, attested to by the invasions that characterized the early history of Europe. Community can be expressed in the space in terms of agglomerations of buildings, but it is really community in a mental sense that people evolved through face-to-face interaction. The development of the urban space on a historical continuum, then, developed in both physical worlds and mental worlds in parallel; however, as physical needs were met and then surpassed, the physical issues became problems of excess rather than lack, and the mental space took over, as the media became available to leave the city behind, actually and metaphorically. As cave paintings gave way to writing, then to printing, then to photography, cinema, television and in the present century to the Internet and wireless mobile communication, transforming images on surfaces (stone, paper, projection screen), so too did the urban space appear to transform in parallel, from enclosure to encampment to town to city to megalopolis, to crowding, and the concerns of the mental space morphed from safety

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12 This construct of parallel realities later gives rise to a conceptual model of three urban layers, posited in Chapter 2. See also the discussion later in this chapter of Reisman’s characterization of three personality types.
to community to entertainment and ultimately to openness and escape into daydreams, all facilitated by the means to do so technologically.

Examples of the historical/technological progression of urban media: from nature, enclosure, commerce and industry, to infrastructure and image, as represented on the Internet (Slovenian landscape in Ljubljana, castle at Soave, open market in Ljubljana, power plant at Issy-les-Moulineaux in suburban Paris, Ljubljana highway toll station [photos by author]; main Ljubljana tourist portal at www.ljubljana-tourism.si)

Examples of the historical/technological progression of imaging media: from cave painting, writing, sketching and sculpture to modern photography, video and multimedia moving images, and global wireless multimedia communication (http://library.thinkquest.org/J001918/images/cave_pic2.jpg); sketch made by Davorin Gazvoda, statue of Boris Kidič, an organizer of the Slovenian partisan uprising, in Ljubljana [photos by author]; Canon DSLR camera [http://upload.wikimedia.org/wikipedia/commons/thumb/0/06/Photographer.jpg], and Apple iMac computer and iPhone [www.apple.com])

If the two progressions (urban media and imaging media) illustrated above have any meaning at all, it is that what we refer to as concrete reality and virtual reality of the city are not strictly
parallel worlds at all, but converging ones, pointing to an inevitable intersection where there will be (and almost already is) a deep interrelation of the real and virtual, with the city becoming a backdrop and an actor, a place of mediation for all sorts of human activity, a multifunctional space, full of the problems, ironies, advantages, conflicts and enticements of intersecting worlds. Proof of this contention is everywhere: first, in the often expressed idea of technological convergence, where a single device, the Apple iPhone for instance, features a moving map, roaming web browser, camera, note pad and music player, in addition to being a telephone; second, the very portrayal of online worlds, and Second Life is a good example here, is strangely concrete, a cartoon world with a very familiar and conservative urban lexicon expressed virtually but intending to be real, with more suburbia than science fiction. Here, with the possible construction of "whatever you want" with on-line tools, and of course without architects, planners or designers, virtual cities, towns, shops and cars emerge in the image of a conventional and obviously romanticized city! The look and feel of Second Life is of course a measure of the user interface and limitations of its on-line design tools; the phenomenon is amazing, the imagery for the time being comical, but the implication does seem to point to a very intriguing convergence.

The issue of identity when applied to the city, then, floats enthusiastically and fancifully in an interesting combined medium, powered by technology, but flirting with memory, shimmering in different perceptions and of course apparently grounded in a standard lexicon of urban vocabulary and image of the city.

To occupy a city today is to surf in a dense array of overlapping media streets. The limit of the city is not the limit of some physical terrain but the limit of its packaging... We have always had to be told when we are in a city. There is always a sign on the highway, or a voice on the train or plane, that tells you that you are not in such-and-such a city, and another sign to tell you when you have left. Why do they have to tell you? Because the city is not a physical object! (Wigley, 2002:105)

What is the role of architects in the city if, as Mark Wigley contends, the city is not a physical object, which seems to counter the underlying assumption of architecture since the beginning? Beyond the building itself, and whatever its level of innovation, the architect also tends the machine of culture that creates and perpetuates eventual memories and expresses the image of the city.

I want to insist that architects are first and foremost intellectuals... Architects are not builders... the architect speculates by bonding words to images. Design offices produce large quantities of images and words, then carefully stitch them together... That is to say, they craft the association between discourse and form, words and objects... Architects don't simply design in response to the city. They design themselves by producing images of what cities are. (Wigley, 2002:118)

In a very different vein, one of the clearest exponents of space and its relation to architecture and people in the city is Rudolf Arnheim, who not only develops a profound understanding of architectural form, but also positions architecture and space squarely in the domain of human perception, leading us to understand that the identity of the city is formed individually
and quite fluidly in the minds and experiences of people.\textsuperscript{13} The basic mechanisms are famously and lucidly developed into a lexicon, that is, the elements of the city that actually contribute to identity in so far as they engage the perceptual apparatus of residents and visitors alike. People respond to the city's form (the space and the objects that articulate it), and thus activate and motivate a relationship of city form to its inhabitants.

Spontaneously, then, space is experienced as the given that precedes the objects in it, as the setting in which every thing takes its place. Without paying our respects to this spontaneous and universal manner of looking at the world, we could not hope to understand the nature of architecture as an arrangement of buildings placed within a given continuous space. (Arnheim, 1977:9)

If there is indeed a fundamental change taking place in the concrete identity of the city in terms of what people experience, especially under the influence of technology, then perhaps that change is captured in the notion of hypertext,\textsuperscript{14} that is, in the way that on-screen text on computers, particularly the Internet and particularly with respect to experimental media that have in recent years toyed with taking advantage of the variety of distributed and decentralized web-based content, compares to the relative linearity of conventional narrative found in books and articles. In line with the previous arguments that Google Earth and other digital devices may be said to have an effect on the identity of cities, and that cities might be said to be a medium of writing on the land, hypertext is a powerful metaphor for thinking about cities as collections of interconnected, converging and layered experiences, an idea that will be developed further in the following chapter. An argument might be convincingly made that books were the first generation of virtual reality, in that the simplicity of the medium of the written word and the complexity of what can be produced with it are staggering! So if the city is a form of hypertext at large scale, then all the drama, connections and excursions of its "readers", i.e. inhabitants, activates the same "willing suspension of disbelief"\textsuperscript{15} that is at the core of all literature and that permits the intersection of the real and the virtual.

Hypertext is a medium that has been explored by programmers, artists and authors; however, what is provocative is the possibility that it can be exploited as a design strategy by architects and planners in an expansion of what has been referred to here as the urban lexicon. In this sense, Italo Calvino's \textit{Invisible Cities} is an interesting example of a cross-over of literature and the identity of cities, and is arguably "hypertextual" in capturing and visualizing (as well as fictionalizing) the diverse images and character(s) of cities. Granted that the city is richly layered, archeologically, culturally, historically, architecturally, politically and experientially as well as in a literary sense, the real task remains of how to fundamentally reveal, understand and use all the potential connections.

\begin{itemize}
\item \textsuperscript{13} In (Arnheim, 1977). Arnheim's contribution is further discussed in Chapter 2, in which we find his exposition of the perception of space developing into a sort of "handbook" for the built form of the city.
\item \textsuperscript{14} A computer-based text retrieval system that enables a user to access particular locations in web pages or other electronic documents (www.answers.com/topic/hypertext) but more generally the inclusion with a text itself of links to other texts or sources or content.
\item \textsuperscript{15} A quote from British poet Samuel Taylor Coleridge 1782–1834, "the willing suspension of disbelief for the moment, which constitutes poetic faith" refers to the natural ease with which audiences tacitly agree to accept the suggestion of the real as real, and is essentially the basis of the ability to relate to drama.
\end{itemize}
INTERACTION, EMERGENCE AND THE MENTAL MAP

It is not uncommon for a telephone conversation or SMS message to include the question: "Are you in Ljubljana?". It is a simple question that could be put to anyone, especially to frequent travelers or business people. However, here, there is a particular fluidity to presence in town, for a number of reasons. First, many city residents also have country or weekend houses, some of which have remained in families for generations (Vraneš, 2005:10). Second, the large number of students also constitute a highly fluid population, likely to be gathered at highway entrances on Thursday evenings or Fridays, hitchhiking by holding up cardboard signs indicating their desired destinations. Third, since the country is so small and leisure activity (i.e. escape from the city, be it to nearby nature in the mountains or at the coast, or to towns across the border) highly valued, it is common to find the city emptied out on weekends and holidays.

The above dynamics add up to a sort of mobilité pendulaire (Kaufmann, 2002), repeated outbound and inbound return trips, not so much the daily commute to or from Ljubljana or towns surrounding the capital every day, but more a weekend phenomenon. Thus there is a pulsation in the city population, and yet the question "Are you in Ljubljana?" also indicates that the mental map of the city in the minds of its residents must be more expansive than most, simply because they have become used to a more porous notion of "presence" in the city itself.
While it may be hard to justify a definition of interaction with the city as "repeatedly leaving it", it does point to the fact that the identity of city dwellers here corresponds to an already expanded conception of the city and their roles in it. Obviously, the technology of communication has played directly into this situation. Technology has made leaving the city, or not participating physically in it, possible, while still maintaining connections and a surrogate presence. The question "Are you in Ljubljana?" becomes much more interesting when in fact you are physically in Lausanne or Los Angeles, or working daily for a company in Ljubljana from an office in Prague, for example, or when your email messages are really on a server in Ljubljana, or when you are on the phone, or have just left or are just about to arrive or when someone you know is talking about you in Ljubljana.

More interesting than simply amusing cases of presence is the much deeper issue of the means of presence, i.e. the "medium". In the context of identity and the notion that the city may now have a hypertextual identity, this medium (of presence) takes different forms, responding to different needs and employing different technologies, as illustrated in the progression of various media in the previous section. One might argue that in the long history of identity-making, images came first – cave paintings for example, updated to today's graffiti, followed by the construction of walls to protect from the elements and enemies, but also to define identity and property. The remnants of the Roman Wall in Ljubljana remind us (despite a slightly fanciful restoration by Plečnik) that walls once defined the town, that it was much smaller than Ljubljana is now and also went by a different name – Emona. Not only walls, but later the notion of the wall as façade, especially the more highly decorated fronts of temples and churches, the noble face of the activity inside, up to the present-day and much less noble store front. Historically, other media of expression than materials of construction competed for definition in the history of art and other creative fields. The Internet, as the information superhighway and the unbelievable proliferation of websites and content, not only changes peoples habits, but those habits begin to change cities: commerce moves to the suburbs and people spend much more time at home; when they do, they are glued to screens, not only looking at images, but also reading and socially interacting.

If there is indeed such a thing as an urban identity, and if that identity is interactive and somehow coded into various elements that exist with the city, now including virtual elements, then what is the mechanism of transmission by which identity is perpetuated and by which it evolves? While obvious influences exist in the external environment at various scales (context), as just mentioned, it is also clear that internal conditions and forces are also at work within the city. In broad terms, the city's built form, from its street furniture to its architecture, its public spaces and paths of circulation, is imbued with many of the aspects of communication.

17 The eccentric painter and author Stanisław Ignacy Witkiewicz 1885–1939 (*Witkacy*), to use a far fetched but interesting example, also wrote a play in which a train on stage was made to "move" by projecting movies of scenery on the windows. The actors in the play hijack the train and intentionally crash it into the station in what was meant to symbolically represent the fear and revulsion that cinema would replace theater (Witkiewicz, 1989). In the 1950s, television not only introduced a new public medium of information, it ultimately led to the demise of many urban cinemas, as VCRs and cable TV made it possible to watch movies at home.
identity that provide an enduring fixed image of the city and constant reminder of a portion of its heritage and a stable base to which residents and visitors alike can refer. But the identity of the city, in a more dynamic way, is transmitted through people, projects and perceptions, and the interactions of these. Here, demographics, political action, educational institutions, businesses and cultural activities also shape the city. Interaction is key, and the nature, scope and quality of interaction is changing rapidly. It is the basic premise of this thesis that the change in this interaction of people, projects and perceptions has accelerated, has become "hyperdynamic", faster in pace and more multidimensional, and less subject to conventional understanding, design and control. In the biological metaphor being earlier referred to here, the process of change in the identity of cities has become one of organic mutation, in both positive and negative connotations of the term, at many interactive levels. This means that the diversity of the city as architects might see it, as expressed nostalgically by landscape architect Martha Schwartz (Harvard Design Magazine, 1994)\(^\text{18}\) or emotionally by architect, educator and critic Michael Sorkin (2004), for example, becomes perhaps a suspect, romantic wish, and the success of future projects is hard to predict or guarantee, owing to the unpredictable interaction of people, or simply their disinterest, as their attention turns more and more to personal consumption and to their private worlds. This is not the case everywhere, however, as people have taken to the streets with technology in some cities, in a mobile-phone-organized protest in New York,\(^\text{19}\) for example, or as great crowds of shoppers inhabit enormous shopping centers, some of which are becoming "cities" themselves, on weekends.\(^\text{20}\)

While a city's identity (as an image) may be an important draw for tourism, which in turn is a sustaining or important economic force for the vibrancy and survival for the city, it is not easy to establish a unique identity in the face of globalization, a powerful trend that cities, countries and cultures have not really had to contend with before and that tends to homogenize both the supply and demand of this urban identity. Media have taught people what to expect in terms of interaction, and entrepreneurs, political leaders and planners have learned to provide a cornucopia of urban branding. Especially in Europe, the history and heritage of the city is relatively obscure to younger residents and visitors alike, according to anecdotal information, until it is either branded (e.g. the Eiffel Tower) or otherwise revealed.

Furthermore, given that it is not easy to define all of the components of urban identity definitively, it is also difficult to predict what the potential might be to resist homogeneity and support a sort of positive diversity of urban experience. And if identity is difficult to define for tourists, it may also be correspondingly more difficult for permanent residents, who are more likely to have other kinds of demands, for improved infrastructure, for example, rather than spatial amenities, or for lower rents rather than green spaces.

\(^{18}\) See full quote in Chapter 2 of this thesis.

\(^{19}\) See article online at http://findarticles.com/p/articles/mi_zdewk/is_200408/ai_n7184063.

\(^{20}\) The BTC(ity) shopping center in Ljubljana is one such example (www.btc-city.com), certainly one of the largest in Europe. See also the interview with Marjetica Potrč in Appendix 1.
Skateboarders interact with the physical surface of the city directly, as here in Letna Park in Prague, at the site of the toppling of the ignominious gigantic statue of Stalin, now replaced by a giant metronome, wagging its finger from its perch. (www.myczechrepublic.com/images/photos/jeffshanberg/letna-skateboarder.jpg)

One conclusion that could be made about the identity of cities is that such identity is essentially the province of visitors — tourists, for example, who do not readily engage with a city’s political baggage or the sorts of perceptions or ennui that comes with living in the same place for a long time — who confront the city head on, as it presents itself, armed with maps and curiosity, eager to identify sights and identify with experiences. Less obvious perhaps is the way in which the city hosts and is defined by what researcher Sophia Vyzoviti terms "urban groups without a place":

These groups are not institutionally established, but constructed on the basis of social and cultural characteristics that denote shared systems of norms, values, interests and behaviors quite different from those universally acknowledge and share a distinct sense of identity. Urban groups without a place spontaneously appropriate urban spaces, and embed them into their practices creating self-organized public spaces that we call here "emergent places". Considering the ability of space to confirm cultural identity, and particularly in the case of groups that are not institutionally established, we could state that emergent appropriated places are vital constituents of the identity of urban groups without a place. (Vyzoviti, 2005)

Vyzoviti’s case study tracks two populations (in Athens): first, immigrants in one of the city's poorest neighborhoods, and second, skateboarders, who literally appropriate urban street furniture, level changes and obstacles, many of these being features (once the visions of designers) that no other group needs or appreciates. Indeed, not only are emergent appropriated places vital to the identity of such urban groups, but these urban groups define, at least in part, the concrete identity of the city itself. Whoever "appropriates" a space becomes a constituent of that space. Clearly, the types of groups who use urban spaces are seemingly less the upper-middle class shoppers or business people, and much more the skateboarders and poor who directly inhabit the city's surfaces and exterior volumes. Some populations that once defined the city have moved indoors for commerce, escape and entertainment, leaving the streets to those who cannot afford or have no interest in virtual forms of reality, and whose needs represent a very direct and tangible interaction with the city, not as backdrop, but as a real Arnheimian "place". Richard Sennett has said that "time is the only resource freely available to those at the bottom of society" (Sennett, 1999). Well, so apparently is space.
Emergent places, as Vyzoviti names the phenomenon, leads to the general idea of emergence\textsuperscript{21} extensively dealt with by Stephen Johnson from the scientific perspective, but with a theoretical application to a form of human interaction in cities and as a possible forecast of things to come in the sphere of urban identity with the influence of technology:

We see emergent behavior in systems like ant colonies when the individual agents in the system pay attention to their immediate neighbors rather than wait for orders from above. They think locally and act locally, but their collective action produces global behavior... There are no bird's eye views in the colony, no ways to perceive the overall system -- and indeed no cognitive apparatus that could make sense of such a view (Johnson, 2001).

If indeed such local emergent behavior can occur in cities, is the city then just an agglomeration of independent cells or does the collection of local emergent behaviors develop into a larger system at a larger scale? Johnson's argument is this:

There are manifest purposes to a city -- reasons for being that its citizens are usually aware of: they come for the protection of the walled city, or the open trade of the market place. But cities have a latent purpose as well: to function as information storage and retrieval devices... the neighborhood system of the city functions as a kind of user interface... organic cites like Florence or Istanbul are more the imprint of collective behavior than the work of master planners. (Johnson, 2001)

Given this argument about the organic system of the city, particularly as an information storage device with neighborhoods acting as the interface, then surely older people are critical repositories of the city's identity, with longer-term and more complicated remembrances, traditions, structures, and even "wisdom" of the amenities and meaning of the places they inhabit; no doubt the younger or migrating populations of those same cities are much less able, unwilling to use or completely oblivious to those same traditional factors, and thus

\textsuperscript{21} Emergence in this context is succinctly defined as the tendency of a complex organism to develop self-organizing local behavior (Johnson, 2001).
function in a less potent way in the urban organism thus defined. Migration, in addition to
technology, shifting priorities and needs, then, has altered the profile of the city, perhaps
forever. Cyberspace, in the absence of traditional urban experience, thus becomes a more
powerful component of city identity that must be reckoned with, as it changes the connection
between real and virtual conceptions of space, information and shifting lifestyles, not to
mention the accumulation of collective memory (Boyer, 1994). Interaction in cities is
increasingly mediated by "devices" (mobile phones, PDAs, computers and wireless networks)
and appears to be intervening in urban interaction, which previously had more the character
of direct physical experience rather than technology-assisted mind, body, time and space
expansion, crossing well beyond the physical boundaries of the city. This, as well as poverty,
crime, environmental crises and other important priorities, argues for a dramatic change in
overall approach and local solution to problems, with the probability that more static forms
of urban development, increasingly irrelevant, will fall by the wayside.

The matter of identity, synthesizing many points of view developed by theorists in the past, is
concisely and holistically expressed by Ljubljana urban planner Matej Nikšič:

The review of the concepts of "place identity" uncovered the complexity of the issue. While
"artistic" approaches focus mainly on the visual appearance and aesthetic of the environment,
"social usage" approaches put stress on activities and the perceptions of place by its users. The
recent comprehensive approaches are mostly holistic. They treat place identity as a complexity of
form (physical appearance), function (social usage) and individual and collective interpretation of
the elements that constitute place. When questioning the ways to improve the place identity of an
un-distinctive suburban area in relation to the overall city image, one needs to know the existing
and potential elements of the identity of the city as a whole. (Nikšič, 2005:11)

Nikšič relies heavily on Kevin Lynch's landmark study of the "image of the city" from 1960,
which very much emphasized orientation, legibility and hence the imageability of the city in
the minds of residents.

Environmental images are the result of a two-way process... The environment suggests
distinctions and relations, and the observer – with great adaptability and in the light of his own
purposes – selects, organizes, and endows with meaning what he sees (Lynch, 1960:6)

Yet while this may be true, however much Lynch may have contributed, and certainly his
declaration (the first sentence of the book) that "looking at cities can give a special pleasure"
can hardly be faulted, the nearly fifty-year-old Lynchian mental map of the city is showing
signs of wear. Clearly, the scale of the concept of "mental map" has increased dramatically (as
technology now makes views and relationships just as concrete as they are conceptually
enticing, along with communication and information transfer at the speed of light, turning the
globe into a universal library and switchboard simultaneously) rendering Lynch's urban
conception in a sense less impactful and a bit too basic. Here, Nolli's Rome and Calvino's
Invisible Cities remind us that there is more to the city than meets the eye.

22 See footnote 7 in this chapter.
23 While Lynch's main concern was the appearance and decipherability of the "code" of the city in rather concrete terms, he also
introduced the idea of individual perception of the urban image in the minds of individual residents. This theme will be further
developed in Chapter 2.
While looking for visual order, Lynch also admits that "it must be granted that there is some value in mystification, labyrinth, or surprise in the environment" (Lynch, 1960:5), but scarcely knew at the time where that mystification, i.e. a sort of "altered state" of urban consciousness generated by digital technology might lead. At least one could say that implicit in Lynch is the idea that the city is fundamentally interactive, that all of its elements taken together conspire in the urban drama of "selection, organization and meaning", to which the terms "response" and "participation" must surely be added.

IDENTITY AND SOCIETY
One does not have to look far in newspapers or other publications on the proliferation of Wi-Fi\(^{24}\) networks, that is, wireless Internet connections which are at the base of one aspect of the technological explosion: connectedness. The "society of mind", to use Marvin Minsky's phrase (Minsky, 1985) indicating this connectedness, which one may say started technologically with Morse code or with amateur radio operators (who could call all over the globe especially when atmospheric conditions were just right for "skipping" of the signal to more distant destinations), putting people together in tacit communities of understanding via technology. Telephones established networks, and the Internet moved them squarely into digital cyberspace, permitting transmission of voice, instant messages, and of course still and moving images. Mobile phones put the no-longer-futuristic dream of wireless communication in everybody's hands, and now the on-line telephony phenomenon of Skype (the popular VoIP, or "Voice over Internet Protocol", accessible from any computer, handheld device, and recently, special dedicated mobile phones) has made such communication free; for a small fee, much lower than normal roaming mobile phone charges, one can, with a computer and fast Internet connection, or wirelessly from certain airplanes, roadside petrol stations, hotel rooms and cafes, stay connected and talk, even for hours at a time (www.skype.com). Clearly, this is a revolution in the definition of "society" and has definite impact on the identity of the city, as people begin to talk and commune on line more than they do face to face, and more time in trying to map the tantalizing fog that virtual possibilities present to the human brain, attempting to answer the questions "Where am I?" and "Who else is here?". Thus the city organism expands, far beyond its borders, buildings and public spaces, to other cities, other organisms, for no other reason perhaps than the fact that it now can.

If it was Minsky who defined the "society of mind" and McCullough the "cognitive background", then it was Debord\(^{25}\) who created the "society of the spectacle". Here the cells of the societal organism move almost magnetically in the direction of consumption, and from this we extrapolate the current model of urban development of shopping centers and

\(^{24}\) Wi-Fi, referred to throughout the thesis, is used particularly with respect to wireless local area networks for Internet access, email and telephony and all sorts of digital network connectivity (http://wi-fi.org/).

\(^{25}\) Debord positions the identity, or rather the estranged identity, of the modern human being squarely in the midst of a displacement into a consumerist society, where "things" rule, "and confront and replace one another." In a scathing critique, he goes on to say that "Under the shimmering diversions of the spectacle, banalization dominates modern society the world over and at every point where the developed consumption of commodities has seemingly multiplied the roles and objects to chose from" (Debord, 1983:§59).
shopping streets as the new, if somewhat less idealistic "agoras" of the modern city. Writes Debord: "the root of the spectacle is within the abundant economy – the source of the fruits which ultimately take over the spectacular market…". But it is not only consumption that brings this society together, but also the shared estrangement: "banalization dominates modern society the world over and at every point where the developed consumption of commodities has seemingly multiplied the roles and objects to chose from…", which he later terms "pseudo-events" (Debord, 1983:§201).

In the massive reality of present social life, men do not themselves live events. Because history itself haunts modern society like a spectre, pseudo-histories are constructed at every level of consumption of life in order to preserve the threatened equilibrium… What hides under the spectacular…is a unity of misery. (Debord, 1983:§69)

Well, maybe. A lot has changed since Society of the Spectacle was first published 1967. Certainly consumption has not decreased, but another important element which could be looked at as a commodity of sorts is connectedness itself, not because it is a negative factor but only that it has become so pervasive as to be banal. So communication itself has become commodified. And yet people seem always to be smiling when they speak on mobile phones, more likely out of the joy of the warm feeling of connectedness, being part of a human and technological system than the actual content of the phone call. Add to this the isolation of an automobile interior, alone, free and connected, and the driver/talker is in paradise. Any architect or urban designer would be thrilled to have such a reaction to a concrete piece of architecture or city space, a sort of jaw-dropping pleasure that only now seems attainable conceptually and virtually. The repetition of the theme stated here and its variations is that clearly the minds of people in cities are often somewhere else. And yet people clearly want to participate, and evidence abounds of new interactions in the virtual space that is then transferred to the identity of the urban space. Witness, for example, www.urban-atmospheres.net: "Proactive archeology of our urban landscapes and emerging technology" and the ISEA interactive city initiative of 2006:

The city has always been a site of transformation: of lives, of populations, even of civilizations. With the rise of the mega city, with the advent of 24/7 rush hours, with the inexorable conversion of public space into commercial space, the contemporary city is weighted down. We dream of something more. Not something planned and canned, like another confectionary spectacle. Something that can respond to our dreams. Something that will transform with us, not just perform change on us, like an operation. (www.urban-atmospheres.net)

A selection from a list of proposed urban "interventions" as part of the ISEA 2006 INTERACTIVE CITY conference in San Jose, California:

- P2P is a 30-foot interactive marquee hanging on the façade of a building in downtown San Jose. By engaging in the everyday unconscious activity of flipping a light switch, passers-by can express themselves, forming any patterns they choose in the hanging web of lights.

- DIY Urban Challenge is a workshop in which participants "hack" the streets of San Jose, creating objects which interject themselves into the urban fabric, to stimulate new experiences of the city.

- "Saint Joe" is a hyper-narrative that unfolds within the landscape of VTA light-rail system. Participants can board the train at any stop, at which time using their mobile phone, they can dial
a provided number to enter their origin, and their destination. As the participant’s voyage commences, a dynamic audio history unfolds, referencing a variety of landmarks along the way.

Similar examples can be found at the website called Doors of Perception, a weblog that purportedly is about "starting new conversations on design and innovation", created by John Thackara:

One of the field projects we’re supporting is Debra Solomon’s ongoing quest to enable "nomadic banquets”. You move round a city from street vendor to street vendor: dumplings, noodles, and vodka martinis. We are keen to hear about locative media projects that involve food, ratings, mobile phones, GIS and so on, that we can learn from and maybe connect with. (www.doorsofperception.com)

One might easily wonder what these forms of media and technology-based urban participation really add up to? And whether there is a new fundamental principle of identity of individuals and society that is applicable to the argument about the changing nature of cities? Or is this an enormous crisis of human civilization and the urban organism? Renowned psychologist Erik Erikson famously coined the term "identity crisis", describing identity as:

… a subjective sense as well as an observable quality of personal sameness and continuity, paired with some belief in the sameness and continuity of some shared world image. As a quality of unselfconscious living, this can be gloriously obvious in a young person who has found himself as he has found his communality. In him we see emerge a unique unification of what is irreversibly given — that is, body type and temperament, giftedness and vulnerability, infantile models and acquired ideals — with the open choices provided in available roles, occupational possibilities, values offered, mentors met, friendships made, and first sexual encounters. (Erikson, 1970)

And so it could theoretically be with the city, which can also pass through similar phases. Ljubljana, for example, has been sometimes characterized as the embodiment of the mythical Urša,26 and in fact is a teenager in terms of being the capital of an independent country for only 16 years.27 Ljubljana looks to some of its urban colleagues, almost as schoolmates, for advice and collaboration on city infrastructure and transportation, just as the country of Slovenia, as a new country in the EU as of 2004, consults with fellow member states.

Perhaps even more pertinent as a comparative paradigm might be the work of sociologist David Reisman and his definition of three fundamental character types:

A society of high growth potential develops in its typical members a social character whose conformity is insured by their tendency to follow tradition: these I shall term tradition-directed people…The society of transitional population growth develops in its typical members a social character whose conformity is insured by their tendency to acquire early in life an internalized set of goals. These I shall term inner-directed people…Finally, the society of incipient population decline develops in its typical members a social character whose conformity is insured by their tendency to be sensitized to the expectations and preferences of others. This I shall term other-directed people… (Reisman, 1961)

If we are amenable to the idea that society forms the identity of its individual members, especially under the influence of various media and the closely tied and highly active

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26 Slovenian poet France Prešeren’s famous Water Man – the story of the abduction of the beautiful young girl who disappeared in the Ljublanica River, allegedly abducted by a devilish spirit in the guise of a handsome prince.

27 As of this writing, Slovenia’s independence was declared in December 1991, with recognized statehood on 26 June 1992.
"collective brain"\textsuperscript{28} made possible by mobile telephony and other forms of electronic communication AND that the city represents the collective needs, activities and ideals of its residents OR if you accept the idea that "an institution lends material existence to the ruling ideology" (Michieli, 2006), then clearly we have to be open to the idea that cities hypothetically recapitulate the development of individuals, going through analogous stages of development.\textsuperscript{29} Speculating on an interpretation that adapts Reisman (1961) to the urban sphere, then:

TRADITION-DIRECTED: each generation feels that the next generation will live much as it lives.\textit{In the city, this characteristic of identity is represented by the concrete elements of architecture and site, embodying relatively stable, persistent aspects of memory.}

INNER-DIRECTED: Tradition still helps to guide the inner-directed man by helping him select the goals and the general principles of action by which he is to reach them, rather than by leading him with strict supervision through every step of the way.\textit{With site and built form as a traditional guide, the city develops infrastructure (roads, communication, mechanical systems, lights) to provide orientation, but at the same time alternative paths as well as means of conveyance (walking, bicycling, driving and riding [taxi, bus, tram, train]).}

OTHER-DIRECTED: came on the scene to form a more appropriate social character. The inner-directed man’s gyroscope of fixed goal and principle is replaced by a radarscope. This is not "set" toward a goal; it does not tell the other-directed man where to go or how to get there, except as changing signals from "the other".\textit{In the city, this aspect relates to the formation of society, with different influences on the individual. Now this category would also include technology and media as factors that change notions of community, personal identity and choice.}

Other theories grapple with the problem and definition of the identity of the city, among them the ideas of James Donald, who draws a parallel between the city and cinema:\textsuperscript{30}

\ldots\textit{in the recesses and margins of urban space, people invest places with meaning, memory and desire. The great figure of this confrontation between he transparent, readable city and the obscure metropolitan labyrinth…is that of the detective. This stages the city as enigma: a dangerous but fascinating network of often subterranean relationships in need of decipherment. (Donald, 2002)}

The city as an organism is obviously not monolithic, but rather a collection of diverse elements, each of which matures passing through stages of development and interpretation like those mentioned above. Howard Rheingold, one of the foremost theorists on the social implications of technology, characterizes the dynamic of the city this way:

\textit{Every time someone interacts with another person, there is the potential to exchange information about people they both know. The structure of everyone’s links to everyone else is a network that acts as a channel through which news, job tips, possible romantic partners, and contagious diseases travel. Social networks can be measured, and interconnections can be charted… from major corporations to terrorist networks… we find community in networks, not groups…}

\textsuperscript{28} Referring to a version of the city of collective memory (Boyer, 1994), only in the sense here of collective thinking in the present.

\textsuperscript{29} A conceptual model of three stages or “layers” that can characterize the city is fully elaborated in Chapter 2 of the present thesis.

\textsuperscript{30} Donald’s reference to film (in which urban narrative is visual and interpretable, though not necessarily explicit) is a useful one, with provocative parallels to the city. As much as the city is three-dimensional at large scale, it functions in many ways as a two-dimensional backdrop, as flat as a film but as rich with imagery, for people’s lives. If the city operates on the principle of visualizing common desires (as developed in Peter Rowe’s book \textit{Civic Realism}, 1997), then in a filmic sense what you see is not what you get (a paraphrasing of WYSIWYG, see footnote 5 earlier in this chapter), and the blanks must be filled in by the inhabitant. Thus the city, like film, is an inherently interactive and paradoxical medium.
complex networks have always existed, but recent technological developments in communication have afforded their emergence as a dominant form of organization. Swarming supported by texting and mobile telephony, untethered ubiquitous Internet access, location-aware services, and device-readable information associated with specific places are only the beginnings of significant changes in the way people use urban spaces. (Rheingold, 2002:206)

In a city like Ljubljana, and within such a small country, the network model of social interaction is already highly developed. One need only observe the frequency of interaction on the street, when friends or colleagues meet by chance, to witness the tight network structure first hand. Now, with a large population of technology users, the often-heard characterization of Ljubljana as a big village begins to take on real meaning. Whereas there might in fact exist the posited "six degrees of separation" (Watts, 2000) between any two people on the globe, in Ljubljana there may only be one or two degrees, especially given now that the machinery of the social network is well lubricated by electronic means of communication.

PERSISTENCE AND IDENTITY
We can think of the city in many ways, as a series of connected rooms, as a gridded patchworks of events, buildings and the spaces between them, as a site for monuments, as spectacle on the streets, as the historical result of accretions of various kinds representing different conceptions and interventions, as mirroring social and political forces, planes and lines, or the traces of flow and turbulence, concentration and repose. Some elements from the past have disappeared, while others have lasted, for a variety of reasons. As the city lays its attributes out before us, it is possible to make a sort of inventory of the elements that contribute to the physical components of urban identity, the visible, tangible and concrete; many of these elements have the characteristic of "persistence", as defined by Gazvoda in his detailed study of Ljubljana's green spaces (Gazvoda, 1998). Furthermore, other features, less concrete, such as participation, lend themselves to analysis from the point of view of "civic realism", as defined by Rowe:

[Civic realism] is about attitudes and an orientation toward the making and reshaping of urban public spaces that are civic in character, belonging to everyone and yet to nobody in particular...[and] it reflects a concomitant belief that civic place making cannot occur successfully without a propitious conjunction of local opportunity, community wherewithal and design capability. (Rowe, 1997:6)

With the aging of one generation and the emergence and overlapping of new theories, it is evident that old methods of thinking about the city must be replaced or at a minimum complemented with new thoughts, new metaphors and new ideas that might then lead to new projects, new kinds of projects, new perceptions and interventions. A new interpretation of civic realism might then become possible, leading to feasible, ground-breaking projects that respond to the current "mental state" of the population and their future needs, that will also, as Rowe states, "belong to everyone", and as Gazvoda states, "persist".

31 Where else but in a roadside highway gas station just outside Ljubljana could the author of this thesis make the acquaintance of the former president of the republic!
Inherent in the idea of persistence is timelessness – the transcendent quality of a thing that tends to remove it from irrelevance over time. When this time is dramatically shortened, this becomes the province of media and advertising, and what is known as identity in its loftiest form (persistent and timeless characteristics), becomes branding\textsuperscript{32} of a strictly commercial nature. As such it is paradoxical when considering countries in transition, say in Eastern Europe, where the questions then become: how do dynamic and fixed identities coexist? Gazvoda's idea of persistence addresses this point, identifying elements that remain unchanged even when the environment is rapidly changing all around. For Rossi, for example, the identity of the city is firmly grounded in its architecture as "as a continual return to archetypes: permanent immutable forms constituting the consistent identity underlying insignificant surface changes... To conceive of a city as founded on primary elements is to my mind the only ration principle possible, the only law of logic that can be extracted fro the city to explain its continuation (Rossi, 1884:126)." Touw applies Rossi’s terms to the preservation of the "soul" and form, if not original function of a building in terms of adaptive re-use:

\[ \text{...the act of a programmatic evolution within a building constitutes the propelling nature of adaptive re-use while the preservation or incorporation of 'obsolete' or 'functionless' elements constitute its pathological nature. By valuing and preserving 'obsolete' forms, statically permanent buildings become rich palimpsests, displaying layers of history. (Touw, 2006:31)} \]

Rossi very much resonates with Lynch and even more so with Alexander in returning to and celebrating Vitruvian firmitas as the foundation of architecture and its permanence, in form and meaning, and thus to the city as a collective of solid urban "monuments":

\[ \text{A function must always be defined in time and in society: that which closely depends on it is always bound up with its development. An urban artifact determined by one function only cannot be seen as anything other than an explication of that function. In reality, we frequently continue to appreciate elements whose function has been lost over time; the value of these artifacts often resides solely in their form, which is integral to the general form of the city; it is, so to speak, an invariant of it. (Rossi, 1984:60).} \]

Kučan, as a landscape architect, turns to the environment in forming a broader definition of space in terms of the cultural landscape and its social inhabitation (Kučan, 1997). While her study primarily concerns the national identity of Slovenia, the elements of this identity are deeply integrated in the capital city as well, given that Ljubljana originated as and is in a sense still configured as a series of settlements, with typical green spaces in the city as well as ample views of the surrounding landscape of mountains, churches, open green plains and relatively low density of common housing types. Were it not for two "rings"\textsuperscript{33} that partially define and contain the city limits, one could argue that the capital city is as characteristically situated in the landscape as are the smaller typical villages that surround it. As Drakulić notes: "In fact, if you take a look at the city, you are compelled to ask yourself where the village ends and the

\textsuperscript{32} See Ruby, 2002, for example, who asks: "what then is the future of the identity of cities?" For Ruby, this may lie in the "branding" of cities, like Bilbao, showing that a previously "no-name" city can become famous by affiliating itself with a familiar brand.

\textsuperscript{33} The ring highway and the Path of Remembrance and Comradeship; the latter will be developed as a case study, starting with Chapter 3.
city begins. The dividing line between rural and urban is hard to define here” (Drakulić, 1996:197). As such:

...identity is bound to the environment, that is, to specific landscapes or even to an idealized landscape type... Specific landscapes or places within the national space emerge as representative of the whole, usually appearing as symbolic places or as conceptualized landscape types composed of various and distinct landscape features... (Kučan, 1997:112)

In the Slovene space, it is primarily the mountain landscape type linked to the cultural (agrarian) landscape that is most often reflected in the image of populated mountain valleys. The second element of the social conception of the space is the domestic landscape with its typical components: fields-meadows, vineyards, "kozolci" 34, and small churches on elevations. (Kučan, 1997:158)

Kučan notes that the conception of identity is flexible, and often more based on symbolic archetypes, as mentioned above. One element in this flexibility, as presented by Vranješ, is the renovation of country houses by city dwellers ("weekenders"), raising the issue of extension of the boundaries and values of the city (and the insertion of those values into the surrounding countryside and the changing (or obliteration) of traditional architectural forms as part of the cultural landscape:

... on one hand the weekenders are seen as basically contributing to the minimum cultural landscape preservation, on the other hand they are seen as causing disturbances and changes in the “traditional” local social and spatial attitudes and norms, as well as in the “traditional” landscape itself. (Vranješ, 2005:11)

Nowhere has the idea of cultural landscape of the city been more thoroughly developed than by Christine Boyer in The City of Collective Memory, 35 who beautifully describes the dilemma of contemporary urban design:

Architects are hoping to heal the image of the city brutalized by modern intrusions through contemporary incremental insertions, contextual additions or figured zoning, trying in this manner to retie "knots" in the unraveling city fabric, reintroducing a human scale, a sense of place and tradition that the modern city destroyed... Whether from a normal or pathological perspective, it seems today that we are still ruled by a latent desire for a perfectly ordered and rational city, excluding everything that does not fit into this utopian mold. (Boyer, 1994:18)

Boyer raises the important point that the nature of recollection is more important in the 21st century city in view of the constant exchange of information via a social and technological network, and "remains a physical site in which images and messages seem to swirl about, devoid of a sustaining context" (Boyer, 1994:28). What then are the ways in which this information is connected to the space? And what is the "real" truth of history, as questioned by Boym (2001), for example (specific to Central Europe)? What role does the information society, as a collection of individual and distributed realities, play in dramatically rearranging history into either a random or romantic (nostalgic) image that is disconnected from the

34 Kozolci are the typical Slovenian hayracks, many examples of which are found within the city limits of Ljubljana, and are thus not only features of the countryside. (See Appendix 2, M18, C7).

35 Boyer's definition here is to evoke a "better reading of the history written across the surface and hidden in the forgotten subterrains of the city" (Boyer, 1994:21).
Finally, will media kill the collective memory built into the architecture and space of the city? Relating to the sequence of photographs of urban and imaging media progression presented earlier in this chapter, it would appear that the premise or even threat of one medium destroying the previous one, Witkacy's 36 *Crazy Locomotive* gone even crazier, Boyer adds:

> If...the book killed architecture, then Venturi has been shrewd enough to surmise that television has killed the book. Therefore he proposed that architecture should draw its solace from the mass media, accepting a role as a marginalized force yet gaining in return from popular appeal. (Boyer, 1994:125)

And this speculation continues, but much farther than Venturi, as the medium of television, which killed not only the book but also cinema, is now being subsumed within the Internet, the availability of the entire world, and world of images both static and moving, along with unimaginable lines of text, on a laptop computer, whose very size and portability have added an even further dimension to mobility, has removed a dimension from the old notion of sense of place. In view of the persistence of the city, and Rossi's fundamental premise of architecture "grounding" urban identity, it is a far more likely scenario that new media will overlay or coexist in the city as a kind of virtual archaeological layer instead of literally destroying the physical fact of the urban environment altogether, but at the same time transforming the functioning of the city and its perception by inhabitants. We have clearly not seen the end of the transformation, and it is likely that there may be further surprises if the city retakes its role, and if what people are learning from the parallel or competing virtual world or mindscape begins to manifest itself in the form of tangible urban space. Thus there develops in Boyer's words, the "analogous city":

> It must never be a question of having a fixed image of the city frozen at a given historical moment. Instead the focus must rest on changes in space and time, seizing on the ruptures or origins around which the modern city was formed. Such rupture points might be the moment when the city will burst beyond its enclosing walls. (Boyer, 1994: 184)

**THE REGION AND THE SPECIAL CASE OF SMALL COUNTRIES**

Up to this point, the discussion of the identity of cities has focused mainly on the urban organism itself, without regard to historical or geographical context, i.e. the medium in which the organism grows. The identity of the city, apart from the day-to-day operation of its infrastructure, overlaid on the physical architectural and urban elements of buildings and spaces, must certainly be viewed in the context of the much broader issue of country and regional identity.

In Europe, the question of identity is of topical importance and has been a very deep and important one in the minds, both individual and collective, of Europeans throughout the entire long history of the continent, but in a very focused way regarding the formation and enlargement of the European Union. This is for several reasons. First, the relatively small size

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36 See footnote 17.
of many European countries also emphasizes the important role and influence of their main cities or capital cities. Secondly, the formation of the European Union has raised many questions about local identity, or the loss of it, as countries with varied histories and qualities join in association under a single banner of solidarity. Thirdly, the debate is nowhere stronger than in Central and Eastern Europe, where identities have changed, been threatened and developed dramatically through the twentieth century and two world wars, and continue to metamorphose, develop and emerge now, as economies grow, as communism wanes and capitalism takes hold, and clearly in the face of globalization.

The statue Europa originally was made in 1955 by France Kralj but it was banned from public exhibition... In 1992 the sculptor's son donated it to the city of Ljubljana (Boym, 2001:220). It now stands in front of the University of Ljubljana main administration building (photo by author).

The development the countries of Central and Eastern Europe after the collapse of communism has put a new spotlight on the region, those countries themselves, their cities, and the "erotic myth of Europa" (Boym, 2001:241).

Nowadays, across Eastern Europe, revolution no longer consists of introducing democracy and a free-market economy... Instead, revolution is seen in small, everyday things: sounds, looks and images. Simply by using [foreign] names, you are presenting not only an image, but a whole system of values, too. They also reveal a longing, a desire to belong to a preconceived idea of Western Europe. At the same time they serve as a kind of barrier, because they seek to deny the old communist Eastern Europe... Can't you see that we belong to the West too, except that we have been exiled from it for half a century? (Drakulić, 1996:10)

And so a city like Ljubljana, once just the largest city in the northwest of Yugoslavia is now a moderately sized capital city of an emerging independent country officially born in 1992.

With independence we Slovenians have changed from a relatively large province, to which we have adapted over the centuries, to a small country, which is an entirely new experience for us. Most probably, on one doubts the justification and prospects of Slovenian independence, but certain new circumstances brought by the situation of independence might well generate major cultural problems and stresses, simply because we were not used to anything like this in the past. (Alojz Ilhan, quoted in Murko, 2007)

Yes, to an extent, a city's identity may be established through its site and built features, monuments, climate, experiences and feeling, and even reputation. But while the Eiffel Tower
and the Louvre may characterize Paris, and London it's Bridge and fog, it becomes a bit more
difficult, say, in the case of Estonia or Slovenia, very small countries that have recently
emerged in the European spotlight and consider very carefully what their resources and
special features are, not the least of which reason is the promotion of tourism, but also
economic and political reasons, as the countries attempt to position themselves in a larger
world. In the smallest countries, it is correspondingly more difficult to separate city identity
from country identity as well. Estonia has attracted some attention with its reputation as a
technologically savvy country (Skype started there), aggressively rising in productivity and
status, and it is assumed that all of this energy emanates from its capital and largest city,
Tallinn, which is also somewhat less known as having one of the largest and best preserved
medieval old town centers in Europe. Slovenia has been described in the past as "the best
kept secret in Europe" (transcripts.cnn.com/transcripts/0705/29/sitroom.02.html); and
because historically it shared Italian, Austrian and Slavic influences, and because of its
location, its Alps, its reserve and geographic beauty, it has compared itself, quietly, to
Switzerland (www fodors.com/miniguides). Ljubljana as a cultural and intellectual treasure of
former Yugoslavia but not its capital city during that era has begun to accelerate as a tourist
destination. Looking for more modern identities, slogans like "Slovenia Invigorates" and "I
feel sLOVEnia" (www.ukom.gov.si/eng/slovenia/publications/slovenia-news/3918/3936/),
following older themes like "Slovenia – the sunny side of the Alps" and "Slovenia, my land"
(Kučan, 1997). And both Estonia and Slovenia, with proximity to Finland in Estonia's case,
and in Slovenia's case, being a favorite destination via budget airline for beer lovers from the
UK, have begun to take on a further identity, also particularly because of the English-
speaking younger population, which has made tourism easier. Some Ljubljana people,
however, continue to look southeast over their shoulders to Zagreb, as if to be reminding
each other that Ljubljana is not a Balkan city, but a European one, with as strong a
connection to Austria as to the former Ottoman Empire countries farther to the south, Serbia
in particular. On the other hand, intellectuals (and many students) bemoan the separation and
recall the importance of communing with their Balkan "brothers".

The geographical images of Europe and the world have changed, and along with them new
interpretations of history and common identities have emerged. In 1919, the Sarajevo daily Glas
Naroda (The Voice of the People) wrote of the newly established state: Yugoslavia has the reputation
of the most peaceful and the least tragic country in the world. Fifteen years after the disintegration of
Yugoslavia, this is just a quaint memory of a onetime political utopia. After the Second World
War, the citizens of the former Yugoslav republics, Serbia, Croatia, Bosnia-Herzegovina,
Macedonia, Montenegro and Slovenia, frequently declared themselves as Yugoslavs. Today, this is
a rare exception. (Michieli, 2006:1)

At the same time that "Balkan" was being accepted and widely used as geographic signifier, it was
already becoming saturated with a social and cultural meaning that expanded its signified far
beyond its immediate and concrete meaning. (Todorova, 1997)

The special character of Central and Eastern Europe, combined with the issues of persistence
and collective memory, is taken up by Svetlana Boym under the general rubric of the region's

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37 This phrase has been used to characterize many countries in the region, Montenegro and Croatia for example ("Google search:
"best kept secret in Europe"), and thus is obviously an element of media branding.
particular nostalgia. Boym effectively questions whether history itself is persistent, and as such whether it is a solid contributor, as fact, to the identity of cities and countries. In *The Future of Nostalgia* she identifies two different shades of nostalgia, equally applicable to urban issues such as preservation of monuments for example, and how to honor collective memory.

Restorative nostalgia signifies a return to the original stasis... The past for the restorative nostalgia is a value for the present; the past is not a duration but a perfect snapshot... which is not supposed to reveal any signs of decay... it has to be freshly painted in its "original image" and remain eternally young. (Boym, 2001:41)

Reflective nostalgia is more concerned with historical and individual time... and suggests new flexibility, not the reestablishment of stasis. The focus here is not on recovery of what is perceived to be an absolute truth but on the mediation on history and passage of time. (Boym, 2001:49)

Later, we will find through the opinions of three generations of Ljubljana architects and urbanists how the balance of approaches to history lean heavily in favor of the reflective approach, extending to the strategy of taking the city "as it is", i.e. as a present physical reality and avoiding political baggage. Yet we can assume that among the forces and creative processes that ultimately are called into play in any project, that history, whether in the form of restorative or reflective nostalgias, or a combination of the two, will come into play, simply because these projects must emanate from complex ideas, that will, if only for the need to defend them, surely connect to deeper human sources.

The futuristic aspirations in the newly opened cities of Eastern Europe... and the millennial prediction of the end of the city... have not come true... The urban renewal taking place in the present is no longer futuristic but nostalgic; the city imagines its future by improvising on its past. (Boym, 2001:75)

Considering the fluid (even slippery) nature of collective memory and the highly complex factors that contribute to persistence in the city, it is fairly clear that the issue of urban identity, that is, the numerous elements that tend to give a city its unique character, cannot be separated from the issue of urban perception, the critically important factors of exactly how the residents and visitors of cities actually view or value the elements of urban identity. Here, the priorities of citizens and the mechanism of perceiving what the cities characteristics are really about and how to make use of them, has undergone and will in the coming decades continue to undergo substantial changes, both positive and negative.

Porosity exists in any city, reflecting the layers of time and history, social problems, as well as ingenious techniques of human survival. Porosity is a spatial metaphor for time in the city, for the variety of temporal dimensions embedded in the physical space. This porosity creates a sense of urban theatricality and intimacy. In cities in transition, the porosity turns the whole city into an experimental art exhibit, a place of continuous improvisation... (Boym, 2001:77)

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38 See Appendix 1: Interviews
39 Boym borrows Walter Benjamin's term, referring to the state where new buildings, buildings in progress and delapidated ruins coexist.
The valuation of cities in the minds of tourists and residents, of course, also depends on age and generation of individuals, and of course on how history has either supported, modified or destroyed collective memory, and how "new memories" are created. In this case, the mental map that inhabitants individually form (for example in Nikšič, 2005) could also be described as extremely porous.

PORTABLE IDENTITY
In contrast to the scale of the urban space and its identity within the region, new technologies, embodied in small portable devices, which despite small size currently influence the life and experience of cities and its populations, also constitute elements of portable identity, at the scale of the individual. The typical devices put imaging and communication capabilities in the pockets of users (mobile telephony, Wi-Fi and handheld computers and digital cameras, for instance) and have migrated into all areas of urban life as seemingly indispensable, but at the same time promote a personal identity via artifacts, mobility and new behaviors, contributing to the emerging organic, cell-like quality of the city.

Contemporary theorists William Mitchell, Manuel Castells, Steven Johnson, Duncan Watts and Howard Rheingold have dealt with this form of individual identity that technology can also form into communities and groups. They largely point to the activation of a new form of urban space, as previously mentioned as existing mostly virtually but also physically in the city, while at the same time new perceptions form in the minds of city dwellers about the "urban space" they inhabit. Individuals are thus nodes in the public identity, individual memories start to form the collective memory, and individual recollections, treasures, signs and artifacts that people carry with them, in either mental or tangible form, contribute to the identity of the city as a whole.

Other portable artifacts of identity exist side by side the technological tools, the familiar symbols of currency and the flag; these are typical national symbols, and yet the argument has been made previously that city identity, national identity and even regional identity are concentrated in the city with the concentration of the population, most certainly in small countries like Slovenia. The stock exchange, the center of commerce, the celebration of holidays and the interchange of conversation all focus these identities at various scales on the capital city. Likewise, urban space identity extends all the way up to the border. Portable artifacts such as coins, bills and even flags surely contribute to the persistence of local identity. For instance, the Slovenian flag, in its present form, is only 16 years old. It is based on the former Yugoslav tricolor, and shares this white, red and blue background with Croatia, Slovakia and of course the Russian Federation; however, just prior to Slovenia's accession to the EU in May of 2004, a competition was held in Ljubljana for a new flag design, thus proposing the chance to alter the young country's identity once again. This competition raised the issue of how to symbolize an identity that had changed over turbulent centuries of history.
Ranko Novak, head of graphic design at the Academy of Fine Art and Design at the University of Ljubljana, argued that the primary characteristic of a new flag should not simply be that it represents the country symbolically, but that the design be reproducible by any eight-year-old child in a drawing, and from memory. Clearly, graphic simplicity is a standard criterion for persistence of an image, but it would be interesting to contemplate an opposite approach, that the flag ought to be memorable for other reasons, and in fact, extremely difficult, if not impossible, for a layman to draw, much like the design of currency, with new materials or fabrication processes, and its complexity or uniqueness could have been a new and different source of pride for citizens. The point was that Slovenia had obviously been searching for a unique, memorable and surely marketable identity among the union of states it was about to join, and yet ultimately the flag was not changed. Nevertheless, the search for identity continues, with new slogans and symbols, even to the point of making the spelling of the country's name universally as "Slovenija" (the authentic spelling in the Slovene language).

The point here, with respect to urban identity, is that the flag has a relation to the habitable space, i.e. derives its symbology from a concrete environment as well as collective memory, then embodied in a portable artifact. Against the background of the tricolor Russian flag, i.e. a remnant of the communist space, the shield presents the landscape space in the form of the cherished Mt. Triglav and rivers. In the winning entry in the competition, these elements remained, albeit further abstracted. A notable honorable mention took the risk of transforming the symbology and space into quite another sign, the trace of a heartbeat on an electrocardiogram, hinting in a subtle way at the technological space, as well as an implied shared emotional vibrancy. A further recent (2006) effort changed the profile of Triglav into a flame atop a heart, while the image of Slovenia-in-the-shape-of-a-chicken is also a durable and wonderful send-up of the seriousness and difficulty of finding portable symbols for a national and cultural space. The flag of the capital city, in the meantime, has gone through no such transformations, and remains grounded in the shared symbolism of history and myth.

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Slovenia's current flag (http://www.crwflags.com/fotw/flags/si.html) (left); the winning proposal in the 2003 competition that deftly updates and completely abstracts the previous symbols (center), and one honorable mention entry in which the familiar symbols are layered with the implied trace of a heartbeat (http://www.crwflags.com/fotw/flags/si!new.html) (right)

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A conversation with Novak and the author in 2003 after the competition results were released for the design of the new flag were released to the public, in which he restated the point he had made in an article in the daily newspaper Delo.
Detail of the shield on the present flag, showing Mt. Triglav (the three-headed mountain) and water (rivers and seacoast) (photo of Triglav at www.mtbslovenia.net/an/images/triglav.jpg) (left); proposed new logo (www.popwink.com/?m=200611) (center); Slovenia's "chicken-like" shape on the map and cartoon; (map at www.lib.utexas.edu/maps/europe/slovenia.jpg; chicken at www.matkurja.com/si/). See also www.travelslovenia.com. (right)

Ljubljana city flag (www.crwflags.com/fotw/images/s/si-061.gif) showing castle and dragon symbols) with actual photos of the castle in the city and detail of the Dragon Bridge over the Ljubljanica River (photos by author).

An article in a Croatian weekly, puts the situation in context:

To persuade the public that it does not go about a marketing whim, the pleaders for the state symbol changes refer to a poll made by Eurobarometer on the popularity of member candidate states among the citizens of the European Union. The results are shocking for Slovenians, since their state got 12th place, in front of Bulgaria, Romania and Turkey, even if it is among the top candidates for admission… The pleaders for the changes claim that the result is largely a consequence of the unidentifiablility of Slovenia, so it would be required to change the flag, the coat of arms, and even the name of the state, so that Europeans and Americans would not equalize it with Slovakia… (Feral Tribune, Split, 28 July 2001)

Perhaps there is no other more powerful portable artifact of identity, particularly important in daily urban life, than currency. The unique figures on the Slovenian tolar banknote, notably representing artists, architects, historians and writers, rather than political figures, kings and queens, provided an enduring reminder of identity in the pockets and purses of inhabitants. But no longer, as this currency only lasted for 15 years, as a transitional artifact between the Yugoslav dinar (and the deutschemark) and the present euro, which made its appearance in Ljubljana in January of 2007.

Tolar notes, front and back: Jure Vega, mathematician (left), Jože Plečnik, architect (center) and Ivana Kobilica, painter (right). The portraits of the personalities on the banknotes were made by Rudi Španzel with graphic design by Miljenko Licul (www.bsi.si website of the Bank of Slovenia)

In the period between January 1 and January 14 of 2007, a short period for the simultaneous use of both euro and tolar, people expressed regret over the implementation of the euro, primarily because, with prices required to be listed in both currencies for six months leading up to the change, price inflation had become evident. Simultaneously, people are also
expressing a certain nostalgia for the old currency, indeed partially because of its distinctive portraits of Slovenian luminaries and graphic design. The tolar has now disappeared, and the only element of national identity within the system of euro currency is the back of euro coins.

The purpose of this section on portable identity only points to the numerous "spaces" of identity, financial, political and personal, all of which relate to the city, in this case the capital city of Ljubljana. The seat of government and commerce, the city now finds itself in a struggle with the state to define and establish its legal identity as capital city. The fluid nature of identity in this city, in spreading to the national border, attests to the special nature of urban identity in small countries, as dealt with earlier in this chapter.

THE URBAN LEXICON
A recent article in the New York Times on an unexpected on-line collaboration of a Palestinian and Israeli scientist stated that "technology is its own nation, whose citizens can work together amicably and profitably even when the geographic neighborhoods where they live are bloodily divided" (www.nytimes.com/2007/09/23/technology/23stream.html). Evidence of the expansion of the urban space (in this case two parts of a divided city) with the influence of technology abound, and thus the expansion of the urban lexicon that tracks and expresses the numerous sides of urban identity. What was once known as the "space" in terms of buildings and open space in cities, is now arguably much more complex, as elements that contribute to the space are activated. The technological space has moved the identity of the city into the minds of urban inhabitants themselves, as all sorts of "societies of mind" are formed. Now, as Branzi has written and as many theorists of technology and urbanism have supported, the urban space is really everywhere, in interiors real and imagined as well as in the cultural and urban landscape.

The old city, made of architectural boxes (redundant and no longer perceptible within the context of a complex urban scenario), has been substituted by another, less visible, less flaunted, more extensive and vital city. It supplies emotions, goods and information - but it does not build cathedrals….the “main body” of the city represents perhaps precisely this: the disappearance of an external (including political) space from which to examine itself and from which to draw ideas and stimuli for its positive evolution. It must therefore draw the endocrine capacity to transform itself from its own “interior”. (Branzi, 2006)

From this observation it is clearly implied that a much broader lexicon of expression of the urban space exists, and continues to develop. From the arguments put forth here, it appears that this lexicon really consists of three identities, or kinds of identity:

1. Physical (static): this is the identity we know, and can see and touch – architecture, street furniture and landscape. Here resides Vitruvian *firmitas*, Lynch's identity of the skyline and wayfinding, and Alexander's timeless principles, the well known and promoted monuments, tourist experiences and the classical "layout" of the city's solids and voids, its buildings and

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41 Expressed in a paper to be delivered by the mayor of Ljubljana, as of this writing unpublished, to be delivered at a conference in Tallinn.
public spaces and natural features of the landscape, all participate in giving the city a concrete “image”.

2. Implied (dynamic): this is the spectrum of a city's infrastructure and history, and particularly in the case of small and homogeneous countries the inferred connections of the city to the countryside, the capital city to neighboring towns and regions, and the totality of "portable" interactions… the use of currency, national icons, mobility from capital to country and the time it takes to traverse distances and through what landscapes, and most certainly politics (especially as concentrated in the capital). The city can thus be thought of as a centralized control unit and thus many aspects just outside the city itself fall within this city's purview. Here, the physical "image of the city" begins to merge with the "city as image", and media also become means of portability of identity.

3. Imagined (hyperdynamic): The already complex identity of the city now transforms into individual perceptions in the minds of inhabitants and in a reciprocal way begins to redefine the city itself, further setting the city, as it is thought to be, against the background of individual lives, behaviors and experiences. Technology has made it possible to form virtual communities and identities, and for people to behave differently. While this kind of identity may seem like only a "virtual reality", from the discussion in this chapter, and in the chapters that follow, it is clear that this reality is no longer separate. It is of course in this sense that the city and its identity become most compelling. It is also in this sense that an expanded conception and more evolved expression of the city also become viable, in the face of modern problems as well as opportunities.

Sorkin concludes a recent essay with the following observation:

Urban design needs to grow beyond its narrowly described fixation on the "quality" of life to include its very possibility. This will require a dramatically broadened discourse of effects that does not establish its authority simply analogically or artistically but that is inculcated with the project of enhancing equity and diversity and of making a genuine contribution to the survival of the planet. Our cities must undergo continuous retrofit and reconfiguration…as an academic matter, this will entail more than another repositioning of urban practices within the trivium of architecture, planning and landscape. (Sorkin, 2006/7:18)

And so the cognitive background of urban life, the massive change that technology has produced in the sense of the meaning of community, and certainly the changing needs of city dwellers rises much more to the fore and calls for rethinking, or at least broadening the thinking about cities, avoiding what Sorkin calls "convergence on a singular form of the good city" (Sorkin, 2006/7:18). In this context, it is likely that the issue of urban identity has become exaggerated (much in the same way as the idea of "place" – people are naturally capable of finding and making places for themselves apart from any romantic embellishment of it), deriving from the media and marketing needs, and hence the need for tangible icons that can be used as part of the vocabulary of the "pitch", i.e. the presentation of the city in order to attract investment. Given the body of research that seems to want to establish that technology, media and globalization have "killed" the uniqueness of different cities, the fact is that tourism is very much alive, that people DO participate in urban events, take public
transportation, stroll through public parks, patronize city shops, visit museums, carry currency and involve themselves in urban activity. If as this thesis contends the minds of residents and even visitors might also be elsewhere (on the phone, in a musical headspace, proudly displaying photos from trips on websites and even participating extensively on line), then their physical presence in cities alone, via work or free time, seems to be enough to energize and reinforce the urban environment. While many complain and while theorists still forecast and speculate (also designing new cities in their minds), the fact is perhaps best stated that cities can go farther to live up to their full potential for rich cultural, functional and human experience. Obviously, given cities’ tacit role as a laboratory for experimentation, it could be said definitively that many experiments have failed. Collectively, however, people seem ready to demand improvement of the environment, but for now, this task is largely entrusted to city officials, planners and developers. Until such time that programs develop from the bottom up as much as top down, and until such time that architects and designers have an expanded opportunity to apply the creativity for which they are trained, it is evident that more diversity, open programming and somehow by some means empowerment of people to pursue many new directions is needed. And here is also where the cellular metaphor may begin to lose its applicability, as the traditional nucleus yields its power and the contents of the cell break through the wall that encloses it.

Finally, a new "trivium" (to use Sorkin's term) is likely emerging, deriving from the three kinds of identity described above: concrete reality establishes itself in the STATIC CITY; the various implied urban identities become the DYNAMIC CITY; and the imaginary constructs of urban inhabitants lead to the HYPERDYNAMIC CIY. These three working designations form the basis of the theory developed in the next chapter, with particular emphasis on how these aspects are related.

Diagram of three forms of urban identity, leading in the next chapter to a hypothesis and characterization of these spheres and how they interact (illustration by author).
CHAPTER 2
Perception of the City

The land stands, but man dies; he weakens and is buried down below. We live but for a short while, but the land stands in its abiding place.
- Raymond Firth, "We, the Tikopia" (1963)

Slowing down, he started to look at the scenery. He burst out laughing. He had always driven towards a goal, to arrange or discuss something, and for him, the world's space had become a negative, a waste of time, an obstacle slowing down his activity.

What is essential is invisible to the eye.
- Antoine de Saint-Exupéry, "The Little Prince" (1943)

INTRODUCTION
The city is a complex construction, an amalgam of many often-paradoxical forces and actors, not to mention historical, physical, intellectual and emotional features. The issue of understanding cities is notably richer and interesting now, at the opening of the 21st century, when technology has already begun to make lasting changes to the meaning of cities, changing the course of urban evolution in a period when more massive problems than ever before have swept across what seems like an untenable cityscape. At the same time, as migration from countryside to city has begun to characterize developing countries and as established cities densify and increasingly become centers of attraction, it is unlikely that the majority of city dwellers will forsake city life. In Europe, where most cities have not become sprawling megalopolises (like Tokyo, Mumbai or Istanbul), where these cities had previously established cultural identities and where both history and change have invested these cities with potential for redefining a high quality of life, the city itself begs for new understanding and creative, dynamic evolution.

And if the city can evolve, it is clear that this evolution may be more elusive than logical, more chaotic than linear, but certainly thickly blanketed with simultaneous processes at different scales and rates, heaped one on top of the other. Indeed, any future conception, metaphor or image brings with it the heavy baggage of the past (to the dismay of some theorists, visionaries and writers of science fiction), and so it is more likely that any reasonable analysis of the city will be layered rather than sequential, and that the dynamism, uniqueness and appeal of the future city will be the interaction of these layers and the coexistence of communities of human beings who read the city in very different ways and who construct the image of the city in terms of their individual perceptions. At odds with the idea that the city is the sum of many different perceptions is the tremendous force of globalization, through the media and through travel, through the homogenizing of human experience, in fact, via these same mechanisms. As a result, expectations of the city and what it can be grow narrower and more focused on the same kind of image, rather than tending to exploit the diversity that could come from history, tradition, site, economic conditions, politics and architecture – in short, the identity of the city. What, then, does perception of the
city mean, or the possible multiple perceptions of the city, and what is the "equation" that relates identity, perception and the increasingly prevalent idea of "image"?

IDENTITY OF THE CITY = PERCEPTION OF THE CITY

The idea of urban identity was discussed in the first chapter as a means of setting the stage for understanding the city in more specific terms. For many cities, as argued, urban identity cannot be separated from national identity or regional identity, particularly with respect to smaller countries, as well as from cultural and historical identity, all of which envelop the city itself in dense shrouds of meaning. It must also be emphasized that identity cannot really be separated from perception, from the ways in which people who inhabit the city see it. Obviously, perception is a matter of the apparatus that allows the human being to see, feel and integrate information; however, in the last hundred years, with the advent of photography and film and with the rise of vehicular transportation at greater speed, the scope and functioning of this human perceptual apparatus has been significantly challenged. Not only has the physical context changed as the result of being able to penetrate an environment dynamically, and thus take in a huge amount of information in a very short time, but various print and broadcast media have also saturated individual human and collective memories with new images, some more virtual than real, and in such great numbers that the very idea of what is real is now a factor when considering perception. Moreover, the situation opens the question of whether people are actually forming their own perceptions or digesting perceptions from the intrusive blast of available imagery and opinion.

Towns and villages, as the early built envelopes of community, evolved from the fundamental requirements of human safety, warmth and cooperation, and later residence, religion and commerce, with attendant architectonic expression deriving from materials and methods, if not exclusively function; and by definition, with more than one building or object, the spaces between them acquired a certain status and began to lay the groundwork for a general, if not universal, conception of urban space.

The present space-time conception – the way volumes are placed in space and relate to one another, the way interior space is separated from exterior space or is perforated by it to bring about an interpenetration – is a universal attribute which is the basis of all contemporary architecture. (Gideon, 1967:xxxvii) 

Architecture and urban design function as a system of representation deriving from this universal conception of space, of the gestalt of solid and void, along with the differentiation of public and private, and the hierarchies and typologies that scale and detail provide (as eloquently expressed in Arnheim (1977).2 The amplified form of smaller agglomerations evolved further, blooming into the form of the mature city, with the addition of culture,

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1 What was true in 1967 has changed in the last decade, as so-called "signature" buildings, seemingly independent of their environment, attempt to claim the attention of the urban landscape. The term "signature" says it all: the flourish of the building itself, as well as the inscription of the hand of the architect.

2 Arnheim's work is important in defining the mechanisms and vocabulary of architectural form, its gestalt, and particularly its role in the making of space. This volume extends his work from Art and Visual Perception to urban scale, especially including space, while fundamentally hard-wired into the human brain, as the sum of learned perception and the unconscious.
service and transportation systems, economic power and synergy, leading to the variety of architecture and open spaces, social problems and pollution of the megalopolises of the twentieth and twenty-first centuries. Meanwhile, the urban centers of many European cities have settled into a typology with a well-known lexicon of elements and expectations, despite each city for a number of reasons seeking a unique "image", comprising its distinguishing features of form, site, demographics, and quality and rhythm of life, not to mention most importantly an identity formed by and filtered through the collective perceptions of residents and visitors alike.

A visitor typically arrives in a new city with the anticipation of the experience of its buildings and public spaces, but also with orientational questions of how to get from place to place, how to meet others (connect), how transactions work (function) and, most of all, how to "decipher" the image, or perhaps more the dynamic metabolism, of the specific urban organism.

Residents of these same cities, on the other hand, according to anecdotal evidence, experience the built environment unconsciously, as a deeply incorporated mental picture or "mindmap" as a personal narrative or as links of emotional experience.

Anthropologically, we can understand the identity of the city as manifesting the primitive human need for stability and orientation in an uncertain world, not only in the practical sense of providing the basic necessities of food and shelter through collective action, but in a metaphysical anchoring that gives meaning to life through a sense of community and shared identity. The physical environment obviously played a strong role in the life of primitive societies – people worked, lived and played in complete harmony with the landscape and felt completely attached to it – "the land", as in Firth (1966) for example – and wanted to "identify" it in their collective perceptions, as is evident from the naming of places and the fascination with the greater context of the cosmos, with no scale in between, since it was impossible to directly perceive or know anything but the immediate surroundings and the sky.

In a way, the urban population of the present has by now filled in the blanks, and as Gideon claims and Arnheim affirms, the current spatial perception is universal and fundamental. Thus, examining the cities of the present as well as identifying new trends and speculating on future directions in the evolution of cities must recognize the established base of the past, the perception and needs of the present and the image of the urban future all as an integrated structure, although composed of different "strata" of mechanisms and information.

Development of the city in this respect is largely a process of accretion rather than substitution. The new coexists and "flirts" with the old, the elaboration of what has gone before, with the present and future always to some degree gazing into the mirror of the past, or more likely, into a somewhat turbulent stream. New essential layers (new functions and

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3 Generally, a diagram used to represent words, ideas, tasks or other items linked to and arranged radially around a central key word or idea (for background see http://en.wikipedia.org/wiki/Mind_Mapping).
4 “Consciously or not, people derive this notion of space from the world as they see it, and unless they are psychologists, artists or architects, they are unlikely ever to be confronted with the challenge of questioning it” (Arnheim, 1977:9).
perceptions, both concrete and conceptual) may eventually be added, but if the conception of urban space is universal and fundamental, then more common would be new elements inserted into the existing strata. Archaeological discoveries, reconstruction or preservation may enrich the past, new systems of transport or further sprawl and infrastructure may intensify the present, while new housing types and new technologies will enliven the future of the urban environment, in all probability in a "layered" coexistence.

IMAGE
As complex as the perception of the city might already have been in the past, the airplane changed everything, for a number of reasons. First, speed. The airplane doubled, tripled then sextupled the speed of travel compared to cars and trains. Suddenly, it was possible to experience the city "filmically", at least for brief periods during take-off and landing, as a blur of buildings (façades and previously invisible roofs), public squares, the grid of streets and open green spaces. Second, views from an airplane window were suddenly oblique and then vertical. Third, people could now directly perceive what architects and planners had been trained to visualize all along: the plan view, an abstraction of reality that is difficult to digest and experience on the ground. Façades were replaced by roofs in the aerial view, and the scale of the sprawling city was reduced to the size of an architect's model. Fourthly, perspective changed completely, as vanishing lines disappeared and the city became a fabric or pattern, flattened and glued onto the surface of the Earth. People in an airplane also became physically detached from the city and yet could perceive it in an overview previously only available in graphic form on a map.

Along with flight as a new perceptual medium came photography, which also tended to flatten the "identity" (in the sense of a concrete reality on the street or in a building) of the city into an "image" (a portable snapshot without a third [depth and height] or fourth [time] dimension).

Proof of the importance of both flight and photography is obvious in several ways: first, in the gradual unburdening of the gravity of place (it is not difficult to fly quickly from one city to another, in a heretofore impossible displacement; and second, in watching the way that tourists experience a new city by watching their habits with cameras). While it is of course possible to photograph objects and events, it is relatively impossible to photograph sensations, and so most tourist opt for uncommon buildings or vistas, or the occasional parade.

Now, with the birth of image as a strong component of perception of the city, or rather, with numerous images of many cities available in books, magazines and films, on television and on line, it is clear that the notion of image resolves the relationship of identity and perception, by freezing a graphic snapshot of physical elements, which are then understood visually, i.e. "perceptible", and which then sink deeply into memory.
Flight and the flattened image as influences on urban perception have been amply described by Michael Schwarzer (2004). The analysis fascinates with its freshness and indeed a kind of cleverness of expression. However, the problem, obvious from the outset, is twofold: first, the influence of motion on perception of the environment – favorite topics of Bauhaus-era theorists László Moholy-Nagy in _Vision in Motion_ (1944, 1969) and Gyorgy Kepes in _Language of Vision_ (1947), not to mention authors of fiction such as Michel Butor in _La Modification_ (1957) and Saint-Exupéry in _Night Flight_ (1932, 1974) – is by now in a sense "old hat" and somewhat romanticized, a phenomenon of the times that simply does not have much impact any longer; second, both the still image and the moving image, in sheer number of images per day experienced on the pages of magazines and on the Internet has saturated the minds and hence perceptions of everyone who has access to these channels of delivery. For many, travel has lost its exclusive, exotic aura: for a business traveler, for example, different environments can become a homogenized blur, and the otherwise penetrating experience of observation and absorption of new cities and the "travel spaces" in between gives way to experiencing the pressures of time and distance, not only commuting in cars and trains, but also in airports around the world.

Likewise, it is harder and harder to find or create fresh images, given the other "blur" of ubiquitous media at every turn. The average city dweller, or average tourist, is likely anesthetized to and relatively detached from the concrete reality, let alone the meaningful, sometimes tantalizing differences, of cities. As Schwarzer concisely puts it: "sight becomes absentminded" (Schwarzer, 2004:43). Further understanding of motion and perception is likely now to come from neuroscience rather than theory or travel, and in the meantime, the issue has mutated from perception of the city from a moving vehicle or from the pages of _National Geographic_ into mental excursions that modern transportation and the media have spawned.

This analysis may be a bit specious, however, since travelers of all kinds indeed have already incorporated the landscape in memory, and as a result can "see" in all directions, not absentmindedly as much as unconsciously, especially behind them, in the direction from which they have just come, not only where they are going. The process of perception of the city in motion has obviously by now become deeply internalized, such that the images that flow in through the window of a moving vehicle trigger memories rather than perceptions. Absentminded boredom is thus understandable, but the cause of it is interesting!

Finally, William H. Whyte’s statement that "of all the tons of studies done of our cities, it is rare to find any that attempt to discern the city as most people see it" (Whyte, 1968:13) is even more applicable today in characterizing a divide between theory and the concrete fact of cities. And yet surveys of people's perceptions present other difficulties: the problem of verbalizing perceptions, the problematic task of devising proper questions and of course the very absentmindedness that Schwarzer refers to.
LAYERS: A WORKING METAPHOR
Against this background of the merging of identity, perception and image, one step towards understanding the city may be finding a productive metaphor leading to a theory. The three quotations at the start of this chapter hint at a possibility of three fundamental, if not universal, characteristics of urban perception: first, the foundation of "place" itself, the land, the static construction of built form as a human reference point; second, infrastructure, springing from the interstices between buildings and along the edges of "place-defining" elements, the dynamic motion through the city in vehicles and the sparkle of light and sensation; and third, the conceptual aspect of the city, as it forms and reforms as a combination of memory, thought and displacement through technological means. In a way, these aspects also correspond to sequential historical eras, from Stone Age to Industrial Age to Information Age, and thinking about an archaeological model naturally leads to thinking about these three aspects theoretically as strata, or layers.

But can the city really be thought of as an accretion of layers that include hypothetical and virtual elements, such as perception of motion and consciousness? And then, why layers, and not axes, or some other form of diagram? First, any purely graphical representation risks not capturing the essence of a process as complex as the city. Second, while Cartesian axes may be able to objectify certain parameters of a process, this representation implies elements that, as independent variables, are not really linked to one another (i.e. perpendicular and mutually exclusive). Given that the identity of the city generally grew historically by accretion, and in a process where elements of the past are not necessarily destroyed but recontextualized, subsumed and overlaid with new uses or appearances, then the city is in fact vertically layered, literally and conceptually, with old information buried without necessarily being replaced. Also, if we accept the idea that the identity of the city is a matter of different perceptions, then the physical reality of the city, such as that may be, is wrapped in "blankets" of interpretation, with each new envelope trying to take into account the previous ones without totally rejecting them. Finally, any sort of construct is an experiment, a hypothesis in need of testing. Like all metaphors, with its poetic or abstract quality, if it fails to lead to some sort of new understanding, this one could eventually be discarded and the new knowledge refitted in some other way.

A range of typical diagrammatic forms of representation: strata (cross-section), relational diagram, Cartesian space and Venn diagram deriving from set theory (illustrations by author).

In any event, for the purposes of the present investigation, the idea of three layers is a working thought experiment, rather than a strict diagram. The more interesting issue, to be
considered later, is how these hypothetical layers interact with one another? For now, the characterization of three urban layers leads to examples of further familiar visualizations in which the concepts are appropriately abstracted: first layer, an architectural floorplan showing fixed spaces and structural elements; second layer, an electrical schematic showing interconnections and small-scale infrastructure in an FM radio receiver; and third layer, a typically freeform mindmap, for which there is no "real" graphic representation other than to indicate that the functions and interconnections are not hard-wired but occur in a series of mental states.


Another challenge to the working metaphor of three layers is the question of whether there is an even broader spectrum, i.e. more than three layers. Is there an even deeper founding principle, a "layer zero", for example? In a sense, the DNA of the city is found in the bodies and psyches of its inhabitants, its builders and designers, and its material substance. In this fundamental state, arguably the city is not yet formed, but is incidentally a promising agglomeration of actors and materials, without its own identity as a separate entity. Here, as Richard Feynman, who along with Eric Drexler extended the perception of the entire universe to scales heretofore invisible, said in his seminal speech on nanotechnology, "there is plenty of room at the bottom" (in Drexler, 1986). Here, "bottom" means atomic and subatomic particles, cells, all the forces of nature and evolution, the biological physical and chemical core of existence. In this base layer are the numerous human needs for community, defense, reproduction and life-sustaining activity. The first, grounded or static layer of perception of the city then emerges, built on this base layer, manifesting and responding to these needs, as a collective embodiment of "fight or flight", fear of the unknown, the need for food, shelter from the elements and socializing. A certain solidity was the obvious consequence of making use of available and durable building materials such as earth and stone. Built mass was, of course, punctuated with in-between spaces, the precursors of "place", i.e. obvious locations to be shaded, hidden from view, to have one's back to, to separate functions for privacy and protection, and of course a certain natural position and orientation on otherwise completely open, unarticulated land. Once functional aspects were mastered, other human characteristics came to the fore: creativity, resourcefulness and competition. Ingenious solutions simplified construction, creativity helped give identity (human and programmatic) to various forms of enclosure, and competition was a way to
handle this identity in the emerging critical mass of an increasing stock of buildings. The first layer operates today, although its protective and organizing function is taken for granted and in a sense its conceptual function ("place-making" in a psychological sense) is already incorporated in the various routines of daily life. Ancient threats and fear of the unknown have abated, although an argument could easily be made that chaos and threats have returned to menace modern life (terrorism, crime, pollution, uncertainty). It may be that one unspoken, unconscious and strangely unexpected agenda of the future is a return to the concreteness and warmth of this first layer – the fundamental principles of nature and human bonding, enveloped by welcoming architecture or other warm sense of community… and if it is not a conscious goal, it may perhaps be an unintended consequence – witness the widely documented sympathetic and bonding reaction of people in New York to September 11 (for example, www.guardian.co.uk/travel/2006/nov/17/travelnews.newyork.usa).

Speculating beyond this, is there a sort of "urban nirvana", an ultimate state of civic mind transcending the form and function of the city as we have come to know it? At the higher end of the spectrum, there are most certainly unpredictable future layers to be added to the present ones. What lies beyond the hyperdynamic layer proposed here? If human community is dematerializing into virtual reality or at least into a reality in which cyberspace plays an important role, as current trends and theories seem to indicate, then is a form of "pure perception" on the horizon? Or, as just mentioned, is the city in a very large-scale cycle with, in an ironic twist, a reconnection to layer zero on the far horizon, to the fundamental needs of the human being, the individual? If so, then this would represent the end of a very long thread of civilization, the thrust of urban development come full circle.

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Preliminary notes for an urban lexicon emerging from the metaphor of perceptual layers \(^5\) (for eventual use in the last chapter in discussing what interventions can be made in cities and elements that locate people in the urban fabric of form and activity).

So, in view of the spectrum of human existence being incredibly wide, much of it, like the spectrum of electromagnetic radiation and to quote Saint-Exupéry, "is invisible". And so the three perceptible layers of the city proposed here represent in a sense the analogue of the sub-spectrum of visible light: the city made visible, or at least the city made intellectually or emotionally manifest at a scale and in a manner that we can actually grasp. Expressing the character of each layer in words might very well lead to a workable "urban lexicon"\(^6\) as part of this theory.

The notion of perception of the city not only carries with it the idea that the city can be looked at or thought about in different ways, but also that the city, as a result of the forces that went into shaping it, can be perceived but not totally controlled. Despite the best efforts of urban planners, the results have not been entirely positive. Sprawl, pollution, congestion and crime characterize the dynamics of many cities. Urban design is an experiment: the process is slow, but understanding the results is even slower. The city is a process that, like evolution, is too big and too complex to master, partly because it is sensitive to so many different forces and the input of so many diverse actors.

\(^5\) The layers can also be thought of as dimensions: we know the familiar three-dimensional world, but other dimensions may exist, and indeed they do, if only in a mathematical sense; here, we begin with five dimensions, but only three dimensions, in this case three layers, are readily perceptible.

\(^6\) The term "urban lexicon" is used here to mean a translation into words of the visualization of urban layers, a sort of verbal database and an attempt to identify specific qualities which might be typical of those layers.
In 1967, a study was conducted at the Massachusetts Institute of Technology, deriving from the work of Kevin Lynch, to determine the perceptions of the city from the point of view of a first-time visitor arriving by car. An elaborate mechanical headgear with two video cameras was developed, which the subject of the experiment wore while being driven into the city from the outskirts in the passenger seat of a car. One camera recorded the view forward, while the other record the eye movement of the subject. One week, one month and one year later, subjects were asked to recall the images of the city that remained in their memories. The study had the obvious predisposition that the city possessed a visual signature (its built form, or skyline) and that a sequence of fixed elements constituted a sort of narrative when the observer was in motion in a car.

This study clearly proceeded on the assumption that the city could be experienced as a sort of story, with a beginning, middle and end. You are welcomed by a gateway, experience the city in elevation, with a darting gaze and by passing through a sequence of actions, like a film, after which you arrive at a destination in the city or simply return home. Obviously certain elements (the tallest building, a bridge over a river, etc.) attract the curious eye, but such a perception of the city cannot be separated from the person doing the perceiving, not just from the point of view of biological perceptual apparatus, but from memory, agenda or background (educational, cultural or political). Visitors may have quite a different reaction or set of needs from residents. Students differ from real estate developers, and politicians from the homeless. Each has a separate take, and for all appearances one perception can sometimes exclude all others: the city is not only theoretically stratified in perceptual layers as argued here, but also compartmentalized into zones, thus suggesting a different metaphor, more like a flowchart or Venn diagram with centers of activity, collections of buildings, functions, density, etc. This is the basis of the common idea of zoning, which has controlled development in many cities. As a result, the city is not a single community, but a collection of communities to be sure. Does the theory of layers still obtain, then?

One possible conclusion is that it doesn't matter. It is unlikely that any single metaphor, analysis or theory can uniquely explain an organism like the city. The value comes in the

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7 The present author, as a student, was a participant in this study.
experiment, in the process of thinking. In addition, given the prevalence of "zoning thinking" by urban planners and the abstraction of the city in plan view, it is a more interesting approach to think of the city in a conceptual vertical cross-section, if only for the sake of argument.

An illustrative visualization of the hypothetical layers of the city. Layers 1, 2 and 3 are the most significant for this thesis, while 0 and 4 are theoretical additions to complete the entire range of human experience (photomontage by author).

The urban lexicon outlined above begins to identify the likely components of the proposed layers of the city. Concisely put as aphorisms, and in the interest of "verbalizing" what has been visualized, layers 1, 2 and 3 might be respectively characterized thus: "form follows mass" (and of course function), "form follows technology" (and of course motion)" and "form no longer matters" (form transcended). As in a Cartesian space, each layer also behaves like an axis to a degree, in that the characteristics and operative principles that can be assigned to each axis or layer is autonomous from the others; however, many interconnections, relationships and juxtapositions surely exist, and those interconnections are developed throughout the thesis. For example, the electronic displays on the main street in the center of Ljubljana (see photo in Layer 2: The Dynamic City below) are colorful, technological and dynamic elements applied directly to and coexisting with conventional, space-defining building façades. Likewise, while one could certainly speak with some perceptual conviction about the static layer of built form and conventional notions of space and orientation...
accommodating dynamic mobility within its infrastructure of streets, there is hardly the sense of the celebration of motion in the buildings themselves. Architects have given form to the façades of buildings through classic design elements of proportion, materials and detail, and to some extent to the spaces between them, with landscaping and street furniture, but these elements mainly constitute a background "tableau", composed, zoned and organized, for the activity that goes on in the interstitial spaces.

In the dynamic city, the city of mobility and time, the façade becomes a face in the crowd, the playful wink of electric lights and the blur of fast cars. Buildings in the dynamic city seem to want to leave their foundations, metaphorically – Archigram's floating buildings and inflatable habitats take this notion to its extreme (Cook, 1999) – as the ground floors of buildings are penetrated and articulated, given over to entrances and exits for pedestrians, to access ramps to parking garages and to transparent shop windows proclaiming the artifacts of commerce and brightly illuminated at night. Modern materials (aluminum, glass, LCD screens) express evanescence and portability rather than the static city's Vitruvian firmness and commodity, along with a heightened and sometimes psychedelic Venturian sense of electronic delight. Buildings pass by quickly and lightly while in motion, and while some may impress us, they have a perceptual tendency to become as flimsy as the cardboard or plastic architectural models that preceded them in their coming into existence, or as plastic as the idea, or software, that made them. Spatial constructs then give over to temporal ones: things move, and speed and motion transform the previous values of mass, volume and formality. Even pedestrians contribute to the colorful arterial flow of dynamic cities. In the dynamic city, infrastructure (the space in between) is enlivened throughout the city and even beneath it. In the glare of bright lights and pixels, what was once made visible in the form of "serious" architecture and function is no longer so clearly perceived... nor appreciated:

I might say that we, as members of a certain class, with a certain social position and level of education, believe that all kinds of wonderful things should be possible. The world is full of spaces that we respond to with a belief that certain wonderful things should happen there because they once did. Perhaps it's nostalgic to believe that these days. (Martha Schwartz, in From Public to Social Space(s): A Faculty Discussion, 1994)

New technologies have contributed to a quantum leap in urban dynamism, to the extent that they become "transdynamic" or "hyperdynamic", i.e. beyond the usual definition of time and space. Many urban inhabitants now appear to be "somewhere else", in their heads as much as in the city, moving much more than ever in a mindspace, accompanied by "their own" music and joined in virtual communities outside the city limits by mobile phones and miniaturized music players while remaining physically within the "normal" limitations of the city. The city's physiology seems to be morphing into phenomenology – an emotional quality of the city – as a mental image, beyond even the branded image one might find on television or travel brochures, and, to be sure, no longer the image of the city in the sense of its composed skyline or recognizable image, as celebrated by Lynch:

Since the emphasis here will be on the physical environment as the independent variable, this study will look for physical qualities which relate to the attributes of identity and structure
in the mental image. This leads to the delineation of what might be called imageability: that quality in a physical object which gives it a high probability of evoking a strong image in any given observer. It is that shape, color or arrangement which facilitates the making of vividly identified, powerfully structured, highly useful mental images of the environment. It might also be called legibility, or perhaps visibility in a heightened sense. (Lynch, 1960:9).

Essentially, in terms of the hypothesis being explored here, the city, with three operative layers each with its operative principles, has stratified in a complicated way. The genius loci of the city8 no longer resides in its imageability of form and void, as the classical "spirit of place" metamorphosizes into the "spirit of specific places" in a much broader sense, technologically, phenomenologically and unconsciously; the resulting transformation might better be described as "urban chemistry" than the worn-out notion of the image of the city as the arrangement of buildings around a space, or along an axis or street. The new "spirit" is a deeper collaboration of all layers in the making of urban space, and thus the city of today, especially the European city, appears to be in the process of ongoing recontextualization, both with development strategies (new buildings, new infrastructure, renovation of old buildings with new materials, movement to suburbs for living and commerce, etc.) and with a definite change in the perceptions of its residents, largely influenced by the glut of ubiquitous media. With both environment and inhabitants in flux, the city can now be interpreted and experienced differently, as layered experiences, and planners ought to be aware of and exploit the new paradigms and potentials emerging from this situation.

LAYER 1: THE STATIC CITY

*Firmitas, Utilitas, Venustas. (Firmness, commodity, delight)*
-Vitruvius (1st century BC, www.archfoundation.org)

Space and light and order. Those are the things that men need just as much as they need bread or a place to sleep.
-Le Corbusier (1965, www.spacearchitecture.co.nz)

What is space?
-Rudolf Arnheim, "Dynamics of Architectural Form" (1977)

An icon of the static city: the Sächsische Staatsoper in Dresden (1841), by architect Gottfried Semper, dominates and defines a large public space (Theater Square), complete with a monument of Saxon king Johann (photo by author).

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8 See Norberg-Shulz (1980) for an elaboration of the term, as well as the discussion below.
The static layer of the city is adorned with a rich palette of materials: brick, stone, wood, glass, steel and concrete. The calculations that determine the assembly of these materials, appropriately called "statics", involve basic arithmetic and geometry, the simple and friendly descriptors of the tangible environment. Perception here is linear, planar and volumetric, and lines of perspective converge exactly as expected. Size and shape, and the rhythm of substance and void are the operative spatial elements. We as humans in the city respond to the appearance of buildings and have learned to perceive the architectural surroundings in terms of the triad: soleil, espace and verdure.\(^9\) The play of light on objects modulates the volumetric quality and spatial complexity of the compositional whole, as windows of taller buildings and aligned boulevards give way to vistas that tantalize and manipulate the eye. The city is built with hand tools and machinery for heavy lifting; people see the image of the city in this first layer as its body, its physical form.

Kevin Lynch posited a vision of the image of the city in 1960, adding to the developing urban lexicon that started to be written as long ago as Vitruvius, but which was also explicated in detail in this century by authors such as Gideon, Arnheim, Alexander and others. Implicit, of course, in the emphasis on form is the perception of that form, and with that the door is open to speculation about other forms of urban legibility that go beyond visual perception. Lynch, in fact, explicitly acknowledges this:

A highly imageable (apparent, legible, or visible) city... would seem well formed, distinct, remarkable; it would invite the eye and the ear to greater attention and participation. The sensuous grasp upon such surroundings would not merely be simplified, but also extended and deepened. Such a city would be one that could be apprehended over time as a pattern of high continuity with many distinctive parts clearly interconnected. The perceptive and familiar observer could absorb new sensuous impacts without disruption of his basic image, and each new impact would touch upon many previous elements. He would be well oriented, and he could move easily. He would be highly aware of his environment... The concept of imageability does not necessarily connote something fixed, limited, precise, unified, or regularly ordered, although it may sometimes have these qualities. Nor does it mean apparent at a glance, obvious, patent, or plain. The total environment to be patterned is highly complex, while the obvious image is soon boring, and can point to only a few features of the living world. (Lynch, 1960:10)

No analysis of the static, concrete and fundamental layer of the city would be complete without considering and acknowledging Rudolf Arnheim (1997) and his lucid exposition of the vocabulary of urban form, which like Alexander's proposition of timelessness (Alexander, 1980), couched in the form of a manifesto, of the physical components needed for humane definition of architecture and urban space, constitutes if not manifesto then a comprehensive lexicon of architecture and urban space, as perceived by people. The emphasis on perception here raises a philosophical issue of interpreting "the real", which goes beyond the limits of the present argument; however, the important point is the almost simplistic notion that in a sense, the city or the urban space is what people see it as, according to Arnheim's perceptual principles, and what people think it is,\(^{10}\) filtered through universal and individual mechanisms.

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\(^9\) Le Corbusier's well known dictum, as part of the Charte d'Atthens, CIAM, 1933.

\(^{10}\) This is a paradox: if the concrete reality of the city is perceptual, then it is arguably no longer concrete. This is in fact the basis for the hyperdynamic layer, in which the minds of residents create individual realities which add up to a much more complex view of what the city is.
(psychological and ethereal) of perception and feeling. Arnheim has built his entire opus on this: what we perceive as concrete is concrete (both built form and urban space), and the concrete behaves according to certain rules.

Three-dimensional space is directly given to the mind only in its crudest extent; the finer interplay of dimensions [layers] must be gradually conceived by it… This is not always evident in the actual constructions since in practice the developmental factor can be overlaid by technical [and technological] historical or personal influences… it is essential for the understanding of architectural form to realize that the mere handling of objects in the physical world does not by itself provide an active conception of the dimensions and inherent possibilities of space. (Arnheim, 1977:16)

At issue here is not only perception of the concrete, but the human need (and architectural practice!) to bring order to space and the living environment.

Order must be understood as indispensable to the functioning of any organized system, whether its function be physical or mental. Just as neither an engine nor an orchestra nor a sports team can perform without the integrated cooperation of all its parts, so a work of art or architecture cannot fulfill its function and transmit its message unless it presents an ordered pattern. Order is possible at any level of complexity… but if there is no order, there is no way of telling what the work is trying to say. (Arnheim, 1977:162)

Here, while Arnheim describes the perceptual spectrum, Alexander (1975), like Lynch, embodies them as "laws". The debate is whether Alexander's viewpoint is an ultra-conservative manifesto, like the New Urbanism (Duany et al., 2003), or a universal truth about the "real" in architecture and urban design, which should, and in fact must, be freely interpreted and adapted to more contemporary urban dynamics, particularly in view of the changes that technology has made in the perception of the city.

The static city layer, with its "time-honored tradition" celebrates the notion of "place" and concretely embodied form, and thus a rather cautious identity deriving from conventional architecture, landscape architecture and urban planning. This layer is, or at least has been, the realm of architects and urbanists, and equally to the point, the playground of politicians, real estate developers, preservationists and property owners, who together participate in lumping together the physicality of cities. It is the concrete base, literally and figuratively of the urban organism, the aggregate of its elements and their situation in space. "Civic pride" resides in this layer as an image archive of the establishment of eternal values.

Because the first layer is literally "grounded" in ownership, economics, zoning and in some cases in legislated architectural review, its possibilities for innovation and for providing the kinds of public spaces that were once active and highly valuable in cities have apparently...

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11 Arnheim goes on to critique Venturi's notion of contradiction as an entirely misguided sensibility and celebration of "noise". (See Chapter VI on order and disorder in Arnheim, 1977).

12 Elizabeth Duany and Andreas Plater-Zyberk, the proponents of "classic" if not "classical" planning, represent the New Urbanism, much criticized for a reactionary if not elitist embodiment of established urban values, particularly in small town architecture, with its Main Street, public square and a sweet expression of "home".

13 The dreaded "architectural review board", presumably one public means of establishing high architectural and urban standards, actually becomes an instrument of repression of more advanced ideas. One stunning exception is in Columbus, Indiana in the US, where more than 70 notable and adventurous "world-class" buildings and pieces of public art populate a relatively small city (pop. 39,000 in 2000), by intent (www.columbus.in.us/).
diminished. Solutions have become homogenized as a kind of standard. Of course, with expanding populations in cities, people have to live and work somewhere, and the enormous value of land in cities creates profit centers and a base for exploitation more than opportunities for the public good. Because this layer is also material-intensive, a problem in older cities then becomes rehabilitation of buildings and infrastructure, of abandoned neighborhoods or unused rail lines, cause by demographic change and economics, as well as technology. Huge potential still exists in the reuse, renovation and repurposing of older structures, since buildings are often more successful in their second incarnation – the life of the original buildings and spaces may still exist within the new, respecting patrimony and constituting a creative response. It is apparent that architecture and planning may produce better results in reacting to given conditions rather than in new creation or on new, suburban sites.

In spite of excellent new buildings, can we really say that the majority of new projects are successful, especially when they adhere solely to outdated static-layer ideas? We can also ask whether people continue to marvel at grand boulevards or majestic facades, or does it really matter anymore, as people's attention has turned elsewhere and as the cost of quality, inspired construction escalates while budgets dwindle. Are there very many successful new plazas today, or commercial buildings that contribute to the life of the city?

In the present environment, the growing addiction to technological and media-based entertainment seems incapable of being satisfied by architecture and planning. More than a level of education in the population, which might be expected to generate higher-level demand, the needs of people, for better or worse, seem to be moving in another direction, largely toward more dynamic forms of time-based entertainment in shopping malls rather than to static spaces. And where does this leave urban design? Part of the problem is

The much-touted yet desolate modern public space Trg Republike (Republic Square, designed by Edvard Ravnikar in 1960) in Ljubljana (www.burger.si) is much appreciated by skateboarders and is the gathering place of an immense crowd at the national anniversary celebrations of independence. However, in daily use it attracts more cars to the parking lot than pedestrians. There is no place to sit, and it does not offer much reason even to pass through. This space is no different from many contemporary open urban spaces.

14 Gazvoda interview, Appendix 1.
management of the relatively large scope and need for consensus in most urban interventions; the degree to which a designer or team of designers can in fact control the design process seems to stop at the level of a single building, despite master plans. There is hardly a parallel to automotive design, product design or graphics, where conventional or even unconventional processes are more predictable and achievable. There is no meaningful parallel to market testing, user interface issues or methods of fabrication. Many urban projects also require enormous budgets that few cities or developers can justify. And what form of consensus is possible among large populations? Finally, the urban lexicon fails at the static level to offer sufficiently wide-ranging possibilities of expression. This is not to say that some projects do not succeed better than others and some even rise to a level that brilliantly answers to a number of important social, cultural, constructional and aesthetic issues. In view of these problems, the static city has remained just that – static, and progress thus must come from other areas and from new interpretations of what is possible.

If the city is indeed an organism, then what is it that keeps the static layer alive, i.e. animates it? In addition to the cars, truck and buses that course through the infrastructure of city streets, and against the backdrop of static-layer architecture, pedestrians are the critical animators of the city, as they directly "inhabit" the city's spaces and move through them fluidly, with multiple destinations and purposes, exercise, and naturally the existential pleasure of walking itself. Walking is arguably one of the slowest metabolic processes in the city, yet more active than sitting at a desk or having a conversation in a café. As such, the act of walking just begins to give the static layer a sort of loping rhythm, with sufficient time to stroll and observe, to go on errands or arrive, even circuitously, from A to B. In the process, however, the mechanism of orientation is at work in planning or at least becoming aware of the route and position in space. Jenks refers to this as "psycho-geography", which "derives from the subsequent 'mapping' of an unrouted tour which, like primitive cartography, reveals not so much randomness and chance as spatial intentionality. It uncovers compulsive currents within the city along with unprescribed boundaries of exclusion and unconstructed gateways of opportunity" (Jenks, 1995). Here, Jenks is really making the acquaintance of the flâneur,15 (as well as hinting at Castell's notion of a "space of flows", as walking, especially without a specific destination, begins to enliven the "space of place")16 who perambulates and "psychomaps" the urban landscape, aware of his or her position in it,17 while foreshadowing that the city is a construction at least as real in the minds of its inhabitants as it is in concrete form. Flâneurie, interestingly enough, despite the relatively slow pace of walking compared to cars, buses, trains and planes, is one of the connecting mechanisms of the city layers, at once tied to the physicality of the streets, to mobility and spectacle, and certainly to mental construction and the pleasure of daydreaming while walking, even as a form of expression. As de Certeau puts it: "The act of walking is to the urban system what the speech act is to

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15 The Baudelairian flâneur: "the gentleman stroller of city streets" (see http://en.wikipedia.org/wiki/Fl%C3%A2neur for background).
16 Castell's concepts of these two hypothetical spaces are described below.
17 In the double meaning of orientation or geographical position on the city (mental) map as well as self-awareness, i.e. "position" as "role".
language or to the statements uttered… It thus seems possible to give a preliminary definition of walking as a space of enunciation” (de Certeau, 1984). Artist Helen Scalway, in considering how people in cities mentally construct the urban spaces they move through in order to inhabit and navigate them, and in expanding the male flâneur to include "the contemporary flâneuse", says:

Now it's time to embark on this walk…The complexity of it may only emerge on the way…This is a narration where I can give to objects which catch my attention as much time as it takes me to walk past them, while struggling, juggling, moving through my various personae, my multiple subject-positions. It's a handheld camera necessarily moving bumpily, chasing things on the periphery of my vision. (Scalway, 2002:65)

What is being "enunciated" or even created, through the sequence of narration and images, is a second space, a space of motion in the urban landscape. And thus the stage is set for the next layer: the dynamic city.

**LAYER 2: THE DYNAMIC CITY**

*The tesserae of the future will be pixels.*

*The aeroplane has unveiled for us the true face of the earth.*
- Antoine de Saint-Exupéry, "The Little Prince" (1943)

*The medium is the message.*
- Marshall McLuhan, "The Medium is the Massage" (1967)

If it is people walking who give vitality to the sidewalks of the city, then it is surely drivers who energize the streets. Literally making a quantum leap by virtue of speed alone,\(^\text{18}\) drivers of automobiles are clearly traversing the city in a cinematic sense. Observing drivers in cities (the situation is much calmer on highways), one need not look far to find relatively joyous facial expressions of drivers, especially if they are at the same time speaking on mobile phones or listening to music, or contrarily angry (the by now well known phenomenon of "road

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\(^{18}\) A factor of 10 separates average human walking speed of 5 km/hr and the average speed in European cities of 50 km/hr (http://en.wikipedia.org/wiki/Speed_limit).
rage") at obstructions or traffic lights or slow drivers who threaten to dislodge the seemingly addicted speedier driver from the motion-induced "narcotic" of the second layer, i.e. the dynamic city. At the same time, urban infrastructure consists of dynamic elements of electricity and even plumbing, above ground and below, from metro to high-tension wires to phone lines. Animated screens have also begun to populate the city, jumping in scale from television and computer screens to the public spaces of the city. As Venturi correctly characterizes it: "the tesserae of the future will be pixels" (Venturi and Scott Brown, 2004), and the future is already here.

In the dynamic city layer, the electron and the clock have replaced brick and stone and the parameters of volume and surface area, and thus the urban lexicon has expanded to include time, entertainment and motion, along with noise and pollution and the falling into disuse of certain city buildings and spaces. While many people of course still enjoy the refuge of a beautiful public garden, others measure the value of open space by the time it takes to traverse it. Rather than a pleasant resting place for the human gaze or enjoyment of the way architecture defines comfortable and organized public space, buildings now impede motion and have to be torn down, moved or redesigned to make way for mobility infrastructure. Signs and electronic display boards cover architectural façades, and as a result light now emanates from within illuminated objects, rather than being cast on them by the sun. What has happened to the play of light and shade so valued by architects in the static layer?

Whether it is because modern buildings are lacking the sorts of details or aggressive threedimensionality that once characterized beautiful buildings, or whether the gaze of the viewer is no longer satisfied by slow-moving daytime shadows in comparison to electric lighting or television’s blue flickering glow or computer games, it is obvious that light bulbs and LEDs compete with the function of the sun! Las Vegas is the stunning example, famously heralded by Venturi and Scott Brown, but more and more one finds lesser examples in any city in the world.

Animated electronic LED display on Slovenska, Ljubljana’s main street (Nebotičnik, Ljubljana’s first skyscraper, 1935, in the background). The dynamic second layer of pixels in motion contrasts but also coexists with the traditional architecture of the static layer (photo by author).
Whereas Las Vegas may vibrate 'round the clock, even in full desert sunlight, the electronic façade rises to its full power in darkness – and thus the proliferation and attraction of nightlife and indoor entertainment in shopping centers and shops, not to mention the exploding use of computers that serve and connect the Information Society in darkened offices in virtually every city on the globe. What is most crucial in this media-intensive environment is that people begin to see the city as an image (Venturi), not the image of the city (Lynch). "It's not about space: it's about communication" (Venturi and Scott Brown, 2004:165). Communication (the motive power of image) has now made it to the top of the list of the legitimate functions of architecture; and form is just beginning to catch up. In second-layer terms, this is an important "breakthrough" in the perception of the city.

The notion of "entertainment", especially coupling "image" with "action", is crucial to understanding the second layer, as transportation but also cinema are both "vehicles" of understanding the city in a new dynamic light. The excitement of the speeding car has brought entertainment to motion, especially against the backdrop of the city that was previously seen as a static composition. Motion has turned the urban "scene" (in the sense of what's going on in the city) into urban "scenery" (in the sense of what the city looks like), and as such the three-dimensional reality of the buildings and spaces in the city becomes flattened, and seems to require artificial light or other means to animate it. More and more in motion, we understand the urban landscape only as a reminder of the scenes of actually walking on a street, sitting in a café, or gazing out of a window in the past. This detachment is further reinforced by the enormous "database" of imagery of the city accumulated in various media, globalized and manipulated to the extent that we could almost say that one urban image can replace any other. The city that in the past represented direct and unique experience, now comes to us in the form of a surrogate, a medium, an expectation, a substitution of complexity for depth, and above all in the form of background radiation, or simply "noise".

Drivers of cars stopped at a traffic light stare at the colorful billboards that have landed like birds of prey on the roof of the once-popular Ilirija Baths swimming facility on Celovška, one of Ljubljana's main streets. Ironically, athletics (people in motion) was once a crucial part of the dynamism of a city like Ljubljana, and although it is still an important part of this city's culture, the city is now populated by automobiles (people in motion in cars) as never before (photo by author).

19 The airplane moves at ten times the speed of a car driving in the city but has no urban frame of reference for its velocity.
Simply put, it is "image" that translates between the identity of the city and the perception of the city. The second layer then is about portrayal of the city as much as experience of the city; both figure in perception, the former being much more indirect and yet more "exportable". On top of this layer a future third layer will grow to meet the deepening human need for identity that the city is less and less capable of supplying, not to mention an equally deep-seated need for more "excitement", which was spawned in the second layer but which it itself eventually will no longer be able to satisfy. The visual image is vulnerable to saturation, to fading among the profusion of other images until the human viewer starts to crave a quieter internal "trans-visual" experience. Meanwhile, the dynamic of exciting speed may also have started to cross a kind of threshold into "hyperdynamism", where only the speed of virtual thinking can keep pace, and with that, the "dethroning" of the static city's celebrated sense of place as the goal of architecture and urban planning, and the emergence of other forms of perception and interaction with the city.

Networked mobility actually forces a renegotiation of place, and leads to significantly altered understandings of place and place-making. This is theorized as a shift from a traditional understanding of place as stable and fixed (stabilitas loci), to a reconceptualization of place as formed in and through mobility (mobilitas loci). (Rowan, 2005)

Because with the technological development of transportation people could move faster and farther, the urbanism of the dynamic city of the second half of the twentieth century blossomed into movement, megastructure, flows and sprawl (Castells, 2002). If the static city is driven by real estate, politics and zoning, then the dynamic city is about production, commerce and sensation. The contribution of theorist Manuel Castells here points to the basic characterization of two urban tendencies, i.e. to the static and to the dynamic. His "space of flows" and "space of places" describe well the competing Newtonian forces of stasis and dynamism. The space of flows refers to the flow of information, and the dramatic extension into a sort of super-suburban condition where physical space is largely dematerializing as the sphere of urban activity dramatically expands, tending of course to megacities without end. Cities themselves generate regions, and become nodes in a network of connections based on the flow of goods and information, in which information itself has become a commodity transported. The boundaries of the modern city become, therefore, frontiers, diffuse boundaries that only roughly characterize a space rather than strictly defining city limits. If cities are nodes, then the connections between them are also highly dynamic in order to keep the flow on which the nodes depend alive (Castells, 2002). Without very succinctly saying so, Castells has defined two competing but also conceptually complementary fields, each with its own "axes" as he terms them, in which people perceive and define their roles. This perception indeed also "flows" into and out of politics and socio-economics:

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20 This term implies both the proliferation of images in globalized media, which tend to dramatically homogenize various urban images into a stereotyped city image, as well as the "export" of images from one software application to another, i.e. "image processing".
21 Castells introduces the concepts of "space of places" and "space of flows" to characterize the shift of cities from a static composition to a series of nodes in a network of the flow of information. While referring to the "dual city" as containing both sorts of spaces, Castells reinforces the idea proposed in the present thesis of "layers": in the concluding chapter the dual city really takes on three "axes" of function, meaning and form. The space of flows links up electronically separate locations in an interactive network that connects activities and people in distinct geographical composites. The space of places organizes
While the analysis of global cities provides the most direct illustration of the place-based orientation of the space of flows in nodes and hubs, this logic is not limited by any means… to the directional functions around which such space is articulated. The space of flows is not the only spatial logic of our societies. It is, however, the dominant spatial logic because it is the spatial logic of the dominant interests/functions in our society. (Castells, 2002:347)

This statement quite specifically defines the mechanism of "top-down" formation of the shape of cities by the dominant power elites, by which the flow of goods and information is generated and controlled.

Thus, the technocratic-financial-managerial elite that occupies the leading positions in our societies will also have specific spatial requirements regarding the material/spatial support of their interests and practices. The spatial manifestation of the informational elite constitutes another fundamental dimension of the space of flows. (Castells, 2002:347)

Interestingly enough, however, the space of flows is inhabited by multiple actors, and a vast and diffuse series of powerful "elites", the "digerati"22 for example, who with access to the space of flows of information have already begun to understand and use their power, and even while the Internet is affected politically (censorship in China, for example) and commercially (Google, etc.) as an engine of capital generation, it retains its idealized function as a democratic information space and phenomenon of dynamic flow, with a defining "bottom-up" character. We have only begun to witness the immense scope and paradoxes of the space of flows. From this space the third urban layer, the hyperdynamic city, will spring, which will be discussed further in the next section.

Obviously, the second, dynamic city layer, where many architects now seem to want to be situated, obsessed with escape from the conventionality and gravity of the static city, is a layer of paradoxical elements. The question is: how to fundamentally animate buildings without resorting to surface application of image technology? In the Venturian direction, the digitalization of the façade is a sort of electro-Baroque strategy of decoration, a superficial virtual reality. This trend, in de-dimensionalizing or flattening urban architecture, contradicts the flamboyantly volumetric, swirling complexity of form in the work of Zaha Hadid and Frank Gehry, for example. And yet both directions, the electronically planar and the seductive 4-D respond to an audience that craves motion and bravura, and perhaps special effects more than content, at a time when the profession of architecture also seems to want to reinvent itself and when its tools of design hint at the realization of hitherto-impossible formal dreams. The Disney concert hall in Los Angeles is an example. As striking as it is, one could seriously debate whether the building animates much urban activity. As sculptural form, it is magnificent, but it requires a lot of open space around it for its grandeur and interest to unfold, a large picture frame for the image, as it were, and as such it hardly fits within the confines of its site, let alone respond to its neighbors. This is perhaps a special case, given the pathetic structures that surround it, and accordingly Gehry was asked to propose some experience and activity around the confines of locality. Cities are structured and destructured simultaneously by the competing logics of the space of flows and the space of places. Cities do not disappear in the virtual networks. The metaphors of the two spaces and the three axes compete with but also complement each other, and the yet the argument is not neatly resolved here. In fact, each of the two spaces has its three axes! Both spaces, obviously, with their different lexicons of material and process, produce results on the three axes, influencing and reacting to function, and producing meaning and form.

22 Term for the digitally literate coined by Nicholas Negroponte of the MIT Media Lab (1996).
architectural companions for this building, shops and smaller buildings along the street, to solidify the image and his own perception of the city.

Proposal for downtown Los Angeles on a site opposite the Disney concert hall, in the form of little replicas of the gyrating mighty concert hall itself that will primarily serve as retail space. Is the implied motion of this architectural-scale machinery a substitute for dynamic city activity? (photo in the Los Angeles Times, 2006)

Here, the effort totally fails with the introduction of similar peculiarly shaped buildings integrated with large display boards, presumably some of which are of the electronic kind. It is laughable to even consider in this context Christopher Alexander's "timeless way of building" (Alexander, 1980). It might also be said that the combination, or interaction, of the two dynamic directions of sculptural form and surface dazzle points to a future direction, but only when it arrives at the level of authentic, dense and varied urban complexity as proposed by, say, Michael Sorkin23 in a number of hypothetical urban explorations. But such a successfully heterogeneous vision of the city may be very far off indeed, if only for economic and political reasons. Using an observation by architect and author Joseph Giovannini24 that the Alps and Dolomites are in fact totally separate mountain ranges created at different times and of different material, yet completely integrated, interspersed and happily complex geologically, the large-scale interaction of all major forces in the city that potentially give the city its vitality has a long way to go, and such interaction might never actually be achievable simply by mixing architectural styles. At this point it is logical to ask whether architecture and planning really play an effective role in the development of the city, or whether other factors apart from the exclusivity of systematic and conventional urban design really give the city its character.

Among those factors that shape the dynamic city's character much surely be considered the senses. Riding past a bakeshop on a certain street in Ljubljana on a bicycle most certainly triggers positive sensations (and memories) – a fleeting smell has as special a quality as a fleeting image. The smell of incense wafting out onto the street from a temple in Taipei, for example, or the aromas of the open market in Padova, are rich with urban sensation. Passing a yakitori shop under the Yamanote elevated railway line in Tokyo and inhaling the vapors emanating from bubbling sauces, or passing a loud, clacking pachinko parlor are unforgettable city sensations. Sound particularly animates the dynamic city environment:

23 See www.sorkinstudio.com for examples.
24 Conversation between the author and Giovannini while driving near Desenzano Italy, 19 July 2006.
Hearing...is partly spatial. A gently swishing field of grain that seems to surround one in an earthy whisper doesn't have the urgency of a panther growling behind and to the right. Sounds have to be located in space...There is a geographical quality to listening. (Ackerman, 1990:185)

Rasmussen has also noted the sensations of sound and rhythm in architecture, and while rhythm plays an obvious part of the dynamics of the second layer of the city, it is an obvious poetic appropriation of musical rhythm into visual language, whereas the real sound of architecture is a direct sensory experience.

Most people would say that as architecture does not produce sound it cannot be heard. But neither does it radiate light and yet it can be seen. We see the light it reflects and thereby gain an impression of form and material...The favorite interior of today seems to be something so unnatural as a room with one wall entirely of glass and the other three hard and shiny and at the same time with a resonance that has been so artificially subdued that, acoustically speaking, one might just as well be in a plush-lined mid-Victorian interior. There is no interest in rooms with differentiated acoustical affects – they all sound alike. (Rasmussen, 1962:12, 235)

Unlike a building, the city does produce sound, along with numerous other sensations that humans can detect and appreciate. Unfortunately, modern planning, especially through the mechanism of zoning, tends to sanitize the city and wipe out its sensory dynamic qualities, except for the pollution that tinges the air or the noise of automobile and bus traffic that masks subtler and more pleasurable sounds.

Vision and hearing are now the privileged sociable senses, whereas the other three are considered as archaic sensory remnants with a merely private function, and they are usually suppressed by the code of culture...Contemporary architecture is more often engaged with the architectural discourse itself and mapping the possible marginal territories of the art than responding to human existential questions. This gives rise to a sense of architectural autism... (Pallasmaa, 2005:17,32)

So for the moment, at the opening of the twenty-first century, and with the confused Brownian motion of architects and consumerist hunger for something new in the city, the second layer must be seen as an experimental platform, full of the contradiction so beloved by Venturi. Consider the conceptual departure and annihilation of the first layer's "sense of place" brought about by Archigram in the '60s. It was nearly 40 years later that Peter Cook's competition-winning scheme for the Museum of Modern Art (Kunsthaus) in Graz would finally give tangible form to an Archigram fantasy... a bloated blue stomach burbling out of a renovated Baroque building, its protuberances pointing proudly to the sky, a belching proclamation of the dynamic city layer. Its high-tech façade of neon circles, hidden neatly under curvy blue acrylic panels, comes alive a night, a quiet circus paying homage to Venturi, and thumbing its nose at abstract modernism.25 And yet the building works, thoroughly integrated as it is in the left-over partial façade of the building it replaced, shaking hands with the firmness and delight of a portion of a static-layer edifice. Gehry attempted this a decade earlier in Prague with "Fred and Ginger", the playfully undulating building along the Vltava River that attempts to integrate itself into one of Prague's most beautiful stretches of architecture. But since juxtaposition is not the same as integration, the pay-off is only superficially delightful, though not conceptually enticing; nevertheless, it is partly the often

25 "Less is a bore" (in Norberg-Shulz, 2000:350).
comical dynamism that Archigram must have really had in mind, but a much more serious effort to at least attempt to make the built environment "move".

Gehry’s "Fred and Ginger" building in Prague, Zaha Hadid's Vitra firestation and Cook's Kunsthau in Graz – second-layer dynamic city expression in architecture: Gehry wants to dance, Hadid to fly and Cook to explode! (photos by author).

LAYER 3: THE HYPERDYNAMIC CITY

Thus the traveler, arriving, sees two cities: one erect above the lake, and the other reflected, upside down.
-Italo Calvino, "Invisible Cities" (1974)

If you are worried about China you are probably not worried enough. If you are excited about the opportunities, you probably aren’t excited enough!
-Michael J. Enright (www.competitiveness.org/article/view/761/1/67)

This explanation will become a mere commonplace in the when scientific men are brought to recognize the immense part which electricity plays in human thought
-Honore de Balzac, "Cesar Birroteau" (1837, www.gutenberg.org)

The hyperdynamic layer is a virtual mindspace of dreams and connections in an invented personal urban landscape (Islands in Lago Maggiore at Stresa, photomontage by author).
If the second, dynamic layer set the city in motion, then what is this movement really all about and where does it lead? And if the issue is perception, then in the third layer technology provides the means for that perception and the mechanisms of behavior. Since the city itself, as defined by its built form, cannot move, and since motion in the city, i.e. the second layer, relentlessly transects the city, isolates static islands and does not want to stop, then the third layer is a mindscape where people seem to be finding versions of their own identity, personal infrastructure and mental rhythm. Beyond the electronic bits of flickering pixels and against the backdrop of a very slowly changing architectural skyline, a transformation is taking place in the minds of city dwellers themselves, in mental and perceptual "places" that conventional urban planners have not generally considered.

Movement is a relevant way to approach the changes affecting contemporary societies, individual behavior and lifestyles, the transformations in cities, architecture and town planning, and thereby to understand the challenges facing the societies of today and tomorrow. These urban mobilities are an expression of modernity not only because they rely on technical innovations in the sphere of transport, but also because they represent the possibility available to human beings today to multiply their living spaces and emancipate themselves from places that subjugate them. (Allemand, 2004)

The key idea here is that in the third layer, the idea of "place" which is fundamental to the first layer but has been "lost" (Norberg-Schulz, 2000:309) is in fact not lost but transformed. Instead of "place", the basic perceptual construct now becomes "presence". It is common to speak of a presence on the Internet in the form of a personal or commercial website, but the notion goes much farther, fully capturing the idea of a distributed existence of multiple identities, in sites such as myspace.com ("a place for friends"), facebook.com ("Facebook is a social utility that connects you with the people around you"), or the proliferating blogs where anyone, anywhere in the world can "show up", digitally interact and declare themselves. Even the name "myspace" more than hints at presence, but clearly at a third-layer space. As of February 2007, facebook.com boasted of nearly 20 million members, certainly larger than the population of many countries and to be sure every city on the globe, while myspace.com claims over 100 million accounts (www.myspace.com and www.facebook.com).

Presence is structured as a network of nodes linked to other nodes, which are physically nowhere but perceptually equal to having a physical address or multiple addresses (just as home, office, or any other fixed spot in an urban grid). The difference between physical presence and virtual presence would appear obvious, but in fact it is more complex, and points to some of the ways in which the third layer can interact with the first, and perhaps via the second. Rather than virtual presence simulating or replacing physical presence (which one could argue that to a certain extent it does), a more interesting interpretation is that virtual presence "overlays" physical presence as a net. It is as feasible to work from home, to be in the same city or even same room, and still communicate by email, for example, as it is to work from Ljubljana with a company in New York, or travel physically and virtually between

26 A corollary of Newtonian physics: a city at rest tends to stay at rest.

27 Again Newton: city in motion tends to stay in motion, as people resist stopping and relish the momentum that vehicular motion brings.

28 As described in Ch. 1.
these places, or simulate all of these processes in cyberspace,\(^{29}\) or mix presences and places in any way one desires, both virtual and real. The "city", as opposed to a specific city, is a very effective mediator for these mixed presences. The power of presence is well illustrated in the following newspaper article:

TALLINN, Estonia, May 24 – When Estonian authorities began removing a bronze statue of a World War II-era Soviet soldier from a park in this bustling Baltic seaport last month, they expected violent street protests by Estonians of Russian descent. They also knew from experience that if there are fights on the street, there are going to be fights on the Internet... After all, for people here the Internet is almost as vital as running water; it is used routinely to vote, file their taxes, and, with their cell phones, to shop or pay for parking. What followed was what some here describe as the first war in cyberspace, a month-long campaign that has forced Estonian authorities to defend their pint-size Baltic nation from a data flood that they say was set off by orders from Russia or ethnic Russian sources in retaliation for the removal of the statue. (www.nytimes.com/2007/05/29/technology/29estonia.html)

The city, in its complexity, diversity and problems, and the extent to which it melds three layers of perception, also characterizes the gap that exists between theory and reality. The failure of cities, or at least the difficulty of managing cities economically, politically and architecturally points to the possibility that those who attempt this management are increasingly out of touch with the needs of citizens. Residents of cities often appear to be more and more estranged, as if they have departed into another world entirely.\(^{30}\) As for urban design, people seem relatively disinterested, as obviously their thoughts are elsewhere. But where?

If the second layer fractured the concrete order of the past, then the third layer is a much deeper and more complex break, under the influence of factors like globalization, communication and a dramatically accelerated pace of technology. Notably, technology has found certain applications in architecture, in computer-aided design and construction, but not to a great degree in the use of new materials or in shaping public space. On the other hand, electronic devices and information technologies have demonstrably altered human interaction to such an extent that, as new hyperdynamic communities form and humans satisfy social needs on a virtual level, the city in its physical identity has become in a sense indistinct, if not extinct. "Hyperdynamism" implies dynamics that transcend ordinary motion, and activity that is accomplished electronically at the speed of light and physiologically at the speed of thought. One result is that research in neuroscience, technology and psychology\(^{31}\) is noticeably in the news and suddenly becomes more applicable to urban issues than urban theory itself.

In the hyperdynamic layer, the virtual coexists with the real. Mobility has become so easy and widespread that it is taken for granted (traffic jams aside), and the once-anchoring, first-layer

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29 Second Life for example (www.secondlife.com)
30 This is of course an exaggeration, since the vitality of many cities, and certainly most European cities, still far exceeds any normal expectations in view of urban problems, and street festivals, open markets, concerts, films and sports activities flourish. Cities seem to thrive despite themselves, at least in so far as these activities animate the cities that host them. Ljubljana’s active cultural, sport and entertainment scene is a good example.
31 In the last decade, termed the “decade of the brain” – see the work of Prof. Dr. Manfred Spitzer, philosopher/neuroscientist at www.uni-bielefeld.de/(en)/ZIF/AG/2005/07-07-Spitzer.html
sense of place has all but vaporized into a cloud of virtual community. Communication and information have now begun to compete with physical mobility as the city tends toward a distributed system.\textsuperscript{32} The pixel, the 2-dimensional unit of digital graphics, in the present expansion of the virtual, has become the "voxel" (http://en.wikipedia.org/wiki/voxel), a basic unit of virtual volume and thus a component of virtual urban space. The tools of the hyperdynamic layer are the portable computer, the mobile phone and wireless systems, all anyone really seems to need to conduct the business of current everyday life. And people now see the city in their own image and in the character of their personal network, with the city's identity being just a backdrop for a multitude of individual human experiences and interactions.

Mobility should not exclusively be linked to human corporeal travel. "Being mobile" is not just a matter of people traveling but, far more importantly, related to the interactions they perform – the way in which they interact with each other in their social lives. New configurations of social-technical relationships resulting from the diffusion of ICTs [information and communication technologies] afford various dimensions of mobility to humans' interactivity with others in their social lives. We here suggest expanding the mobility concept by looking at three interrelated dimensions of human interaction; namely, \textit{spatial}, \textit{temporal} and \textit{contextual} mobility. (Kakihara et al., 2002)

Nicholas Negroponte at the MIT Media Lab famously characterized this phase as a major transition from atom to bit, i.e. dematerialization (Negroponte, 1996). The consequences for cities are rich for speculation. Other theorists and researchers like Rheingold and Watts have pointed to behaviors that have important implications for understanding the evolution of the third urban layer. Johnson defines the idea of emergence and emergent behavior\textsuperscript{33} as a paradigm for explaining and predicting, and of course ultimately stimulating urban metamorphosis.

Metropolitan space may habitually be pictured in the form of skylines, but the real magic of city living comes from below, thus introducing a hypothesis of "bottom-up" development rather than "top-down" planning. "Down below" also means the sidewalk of city streets where high bandwidth communication takes place between total strangers… neighbors learn from each other as they pass each other – and each other's stores and dwellings – on the sidewalk. (Johnson, 2001:92) …There are no bird's eye views of the colony, no ways to perceive the overall system and indeed no overall system that could make sense of such a view. (Johnson, 2001:75)

This idea argues for "deprogrammed" (in the sense of undoing first-layer static hypotheses of how the city should be organized) and "unprogrammed" (in the sense of leaving plenty of room for self-organization and the formation of local communities in an emergent way) approaches. The question is really whether or not this will work, and how long it will take. Obviously, the human energy to adapt (as a form of creativity that appears to exceed the ability to create new ideas from scratch) has not been allowed to flourish, for many reasons, one of which is the pressing need for the profession to find it's own identity through built examples rather than through creative and conceptual facilitation.

\textsuperscript{32} In computing: A distributed system consists of a collection of autonomous computers, connected through a network and distribution middleware, which enables computers to coordinate their activities and to share the resources of the system, so that users perceive the system as a single, integrated computing facility.

\textsuperscript{33} In defining emergence, Johnson says that "cities, like ant colonies, possess a kind of emergent intelligence: an ability to store and retrieve information, to recognize and respond to patterns in human behavior" (Johnson, 2001:100).
Like Schwarzer in the second layer, who looks freshly at the city as a cinematographer and not in terms of statics, William Mitchell also approaches the third layer of the city from a completely different stance, as a "cyborg self", starting with a being who is wrapped in many layers, physical and technological, at many different scales and in biologically, materially and electronically expanding layers.

Under my epidermis there is a tightly packed, carbon-based kernel… Then there is a wearable layer of cloth, leather, plastic, metal and a growing number of tiny machines and miniature electronic devices… When I travel in a vehicle, there is an additional, mostly metal layer with its own increasingly sophisticated electronics… The architectural layers… are generally composed of heavy materials together with machines and pipe, duct and wire networks. Finally the regional and global layers are formed by larger-scale, long-distance infrastructure and geographically dispersed networks. (Mitchell, 2003:41)

Mitchell's use of the term "post-sendentary space" (Mitchell, 2003:143) also reaffirms the idea that the city has acquired a new layer of hyperdynamic qualities, but he is careful in explaining that the virtual world has not completely displaced the cubicles, blocks, public plazas and streets of the composed static city:

The metaphor of "virtuality" seemed a powerful one as we first struggled to understand the implications of digital information, but it has long outlived its usefulness… It makes more sense to recognize that invisible, intangible, electromagnetically encoded information establishes new types of relationships among physical events occurring in physical places… with definite spatial and temporal coordinates… Bits organized into code now constitute the most powerful means we have for expressing intentions and translating them into actions. (Mitchell, 2003:4)

The consequences for the integrated technological and physical city go "against program", and here is where urban planners may have to take a step back from master plans as fixed proposals and instead think about facilitation of activity and a much more open-ended approach.

As continuous fields of presence are overlaid on architectural and urban space, the ancient distinction between settlers and nomads… is eroding in subtle but important ways. In the emerging wireless era, our buildings and urban environments need fewer specialized spaces built around sites of accumulation and resource availability and more versatile, hospitable, accommodating spaces that simply attract occupation and can serve diverse purposes as required… A quiet place under a tree can become a design studio… (Mitchell, 2003:159)

In analyzing the content of the hyperdynamic layer, Rheingold, a long time commentator on technology, takes a somewhat different focus in considering the "smart mob", i.e. the behavior of people connected in electronic networks, from Tokyo teenage girls to political protesters and, darkly, to terrorists. The idea of smart mobs very clearly resonates with Johnson's concept of emergent behavior. "Smart mobs consist of people who are able to act in concert even if they don't know each other… because they carry devices that possess both communication and computing capabilities" (Rheingold, 2002:xii). In talking about a study of Japanese teenagers ("Getting a mobile phone grants teenagers a degree of privacy and right of assembly previously unavailable, which is used to construct a networked alternative space…"), Rheingold ponders whether presence has become decoupled from physical places and reassigned to a social network that extends beyond any single location. Quoting

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34 Cyborg = cybernetic organism, i.e. a combination of artificial and natural systems.
35 This important theme is picked up and applied in the case study analysis of the present thesis – see Chs. 4 and 5.
researcher Mizuko Ito: "As long as people participated in the shared communications of the group, they seemed to be considered by others to be present" (in Rheingold, 2002:6).

The extent and character of perceptual and social aspects of mobile and pervasive technologies are still relatively unknown. As Rheingold claims:

We need to know more about the ways pervasive media are changing the way people use cities, because the changes are well underway… Swarming supported by texting and mobile telephony, un tethered ubiquitous Internet access, location-aware services and device-readable information associated with specific places are only the beginnings of significant changes in the way people use urban spaces… Smart mob technology could do more than spawn surveillance, cyborgs, flocking teenage-culture consumers and swarming terrorists. (Rheingold, 2002:206-208)

Duncan Watts has been studying the behavior of mobs and emergence from a scientific and mathematical point of view under the general heading of network theory, which attempts to understand the behavior of connected elements. Such theory has been applied to physics, economics, the functioning of real infrastructural networks like electricity distribution and supply chains in manufacturing, particularly with innovative and reasoned Japanese manufacturing approaches such as the well known "just-in-time" delivery of components from subcontractors to minimize stocking of parts that are simply waiting in a warehouse to be installed. Through highly technical case studies in this new science, Watts then begins to extrapolate the complexity of the combined vulnerability and robustness of networked systems to human systems, without real conclusions, however. At least not yet.

The interactions of individuals in large systems can generate greater complexity than the individuals themselves display, and sometimes much less. Either way, the particular manner in which they interact can have profound consequences for the sorts of new phenomena – from population genetics to global synchrony to political revolutions – that can emerge at the level of groups, systems and populations. As with a cascade in the power grid, however, it is one thing to state this and quite another matter altogether to understand it precisely. (Watts, 2003:27)

This means that in the future, as the science of networks develops, perhaps new forms of democratic participation in cities can go beyond voting, the present method by which citizens install surrogates as their representatives and depend on trust that this small group will produce desired results. With new forms of participation ought to come bottom-up activity with a decrease in top-down control, allowing heterogeneous solutions to coexist in the city. The possibilities are intriguing, if not threatening:

In a world spanned by only six degrees, what goes around comes around faster than you think. So just because it happens in a language you don’t understand, doesn’t make it irrelevant. When it comes to epidemics of disease, financial crises, political revolutions, social movements and dangerous ideas, we are all connected by short chains of influence… To misunderstand this is to misunderstand the first great lesson of the connected age: we may all have our own burdens, but like it or not, we must bear each other’s burdens as well. (Watts, 2003:301)

Clearly, the global fluctuations of stock markets is an example of a sort of independence and interdependence, as the movements of these markets, based on the perceptions of investors

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36 This refers to the posited "six degrees separation", the notion that every person on the planet is connected to every other by a maximum chain of six people (Watts, 2003).
and brokers, and computerized trading, chase each other around the globe. In previous
generations, when technology had not yet made the flow of information immediate, such was
not the case, as the buffers of distance and time, and greater heterogeneity of opinion tended
to dampen the possibilities for any extreme oscillations. As cities globalize, and as media
become even more deeply imbedded in people, devices and infrastructure, it is likely that the
third layer will explode further into dominance, subsuming the static and dynamic layers
within an all-encompassing envelope.

Underlying this inevitable process lurks the "smart city", whose residents are connected
electronically by miniature devices and whose buildings, roadways and public spaces are
equipped with sensors and media in a network of response and control. The Internet,
miniaturized electronics (making devices wearable or even implantable), Wi-Fi (wireless, high-
bandwidth Internet access), ubiquitous computing (computer chips in every appliance, vehicle
and space), tracking technologies such as RFID (Radio Frequency Identification, the
successor to the barcode for tagging goods for remote identification) and GPS (Global
Positioning System, the satellite-based position location on a moving map display in a
handheld device) offer promise of not only the delivery of information, but the potential to
radically change behavior and perception. The Internet has changed the way that people buy
books (Amazon) and music (Apple iTunes), and trade all kinds of used goods (Ebay). Blogs
and online forums testify not only to a need for social communication, even to the point of a
sort of egocentric or voyeuristic excess. Google Earth now lets users zoom in to views of
every inhabited site on the planet, and Skype has allowed voice and video communication
over the Internet absolutely free of charge. The much anticipated "video phone" once
relegated to science fiction is here, with the result that people can chat for hours, play games
together and fly over each other's cities using stitched satellite and aerial photos and zoom in
to the backyards of houses from anywhere in the world.37 People's shopping habits have
changed, research is conducted over the Internet instead of in libraries, and a multitude of
unexpected "communities" in the sense of easy, informal ties to others (with whom one
would not or could not normally be in contact) bring people to a "place" that not only is
virtual and thus needs to be visualized by each participant, but also which begins to substitute
for, and not simply augment, all manner of previously concrete interactions.

An alarming downside of this virtual space has been pointed to by many observers: the loss
of privacy in a society that is now so massively electronically linked and observed. The very
technologies that promote new forms of interaction are also precisely those that permit
activities like surveillance, data mining and so-called identity theft.38

New technologies of continual presence allow any institution to structure activity in any place,
and so the participants in activity must increasingly negotiate the cross-cutting demands of their
various institutional involvements. For example, mobile payment technologies bring the

37 See www.zillow.com for an example of the use of aerial photographs of any house in large cities in the US, connected to public
ownership records and used as a guide for real estate agents.
Identity theft: "fraud related to activity in connection with identification documents, authentication features, and information",
institutions of banking and commerce to every place. Wearable medical devices with wireless data links liberate the institutions of medicine from the clinic so that patients can maintain constant, real-time relationships with the medical system wherever they go. Family members can stay in constant touch during the day, and extended families can remain continually aware of one another despite being geographically spread out… Yet at the same time, the pervasive cross-cutting of institutions also tangles the lines of power, creating a complicated landscape of everyday practice that the culture has only begun to explore. (Agre, 2004:177)

Ms. Kalin-Casey was a bit shaken when she tried a new feature in Google's map service called Street View. She typed in her address and the screen showed a street-level view of her building. "The issue that I have ultimately is about where you draw the line between taking public photos and zooming in on people's lives," Ms. Kalin-Casey said in an interview Thursday. "The next step might be seeing books on my shelf. If the government was doing this, people would be outraged." Google said in a statement that it takes privacy seriously: "This imagery is no different from what any person can readily capture or see walking down the street." (www.nytimes.com/2007/06/01/technology/01private.html)

What is the perception of the city like for people who can be connected everywhere, where real goods magically arrive at your doorstep, where movies are shown on mobile phones and where a deeply ingrained sense of social need is satisfied by virtual community? And how is this image transformed by the many eyes of the institutions that occupy the same space, the police, banks and credit card companies? In a positive sense, the city begins to look more and more like a gigantic database of information, an open university or universal library (Borges, 1964), where all knowledge resides and where users mix effortlessly, making urban design look more like curriculum design, with each new day bringing new learning in a different remote seminar at a different remote institution! On the other hand, technology has given a particularly sinister quality to another community, one of behind-the-scenes observation under the watchful 1984-like gaze of an astonishing number of uninvited, yet interested spying parties. Given this, but in an idealistic frame of mind, one might hypothesize that in this third layer of the city, the very notion of urban identity will eventually cease to exist, as the minds of residents, relatively detached from their bodies, migrate to other sorts of imagined technological communities, and to other perceptions of what "city" really means.

CONNECTIONS

If the perception of the city starts with three hypothetical layers, there is no reason to suspect that the layers remain entirely discrete. Instead, it is likely that the layer boundaries are porous and that adaptations to connections and a sort of intellectual and perceptual "turbulence" will lead to a much more complicated mix.

With the influence of the media, it is theoretically likely (and this is already born out in observing many cities today) that one city will become alarmingly the same as another, with the urban space and features homogenized by globalized thinking and ignored by a disinterested and distributed, place-independent populace. As this happens, it is also

39 See Ch. 5 in relation to the case study.
conceptually possible that the hypothetical urban layers begin to curve into a ring, bringing virtual community and information into direct contact with the fundamental human needs that gave rise to the city in the first place. Might the connections among the three layers produce an unforeseen condition, a series of benefits that shape the city in ways previously unimagined? The fact is that basic human needs and feelings have been part of the urban lexicon ever since cities began to develop. This is especially true if one accepts that cities grew out of deep emotional attachments, all assembled in each resident's psyche as a satisfying whole, but a unique whole to each individual. Certainly now, these same basic needs apply, except that they are overlaid with other layers that further enrich the urban palette. And if "electricity" is really a part of human thought, as Balzac wrote, very much in the spirit of the times that embraced magic and psychoanalysis, and if phenomenology is accepted as an important and potent branch of philosophy, then surely the city today, with its layered perceptions, must without doubt be a place of feeling as well as perceiving. In view of this, what becomes of urban design itself?

Our everyday life-world consists of concrete "phenomena". It consists of people, of animals, of flowers, trees and forests, of stone, earth, wood and water, of towns, streets and houses, doors, windows and furniture. And it consists of sun, moon, and stars, of drifting clouds, of night and day and changing seasons. But it also comprises more intangible phenomena such as feelings. This is what is "given", this is the content of our existence. Everything else, such as atoms and molecules, numbers and all kinds of "data", are abstractions or tools which are constructed to serve other purposes than those of everyday life... Being qualitative totalities of a complex nature, places cannot be described by means of analytic, scientific concepts. As a matter of principle, science "abstracts" from the given to arrive at neutral, "objective" knowledge. What is lost, however, is the everyday life-world, which ought to be the real concern of man in general and planners and architects in particular. Fortunately, a way out of the impasse exists, that is, the method known as phenomenology. (Norberg-Schulz, 2000:68)

As Mitchell stated in Me++, the virtual and real are not separated in the city, and thus the concept of layers, which served here as a theoretical metaphor and useful starting point is obviously more porous and more complex (Mitchell, 2003). The very electronic devices that generate the hyperdynamic or virtual layer, as Mitchell claims, also function to control the interaction mechanisms of the physical space: its lighting and responsiveness, the arrival scheme of buses, delivery of goods, etc., or as Rheingold says: "wearable remote-control devices for the physical world" (Rheingold, 2002:xii). What is more, the reality of the modern city does not correspond to its glossy image in many science fiction films, unburdened by the ball and chain of history and cleansed of any remnants of earlier layers. The future of the city brings its past along with it, its successes and mistakes, the bulk of its built form and the tradition of behavior and the reality of rich and poor, beautiful and ugly. This observation alone tends to confirm a layered model of the city, but with the layers mixed and fuzzily defined by cultural and historical turbulence. Yet it is still valid that in the static city, buildings, open spaces, streets, the skyline, street furniture and any other object in the space, function to define the shape of the space and compose the physical relationship of objects, the gestalt of the scene. As such, the human being is in a sense equally a physical element of the space that can also perceive the characteristics of adjacency, crowding, isolation, scale and aesthetics. In the dynamic layer, the human being now becomes an actor in the space, and perception turns to action. In the spirit of Kundera's character in The Book of Laughter and
Forgetting (Kundera, 1994) we know can understand the identity of the city in terms of how it defines paths and trajectories, or how it inhibits them. Motion, time and sensation characterize the experience of the dynamic city, the clash of fixed and moving objects, be they vehicles, humans walking or biking or driving, or the dynamic quality of moving pixels on a large-scale display. Finally, in the hyperdynamic city, human beings enter a zone of interaction, where all elements fixed or mobile, real or virtual become nodes in an immense network, which changes through time, leading to a recontextualization or amplification of the reading of three urban layers as past, present and future. Support for this is offered by Charles Landry:

Why, in the rush for change, do we find solace and inspiration in the buildings, artifacts, skills, values and social rituals of the past? ...Cultural heritage connects us to our histories, our collective memories, it anchors our sense of being and can provide a source of insight to help us to face the future... Cultural resources are the raw materials of the city and its value base... Creativity is the method of exploiting these resources and helping them grow. (Landry, 2000:51)

Cultural activity is an important aspect of cutting across urban layers and of urban development strategy: "Culture can also strengthen social cohesion, increase personal confidence and improve life skills, improve people's mental and physical well-being, strengthen people's ability to act as democratic citizens and develop new training and employment routes." Landry continues with his analysis:

Traditional structures for work, organization and learning are proving inadequate to the new demands. Core concepts governing our lives, such as notions of time, place and space, are being reconfigured to accommodate virtuality and cyberspace... There is a transitional quality to the current period, its form is unclear and its contours still unfolding... In transitional periods mistakes are inevitable. Solutions depend on experiments which can be managed by organizations open to new ideas. (Landry, 2000:53)

Every hypothesis, like every change or step forward in civilization, has its proponents and detractors, a weight and counterweight trying to find a logical equilibrium. This might tend to give a kind of intellectual balance to the experiment and, in the present example, lets us move more freely and find bridges or connectors of some sort between the metaphorically proposed city layers, whose interfaces, we have to agree, are fuzzy at best.

Certain architects and urban designer/theorists begin to give voice to the connections between layers that people who are not theorists are actually making unconsciously. Think of Christopher Alexander as a theorist in the era of the second layer, if not actually working in it, enthusiastically casting his nets downward into the first layer in search of stability and eternal architectural and urban answers. Perhaps Peter Rowe could be considered one of his counterparts, but it is difficult to situate him. With his book Civic Realism, Rowe lays out the factors led to the development of a selection of public spaces and concludes that successful urban projects always consisted of a practical mix of power (government, developers, etc.) and the public will. Restating the quote from Rowe in the first chapter:

Civic realism is about attitudes and an orientation toward the making and reshaping of urban public spaces that are civic in character, belonging to everyone and yet to nobody in particular...[and] it reflects a concomitant belief that civic place making cannot occur successfully without a propitious conjunction of local opportunity, community wherewithal and design capability. (Rowe, 1997:6)
While including a fascinating historical analysis of specific cities, Ljubljana among them, Rowe huddles closely to the world of the fundamental and concrete, reaching backwards for conventional static urban elements (public square, monument, axis, etc.). For Rowe, what was done was that which in fact could be done at the time and in those circumstances; and what could survive did survive, with a unique chemistry in each case (see also Gazvoda, 1996). But what this analysis does not take into account is the extension of the city into the dynamic and hyperdynamic layers, where the urban space also resides, and hence it is much more unexpectedly tantalizing to think about the way in which some of Rowe's ideas, with some massaging, might leapfrog into the hyperdynamic realm; here, relieved to a great extent of the burden of buildings, which must be physically rearranged and provided at great cost and which last for decades and centuries, technology now permits a new explosively large definition of civic realism: the enormous scale of what might be accomplished by combining the real and the virtual. Connect all the people on the globe? It's possible now. Track every human via satellite and deliver custom information to each one? It is already being done. We take for granted the pieces of this "organism" since they are transparent, and unlike architecture and unlike cities, the medium of virtuality is curiously user-friendly. And one can imagine many urban features (community networks, outdoor projections, custom localized transmission of information, etc.) that barely need to be envisaged to come into existence in the third layer, whereas buildings, real buildings, actually need to be built in the first.

It is unlikely that the future analysis of urban design can afford to ignore new actors in the development of the city, the groups of city users that are physically attached to the city as well as the younger population who at other times is very detached from it, and the groups, estranged, disadvantaged and in the traditional sense powerless, that, unlike theorists, participate directly in the city and throughout history have given the city part of its form and part of its life. Here is another area in which the three hypothetical urban layers converge and overlap and where the life of the city is expressed. Here is where emergence figures, the unprogrammed spontaneous and sometimes chaotic participation in ways that were not exactly foreseen or categorized. Skateboarders fit this very definition of emergence, and also help give new lively meaning to civic realism, as do the spontaneous political rallies or protests or gatherings, or behavior evidenced in Estonia as described above. Students in a city like Ljubljana, for instance, are at once wired, in motion and physically connected to the city. They sit on benches and steps of buildings, climb the Roman Wall, ride buses and bicycle through the city, while their brains are elsewhere, and so instinctively inhabit all three layers.

Conceptual artist Marjetica Potrč celebrates such multilayered interactions in cities, and has turned her background in architecture into a language of social critique, as quirky and potent as it is in a sense unintellectual (see interview in Appendix 1). For her, it is participation, especially outside the normal regulations of approved urban behavior, that interests her and that defines the way in which the layers are transcended.

When you look at our cities today, more than half of the population lives in informal settlements. The informal has become a normal, an every day situation… Infrastructure will be the thing of
the future; the way in which people use and adapt a basic infrastructure and utilities. Small-scale systems that can be shared. (Potrč, 2006:124)

The informal city loves to plug in [this is an homage to Archigram, some forty years later!]. To reuse the situation which preexists there. Such as buildings built on top of buildings in today's Belgrade or Tirana. (Potrč in Weiss, 2006:127)

Potrč has used the term "Balkanization" to describe the process of informal intervention, and the theme is also taken up by Srdjan Jovanovic Weiss, who describes it as "an ocean of small acts in swarming opposition to grand schemes with bad reputations and proven to fail" (Weiss, 2006:125). Weiss and Potrč both use the term in a positive way, in contrast to the sometimes pejorative use of the word and the difficult breakup of the former Yugoslavia that split and displaced large populations. The new version of Balkanization is provocative:

Balkanization is a source of differences…it fragments cities into pixels, blurs their borders, makes city islands and makes them grow at parallel speeds. The result is a city of difference against sameness, a city of dynamism against staleness, a field of growth against shrinking. (Weiss, 2006:126)

Thus, the three proposed city layers only theoretically coexist in parallel, but not in fact in parallel universes as mutually exclusive dimensions, but more interestingly as connected fields that blur the layer boundaries into frontiers of activity. Castells' work, in which he juxtaposes the "space of flows" and the "space of places" leads to this:

Localities become disembodied from their cultural, historical, geographic meaning, and reintegrated into functional networks, or into image collages, inducing a space of flows that substitutes for the space of places. (Castells, 2002:397)

But this contiguity is slippery and highly dynamic in the 21st century. Castells has noted that "there follows a schizophrenia between two spatial logics that threatens to break down communication channels in society":

The space of flows does not permeate down to the whole realm of human experience in the network society… The overwhelming majority of people, in advanced and traditional societies alike, live in places, and so they perceive their space as place-based. A place is a locale whose form, function and meaning are self-contained within the boundaries of physical contiguity. (Castells, 2002:354)

One wonders, however, if the boundedness of the two "spaces" is really essentially impermeable. If anything, the mediation between the spaces of places and the spaces of flows, or the interpenetration of three urban layers, is the very condition that will define the future of cities, i.e. the rich coexistence of the virtual and the real, and of a wide spectrum of dynamism from preservation to rapid change. The city is the vessel that will contain and reflect these changes, while at the same time be defined and itself altered by them.

Castells hypothesizes that the change in cities constellates around three axes: function, meaning and form, and more interestingly, that "functionally speaking, the network society is organized around the opposition between the global and the local [i.e. around the two competing spaces of place and flow]" (Castells, 2002:396). Continuing he notes that:
From the point of view of the urban experience, we are entering a built environment that is increasingly incorporating electronic communication devices everywhere… Our urban life fabric… becomes… a new urban form in which we constantly interact, deliberately or automatically, with on-line information systems, increasingly in the wireless mode. Materially speaking, the space of flows is folded into the space of places. Yet their logics are distinct: on-line experience and face-to-face experience remain specific, and the key question then is to assure their articulation in compatible terms. (Castells, 2002:398)

Yes, and urban designers will play a part in this articulation, ideally, but the power to control will be in a sense replaced or ideally complemented by the power to use and the power to articulate through participation. Some ideas about how the aforementioned "articulation" might take place is suggested in Chapter 5 with respect to the case study of this thesis.

While theory is suspended idealistically and care-free in the air of the first and second-layer mindspaces, mingling with electronic messages and the brainwaves of the "digerati" sent into the ether from their desks at home or from cybercafés in popular third-layer haunts from Paris to New Delhi, the pedestrian, a perhaps forgotten urban actor, walks blithely through three layers of perception simultaneously. With head in the clouds and feet on the ground (see the da Vinci-inspired illustration earlier in this chapter) – usually without realizing it, people can be walking at 5 km/hour on foot while also moving at the speed of light!

There is a connection between urban design and communication, between public space and media technology. Spaces are being modified and expropriated by developments in communication technology. Every media development alters the availability and nature of traditional private and public place. The newspaper influenced and defined, in part, the barbershop, the village green and the café. The telephone shaped the division of home and work place. Radio altered the experiences of the living room, the car and the doctor's office. The computer keyboard opens up distant retrievable vistas in cyberspace. (Drucker et al., 1996)

While it may be true that the city of the present and the city that will further develop in the future are evolving in cyberspace, it is also evolving on the ground – the fact remains that all perceptions of the city are indeed realities, layered on real sites and inhabited by real beings. Both human beings, the residents and visitors of cities, and the cities themselves have the extraordinary capability of taking on and incorporating these layers in a very powerful and interactive coexistence.

A livable city is made up of types. Some of these, like the sidewalk café, become valued for the experiences that have accumulated there. Any institutionalization is purely unofficial. Other sites declare values and expectations more deliberately; a public library does this well, for example. Cultural distinctions in handling these typological elements become sources of exchange and identity in themselves… Interactivity becomes a remedy for architecture, which as a discipline has ignored usability, performance, and inhabitation in its quest for attention-seeking novelties in form. Architecture needs to rejuvenate itself with interaction design. (McCullogh, 2004:166)

When Julius Caesar proclaimed *veni, vidi, vici*⁴⁰ (I came, I saw, I conquered), he uttered a classic tripartite exclamation that in another way affirmed the idea of living in three urban layers at

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⁴⁰Used here as metaphors for arrival, observation and understanding of the city in the sense of conquering the meaning. Caesar used the phrase as the full text of his message to the Roman senate describing his recent victory over Pharnaces II of Pontus in the Battle of Zela. Caesar’s terse remark – translated as “I came, I saw, I conquered” – simultaneously proclaimed the totality of his victory and served to remind the senate of Caesar’s military prowess. (http://en.wikipedia.org/wiki/Veni,_vidi,_vici). See another tripartite declaration in Slovene, at the end of Chapter 5: *Živi, Čuti, Ustvarjaj* (Live, Feel, Create).
once. It would seem, then, that the contribution of urban designers becomes facilitating the development of all three. It is also the function of educators to make sure that people have access to tools, knowledge and motivation to move freely through these layers, to take advantage of each and contribute to each. Cities that aggressively promote the use of bicycles, for example, may be one step ahead in this. As gridlock and pollution from automobiles paralyzes infrastructure, the use of bicycles represents a classical as well as future-looking solution. Going beyond the reach of the pedestrian in distance, efficiency and elegance, this method of conveyance offers numerous advantages: health, speed, environmental responsibility, community, independence and a conceptual and idealistic feeling of lightness that is now more than ever an applicable "vehicle" of participation in the city of the future and for effortlessly navigating all three layers of urban perception. First, the bicycle is concrete, direct and physical. Unlike the car, it exposes rather than insulates the user; except for bad weather or physical infirmity, it is not only a conveyance from one point in the city to another (often faster than a car or bus), but also a means of direct contact with the urban landscape and nature along the route. As a second-layer vehicle, the speed and experience of the bicycle is sufficiently dynamic and liberating. With on-board music (iPod and mp3 players) and an open-air cockpit, it gives an extraordinary feeling and sensation of movement, and experiencing the city streets or bicycle lanes in motion. Finally, as the moderate exercise releases spirited endorphins and new thoughts and perceptions begin to flow, the rider begins to think and connect. The act of transportation leads to being "transported" into a mental process as well as a physical one.

Marshall McLuhan at one point proclaimed the city dead (McLuhan, 1967). And yet he also punched a large tunnel through the city layers with the aphorism that the "medium is the message", opening the door to perception and the hyperdynamic life of cities much wider. Finally, then, it is in the mind of the urban actor that the image of the city takes form, seen through mechanisms of perception that have expanded rapidly in the near present, and which were unknown in the past. Or were they? Has not the perception of the city always been as much a mental construct as a physical one, full of quirks, paradoxes, variety and vitality. It is likely to continue that way far into the future. In fact the city is not dead. In a way, it is just beginning. Along with Julius Caesar is another emperor, Kublai Khan, who "came, saw and conquered" through the intermediary of Marco Polo, in a telling example of virtual travel and, in fact, virtual cities.

"I have also thought of a model city from which I deduce all the others," Marco answered. "It is a city made only of exceptions, exclusions, incongruities; by reducing the number of abnormal elements, we increase the probability that the city really exists. So I have only to subtract exceptions from my model, and in whatever direction I proceed, I will arrive at one of the cities which, always as an exception, exists. But I cannot force my operation beyond a certain limit: I would achieve cities too probable to be real." (Calvino, 1974:69)
CHAPTER 3
Case study: *Pot Spominov in Tovarištva*
(The Path of Remembrance and Comradeship in Ljubljana)

On 5 January 1942 Count Ciano, the Italian minister of foreign affairs wrote in his diary: "Was visited by Vanustoni (head secretary of the fascist party). After discussing some minor questions he explained to me his murderous proposals against the Slovenians. He'd like to kill them all. I warned him there are a million of them. 'Doesn't matter,' he replied decisively…"

-Aleksander Potočnik, "The Ring of Wire" (2006)

More than the Path.
The Path is part of cultural existence.
I go on the Path every day and thus I relieve stress.
I bicycle on the Path and I run there.
I walk my dog on the Path and take my kids.
The Path is my way to work, and the way to school for my kids.
The Path is a first date.
The Path is the way home.
I meet my friends there and find time for them.

-Promotion for Pot Spominov in Tovarištva (Krajnc et al., 2006)

Recent proposal for promotional posters for the Path: More than the POT, Around the town on the POT, The goal is the POT
(Krajnc, Simoneti, Vidic, 2006)

INTRODUCTION: SELECTION OF A CASE STUDY

With the development of the idea of the identity of cities, evolving into a theory in Part One of this thesis, it is logical in Part Two, in terms of methodology, to situate the theory in a real environment and to find examples in an urban space that begin to illustrate the theoretical claims.

To begin with, this thesis originated in Ljubljana, as a result of observation of the dynamics of this fairly small European city with, like most cities, a unique story behind its historical, cultural and urban development. Given that even this city in general would be too broad as
the subject of a case study, the task then became one of finding an aspect or site in this city on which to focus, where the three theoretical layers appear to be already operative and where the potential for development according to the theory exists. First, in terms of the static layer, the case study site must therefore be an established environment, with a known identity and a sufficiently rich historical presence, i.e. a substantial and recognized place in the city. On the other hand, a strictly architectural example might afford little or no engagement with the dynamic and hyperdynamic layers, as discussed in the previous chapter, despite the efforts of Archigram, Venturi, Hadid, Gehry and others to give buildings dynamic form. The inherently static quality of fine buildings might inspire the people who visit, use or inhabit them, however it is clear that architecture itself is not a direct participant nor necessarily a conducive environment in the creation of virtual community or imagining personal identities. Second, the dynamic layer is only tangentially about dynamic architectural form, and therefore much more about movement itself, the phenomenology of space and time, and the sensation, however transitory, that can be found in a certain space. Thus for the case study, some aspect of movement, the possibility of sensation and certainly an organic quality of change over time would be required. Third, for the needs of hyperdynamism, an ethereal, open quality is needed that both gently induces and freely allows for the human participant to move about in a mental sense. What would such a space "look like"? In view of these qualities, the case study should focus on some form of open space, or some configuration of space that transcends conventional architecture, is possible to physically move through, has a connection with nature and options for multiple use and interpretation. In terms of the concept of an urban lexicon that was discussed in the previous chapters, the case study site, then, must have a promising vocabulary of expression, i.e. be "articulate" in the urban space.

Considering the discussion of the shifting identity of cities, particularly with the pervasive input of new technologies and the emergence of new demographics and behaviors, it is interesting to observe the expansion and transformation of the urban space in progress and to see that this is not entirely theoretical. Why for example is wireless Internet access provided along the Thames in London, i.e. a linear and open urban space, as opposed to, say, a public park? While one might today expect Internet access in libraries, it is another phenomenon entirely to find means of communication and knowledge acquisition inhabiting unexpected environments. This seems to reinforce the idea of new urban functions in new sorts of urban environments, the dynamism of talking, walking, wayfinding and exploration in a linear zone, a sort of implied infrastructural corridor, for example. Infrastructure itself lacks the fixed foundation of the first layer, and as such does not at first glance appear to be able to generate any sort of sense of place. However, the more people perceive urban life as a series of connections between all sorts of nodes, real and virtual, the more the idea of a linear space, beside a major river, full of history and dynamic activity begins to take on greater import in the definition of a contemporary urban space. The notion that "presence" (i.e. in cyberspace, as discussed in Ch. 1) is the new version of the classic urban place is also reinforced in this wireless intervention in London.

1 The service, incidentally is also free of charge, on the condition that users agree to view advertisements every 15 minutes; otherwise a fee for uninterrupted access can be paid. See http://www.nytimes.com/cnet/CNET_2100-7351_3-6196772.html
In Ljubljana, the Path of Remembrance and Comradeship offers great potential for study in line with the issues that have been raised here. A "linear park" closed into a circle, the Path was created as a memorial to the occupation of Ljubljana by Italy during World War II, and has had a complex history as a political symbol, as green open space used for recreation and as a major urban element (nearly 33 km in length) still trying to find its rightful and effective role in the environment of the city. As a recognized and persistent feature, the Path has a familiar role, both in its situation in the urban landscape within the city limits and its own diversity of places for recreation and repose. As a path, and a long one, it is inherently an established element of infrastructure, used by joggers and cyclists, quite intensively in some sections, and also an open landscape space, full of sensation and changes of light and microclimate, varying with the seasons. Some segments of the Path traverse industrial areas, and thus the variety of environments it connects constitute visual dynamism. Because the Path is relatively infrequently used for the practical function of getting from one place to another, but in fact could be thus used, the potential exists to develop the Path further as a viable pedestrian and bicycle link. In third-layer terms, the Path is a place to escape for contemplation, not only personal thought but also the history of the Path and city, and the abstract issue of the virtual image of a ring and connector of nodes on a green necklace around the city. Finally, it would be interesting to think about new forms of "interactivity" between new urban features and the population of the city. This means synthesizing emerging trends and adapting them to concrete solutions, although economic necessities (lack of funds) will typically make executing new projects more difficult and other priorities may have refocused the attention of legislators, planners and developers in other directions, away from city beautification or any of the standard responses of the urban design repertoire.

In Ljubljana, opinions about the Path, and attachments to it, vary considerably, although it is obviously an urban element that is present in the minds of people, especially older generations. The selection of the Path for this case study was partly conditioned by the reactions of a number of Ljubljana architects, artists and designers who were interviewed as primary research for this thesis, as presented in Appendix 1. As a source of controversy, rich history and intriguing future potential, the Path was confirmed as a logical point of focus for the identity of Ljubljana. The present chapter presents the history of the Path, Chapter 4 deals with an extensive analysis of the case study from various points of view, and Chapter 5 offers some conclusions and hypothetical propositions and interventions, and consideration of a sort of new "civic realism", in which the virtual identity and manifestations of the city and the will of the people even in terms of an unconscious collective of individual efforts could redefine what participation in city projects means, even in economic terms, changing the relationship of what can feasibly be done and what really ought to be done. This leads to a final and more elaborated speculative version of the urban lexicon, perhaps serving as a tool for future planners but most certainly as a tool of better understanding of urban identity.

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2 Pot Spominov in Tovaristi, now official known as POT, the Slovene word for "path".

3 See interview with Ana Kulčan for her characterization of the Path: "in the seventies, which were an 'iron age' in Yugoslavia, people were clever enough to build a public landscape [as a monument]."

4 The persistence of the Path was threatened at various times in its history, as explained later in this chapter.
LJUBLJANA, CAPITAL OF SLOVENIA

Where's Ljubljana?
-Paul Coehlo, "Veronika Decides to Die" (2000)

The characteristic "postcard" view of the old town: the Ljublanica River, the Franciscan Church and the willow trees (left); opposite the church, the statue of "national poet" France Prešeren crowned by his muse (center); Castle Hill in the center of the city (right) (photos by author).

In 1991, Ljubljana suddenly became the capital city of a country that has only had its official identity as a country since independence 16 years ago. Slovenia is manifestly looking for its identity among European nations, as its capital begins to think about its role in that process and in establishing itself as a modestly scaled modern city.

The identity of a city starts in a way with its name, making "Ljubljana" as potentially interesting as it is unpronounceable. Originally the Roman town Aemona,6 present day Ljubljana was earlier known as Luwigana or Laibach (as it now continues to be identified in Austria); anecdotal speculation suggests that the name may have derived from the Latin alluviana, referring to the flood plain in which the city developed, or the possible derivation from the Slavic root ljub, with the implied meaning of "beloved" or "favorite". In an even more speculative sense, the city has a colorful mythical origin:

Legend has it that Ljubljana was founded by the Greek mythological hero Jason and the Argonauts, who had stolen the golden fleece from King Aetes and fled across the Black Sea and up the Danube, Sava and Ljublanica rivers. They stopped at a large lake in the marsh near the source of the Ljublanica, where they disassembled their ship to be able to carry it to the Adriatic Sea, put it together again and return to Greece. The lake where they made a stop was the dwelling place of a monster. Jason fought the monster, defeated it and killed it. The monster, now the Ljubljana Dragon, found its place atop the castle tower on the Ljubljana coat of arms. (Slovenian Tourist Board, http://www.slovenia.info/?ctg_kraji=2611)

With a complex history, including nearly 600 years of Austrian Habsburg rule, a short period as capital of the French Illyrian provinces, 46 years between the two world wars under the

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6 34 BC to 452 AD; *Emona* in the Slovene language (Gazvoda, 1996:28)
Kingdom of Slovenes, Croats and Serbs, Ljubljana was occupied by Italy and then Germany in World War II and became the capital of the Yugoslav socialist republic of Slovenia.

Ljubljana's urban form came to reflect the Slovenian national spirit and culture. This period began after the city was damaged by an earthquake (1895) [destroying many of the Baroque buildings in the town] and was later enriched by the introduction of the Secessionist style... Growth brought new modern structures into the space and started to change the large-scale urban pattern. (Gazvoda, 1996:30)

Demographically, Ljubljana is an "education city" with an enormous academic population. The University of Ljubljana alone, established in 1919 and now populated with over 56,000 students and 3,500 teaching staff in 22 faculties and three academies, is likely the single most powerful engine of vitality in this city. The daytime university population is thus approximately one-fifth of the entire city (www.uni-lj.si), while it is estimated that 15.6% of the city is composed of resident students (Žurnal, 35/07, 28 September 2007).

No study of Ljubljana would be possible without at least paying homage to Plečnik's Ljubljana, given the tremendous influence of this architect's buildings and urban interventions. Jože Plečnik was, and in some circles still remains, the city's design visionary and "godfather". The list of influential projects is a long one, including the Triple Bridge, University Library (1937), Church of St. Michael and the development of the banks of the Ljubljanica River, along with balustrades, light fixtures and unrealized proposals for a new parliament on Castle Hill and an urban plan for the Bežigrad district (Krečič, 1991). Clearly one of the most colorful characters of Ljubljana's historical urban drama, Plečnik's portrait graced the 500-tolar banknote for the 15 years of use of this currency, until replacement in 2007 by the euro.7

Examples of the Plečnik architectural legacy in Ljubljana: Tromostovje (Triple Bridge, 1932), National and University Library (NUK, 1937) and Church of St. Michael in the Marsh (1940) (photos by author).

In terms of infrastructure, the city lacks a fully mature transportation network, making many residents dependent on the automobile, although the old city center is for the most part bicycle-friendly and small enough to navigate reasonably on foot. The train station does not activate the center of the city, as it is located slightly at the periphery of the old city center and does not have a strong draw or attraction to define a thoroughfare leading to it nor to activate

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6 See numerous references to Plečnik in various interviews in Appendix 1.
7 See image in Chapter 1.
a public square adjacent to it. The radial "starfish-like" configuration\textsuperscript{8} of the main streets sets the main road geometry. The city is further delimited by a ring highway (built in the early 1980s) that surrounds and in a way contains the city, which only measures 11 kilometers across in the east-west direction, and 7 km north-south.

The large number of students plus the tradition of leaving the city on the weekend for the countryside (family, nature, etc.) very noticeably shrinks the population between Thursday night and Monday morning. The explosion of commercial growth of shopping malls post-independence has also served to depopulate the city center, raising the question of how to maintain a critical urban mass, despite an impressive quantity of cultural activities (concerts, exhibitions, etc.).

As with the ring road, Ljubljana is also encircled by a second and much less prominent ring (sometimes called the Green Ring), the Path of Remembrance and Comradeship, the specific subject of the present case study.

\textsuperscript{8} See interview with Maja Simoneti, who disputes this characterization (Appendix 1).
THE PATH AROUND LJUBLJANA (POT)

Pot okoli Ljubljane, the path around Ljubljana, historically also known as AST (Aleja Spominov in Tovaritva, PST (Pot Spominov in Tovaritva) and now officially POT,9 and which is also referred to by some as the Green Ring (Zeleni prstan), is a recreational walking and biking lane, in most sections lined with trees, that threads its way circumferentially through the entire city, sometimes blending directly into the street grid and losing its clear definition, sometimes seeming to disappear entirely, but it is conceptually a complete circle. Even long-time residents report getting lost in some sections,10 and it is only really possible to circumnavigate with a map. Fortunately, the Path is indicated on every city map, although with small changes that have occurred in its exact trace over the years to accommodate development, there are minor discrepancies between maps and the route as indicated by directional signs on site. The nearly 33-kilometre path crosses a variety of natural and built environments and more or less traces the course of a barbed wire fence which surrounded Ljubljana during World War II, when the Italian and later German occupying forces tried to isolate the city from the partisan resistance in the hinterland and in so doing created an enormous ghetto, one which would imprison the city for 1171 days. The wire fence was patrolled by around 1,300 soldiers and 400 policemen, who checked the identity papers of those travelling to and from the city (Omersa, 1980). The original course of the fence, with some modification, became the Green Ring, as a monument in the landscape. The creation of the Path, as both recreational feature and memorial did not happen immediately after the war, but was later initiated by students in the academic studio of the prominent architect Edvard Ravnikar in the early ‘70s, although it had been talked about and sometimes used as a recreation path since 1957 (Gregor Košak interview, Appendix 1). The Path is well-maintained in some areas, although it virtually disappears in some industrial areas in the northern part of the city and in a residential area to the east, where it actually passes outside the ring highway. Signboards with the map of the Path and smaller direction signs on steel posts and some markers embedded in the pavement are distributed along the length of the Path, but not uniformly. Notably, every year on May 9, a celebration takes place in Ljubljana marking the anniversary of liberation in the form of the now traditional Recreational March along the Path around Ljubljana (Pohod po Poti okoli Ljubljane).

There is no doubt that the Path is a unique urban feature and resource. Numerous plans have been proposed for its further development and preservation, yet little progress has been made over a period of three decades, largely for political and budgetary reasons. Although the city council has initiated two studies, organized by Prof. Janez Koželj in 1984 and 1992, little of only a portion of the proposed schemes were realized. In the early nineties, six large commemorative masts topped by the signature Yugoslav red star, erected as part of the 1984 plan, were removed and later destroyed by the right-wing government after independence, and the further development of the Path was threatened.

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9 Largely to diffuse the historical/political reference, i.e. that the Path commemorated the communist liberation of Ljubljana after the war, and with a move to the right following independence, the Path of Remembrance and Comradeship became known as POT, meaning simply “path”, and is embodied in its signage as such, in capital letters. The issue of naming is referred to in the text.
10 Interview with Saša Maechtig, for example (Appendix 1).
What should be done with the Path, and what is its significance and potential in the future development of Ljubljana? Ana Kučan describes the Path as a "mosaic" (echoing the statement of Janez Koželj), owing to the variety of environments it traverses: agricultural land, open fields, a wooded hill, residential settlements, industrial areas, several river crossings and numerous intersections with city roads. As a major urban feature, unique among European cities for its size and history, and unique enough among the examples of linear parks and large scale monuments in the world, the approach to the future of the Path might very well serve as a paradigm for innovative urban development.

![Map of Ljubljana](image)

HISTORY OF THE PATH

The Axis forces attacked the Kingdom of Yugoslavia, of which Slovenia was a part, on April 6, 1941, from Italy in the west and from the north by Germans from occupied Austria. Slovenia was officially annexed to Italy. A resistance movement was established, with partisan units operating in the countryside while the base was established in Ljubljana, where

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11 Interview (Appendix 1).
equipment, clothes and arms were produced, and where wounded were brought to recover. In an attempt to cut off interaction between the city and the countryside, and isolate and capture the leaders of the resistance so they could not communicate with the partisan forces that had organized in outlying areas, primarily in the mountains near Ljubljana, the Italians encircled the city with a fence, erected in a makeshift way, but encircling the city in one day (Potočnik, 2006; Košak interview, Appendix 1). In an astonishingly short space of time, essentially overnight, from 22 to 23 February 1942, Ljubljana was surrounded by nearly 30 km of barbed wire. Mussolini had declared Ljubljana a strictly controlled military area, an important part of the Italian front. General Robotti ordered that Ljubljana should be so perfectly wired that "even a mouse could not get out" (Ljubljana v ilegali, 1967). Nevertheless, there is some doubt about how effective the fence actually was, as despite surveillance from numerous bunkers, it was impossible to make the fence completely impenetrable. After the fence was erected, it was discovered that it was not in the right spot according to the original map that specified its location: ironically, Slovenian collaborators, the Belagarda or White Guard, helped the Italian soldiers move it (Omersa, 1980)! 

Commandant Emilio Grazioli issued a decree, which was printed and posted in every public place, forbidding exiting or entering the city of Ljubljana without specially issued passes and only at certain entry points. Passes were generally only granted to people dealing with business (food, primarily). The poster did not hesitate to proclaim that people would be shot if they tried to cross the fence (Omersa, 1980). Passage was only possible at 11 checkpoints. Barricades were also placed within the city to divide it into sectors, which were systematically searched for collaborators (Košak interview). In July the Italians mounted a major offensive and began construction of a new fence, this time with three or four rows of wire and a series of 53 fortified machine gun positions. By December, a total of 206 bunkers had been erected, 73 along the fence with the remainder in the city, and two stations at major access points illuminated with floodlights. The fence was about 2 meters high, patrolled by 2500 soldiers.
In all, according to Italian archival records, a total of 564,000 man-hours had been invested in constructing the fortifications (Potočnik, 2006). More than 1000 soldiers and 300 police participated in the placement of the fence. At least 1.5 tons of concrete and 151 tons of barbed wire were used in the construction (Omersa, 1980).

Nevertheless, the new fence also proved impossible to patrol because of its length, especially in the area of Golovec, where the fence passed through fairly dense forest and steep terrain. As such, one of the activities of the OF Liberation Front (Osvobodilna fronta) was to make the fence in this area as "transparent" as they could to the transport of food and weapons to partisans in outlying area surrounding Ljubljana (Omersa, 1980).

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12 Golovec Hill, see Appendix 2 for photos.
In September 1943, Italy capitulated and Germany occupied Ljubljana and took over the fence and the bunkers. By then, much of the resistance had moved out of the city into liberated areas of countryside. With the aid of British forces, by May 1945 Slovenian partisans were joined by troops of the Yugoslav army. On May 9, the partisan army marched through liberated Ljubljana (Potočnik, 2006).

With the Germans out of the city, the wire ring was torn down and defense ditches were filled in by residents, along with the destruction of most of the bunkers (Košak interview). "Even then, there were some who thought the bunkers should be preserved. But the general enthusiasm to get rid of the hated symbol of occupation was too strong," said Ljubljana resident Matija Žgajnar in an interview (Potočnik, 2006). The city had been imprisoned by barbed wire for 1171 days, out of a total period of occupation of 1490 days (Omersa, 1980). It would be more than a decade before the idea arose and developed to commemorate the occupation and resistance, and then liberation, in some way.

In the late fifties, a move to preserve the memory of the wire fence led to the construction of monuments designed by architect Vlasto Kopač, to be placed on several of the main roads to the city where roadblocks had once sealed off entry. Later, in 1961, for the 20th anniversary of
the Italian invasion, it was decided to permanently signify the wired path with memorial stones, placed at former locations of bunkers of the occupation army, and tree allées (aleja). Architect Edvard Ravnikar (the noted disciple of Plečnik – see references to Ravnikar in several of the interviews in Appendix 1) designed the prototype for octagonal stone memorial pillars, 102 of which would be erected along the Path, sponsored by various workers' associations and companies (Kos, 2006).

In 1957, the first marathon-style "march" around the Path was initiated in memory of the liberation and as a sort of "festival" of physical education, referred to both as "Wired Ljubljana" and "The March Around Ljubljana". The local "committee of union of fighters" of Ljubljana, preparing for the first Slovene festival of athletic culture, suggested that, in memory of the national liberation, the march should follow the trace of the former wire fence. The date was set at 23 June: the first march for the "hero city", so-awarded by Tito for its enduring the long imprisonment and for the combined efforts of its resistance. In October, the Ljubljana city council accepted a decision to establish an annual march around the trace that marked occupied Ljubljana, to take place on a city holiday on May 9, the historical day of liberation. The city authorities also made the commitment to maintain the path, the preserved remains of bunkers and the several markers adjacent to it. The idea thus developed that the Path should be made permanently available for recreational activities (Krajnc et al., 2006).
In 1965, the general urban plan of Ljubljana in the chapter on preservation of monuments presented a way to protect the monuments around the Path by suggesting a strictly protected easement 100-meters wide in open spaces and 50 meters in built-up areas. In the immediate surroundings of monuments a strong regime for protection was talked about. In 1967, the Ljubljana city council realized that the monuments and traces of the wire were in fact threatened by possible encroachment and lack of maintenance. As a result, on October 30, 1968, the city council accepted a decision on protection of the stone monuments and the trace of the wire fence in a zone 20–50 meters wide. The exact configuration would be determined by LUZ ("Ljubljanski urbanistični zavod", the now private Ljubljana Urban Institute) with the cooperation of the city association for the protection of monuments (Krajnc et al., 2006). The decree is of significance historically as the first official document to specify the preservation of the Path. This also led a few years later to the "standardized" 20-meter width that now characterizes many sections of the Path.

In the early seventies, the reformist movements in Yugoslavia of the sixties turned nationalistic, and huge monuments were being built to commemorate the "War of Liberation and Revolution". The response in Ljubljana was more sophisticated, and led to conceiving the Path as a designed green lane to be used as a recreational feature, an initiative partly stimulated by young architecture students, including Dmitrij Omersa, whose masters thesis remains an important chronicle of the history of the Path up to that time (Omersa, 1980). Thus the first moves to concretely establish and preserve the Path as an element of landscape design emerged. The year 1972, then, marked the first actual design for the Path and the first designation of it as Aleja spominov in tovarištvu (Allée of Remembrance and Comradeship, or AST), a tree allée scheme designed by architecture students Omersa, Franc Kastelica and Jože Stoke for the entire walking path with an accompanying program. With the spread of the city, the Path joined other public green spaces. The AST project specified a uniform gravel walking path lined on each side with a row of trees (Kranjc et al., 2006). The AST proposal received the support of the Ljubljana city council and was in fact generally well accepted by the city, especially by political organizations, because it emphasized communist ideas and the fight against fascism. The idea was to promote the Path as a green ring and a "living" monument. The original concept of the Path as a walking trail with trees on both sides led to
the establishing of dimensions and configuration of the path cross section: a 4-meter-wide trail with 8 meters on each side for planting. (The "Kozelj scheme" which in 1984 specified a comprehensive design strategy for the Path did not challenge this basic configuration at all, but instead built on it and proposed its further implementation.)

This project was specific in its emphasis on open green areas and avoided heavily symbolic meaning, focusing instead on nature, sport and public recreation. There was a lot of open space at the time, mostly agricultural land, and the ring highway would not be built for another decade, the trace of which came close to the Path in some areas, and further defined the perimeter of the city. However, in the seventies, in spite of the decree of 1968 declaring that the Path must be preserved, some green areas began slowly disappearing with the building of new neighborhoods and thus the "executive association of the city of Ljubljana" elaborated a further initiative to define protected spaces around the AST (Omersa, 1980).

Omersa, who had been part of the original group of students who conceived and initiated the project for the Path, finished his diploma project documenting the history of the path in 1980, before what would be the pivotal year for the Koželj design in 1984. According to Omersa, the seventies witnessed the first real definition of different areas adjacent to the Path. Part of this definition was a horticultural scheme, specifying certain tree species by district, and based on the detailed soil characteristics. For example, Bežigrad in the north part of the city would be planted with maples; Moste, near the marshy Barje area called for willows; Vič and Rudnik, at the southwestern and southeastern access points to the city would include birch and poplar, as well as willows, while Šiška in the north could accommodate any species (Omersa, 1980). This scheme was important in that it added horticulture, or really emphasized a possible expanded palette of natural materials for definition of the Path, which represents a very logical direction for future development, not only for recreation but also as landscape design, leading as far perhaps as "land art".
In 1974, the "city conference of the socialist association of working people of Ljubljana" attempted to stop the executive association from authorizing building the Path, yet the first drawings were permitted for the part of the Path between Dolenjska and Tržaška streets on September 23, and the "young workers brigade" started construction (Krajnc et al., 2006). The association had gotten permission from landowners where the Path crossed private land to donate these parcels as rights-of-way. They were in a sense forced to do so, and yet the Path was a positively acknowledged project, with a growing profile and significance, and this importance was an incentive to citizens to contribute. (POT report, 1986)

Young worker volunteers constructing the Path in 1974 (POT report, 1987)

In the following year, the Lubljana city association brought the Path into their official urban documents and accepted the first decision on the protection of monuments and the trace of the original fence. The Path was confirmed as a 4-meter-wide gravel surface defined by tree rows on each side (Krajnc et al., 2006). The city initiated a major urban plan of the city of Ljubljana which called for the planning, building and maintenance of the AST. At the same time the name of the Path was officially changed to PST: *Pot spominov in tovaristva*, or Path of Remembrance and Comradeship (Omersa, 1980). Despite the administrative steps taken, developers often did not observe this plan and therefore technical illegal encroachment on the original trace of the Path occurred, shifting its location in some locations. With the actual construction of large sections of the Path, lasting nearly a decade up until 1985 with its ceremonial "opening", its trace would be gradually stabilized. Work took place over a large area, involving the cooperation of numerous volunteers and work brigades including students (as many as 60,000) and soldiers who came from all over Yugoslavia. It is estimated that over 350,000 man-hours went into the construction during this period (Krajnc et al., 2006).

The year 1980 was a pivotal one for Yugoslavia as well as for the Path, since this was the year of Comrade Tito's death at the age of 88, which for the Path lead to the commemorative placement of a series of tree allées with specific different tree species, in parallel rows of 44 trees each. The POT report of 1986 later emphasized that this was in keeping with the horticultural aspect of the Path. In addition, these special commemorative segments would later be identified with specific signs as part of the overall signage scheme developed in 1984 (see Appendix 2 for photos of these "88 tree" sections). In the same year, the city council of Ljubljana confirmed a new decision on protection of stone monuments and the Path in which they reinforced the previous decisions they had implemented five years before (Krajnc et al., 2006).
Between 1982 and 1985, a comprehensive urban plan for Ljubljana 2000 and drafts for a long-term plan for the entire municipality emphasized the development of the green areas of the city and gave a further role to the building of the PST as a connector of walking and sports areas within the general layout of green zones (Kranjc et al., 2006).

The Path was designed [according to Koželj] as "a radial penetration and concentric connection of urban green space of Ljubljana, a heterogeneous complex structure of architectures in the open space, which can have an urban, suburban or landscape character", architecture which would help to transform the Path from the original bounded concept into a connective system of the town. Although the new project of the Path was a truly urban design project, its ideological character had to be expressed. (Gazvoda, 1996)
Example layouts of the 1984 scheme (Koželj archive)

Iconic elements and signage system of the 1984 scheme (Koželj archive)

“Constructivist” jambori (masts) at intersections of 3 major streets: Tržaška, Celovška and Dunajska (POT report, 1987)

Signage system, as implemented. Embedded pavement markers, signboards and directional signs (photos by author).
Kozelj team's design addressed a multitude of different conditions for development of the Path, including intersections with streets, open areas and sites near the Ljubljanica River. Especially important was that the design was comprehensive, preserving a sort of unity through signage and landscaping while at the same time being sensitive to the "mosaic" of different sites and conditions, and providing designs for adjacent open areas, sports facilities and amenities for children. Among the ideas contained in the proposal, an island in the Ljubljanica River was among those not realized (Jujić, 2005).

The initial brief of the competition had specified certain criteria to be followed in the design scheme: symbolic value of the Path for city, keeping the 88 tree sections in the general design, connection with other green areas, interesting and different connections with city roads and adjacent environments. The landscape scheme should consider spatial effects and treat the Path as the dominant green element in Ljubljana. However, it was stressed that these were notes of an informative nature to be considered but not to exclude new ideas. Among the jurors for the competition were Ranko Novak and Peter Skalar, both architects by training, but now professors of visual communication at the Academy of Fine Arts and Design of the University of Ljubljana. A total of 32 people had expressed initial interest in the brief, but of these only 13 designers submitted proposals (Competition brief, 1984; Jujić, 2005).

After evaluating all the designs, the jury concluded that most of the schemes were not highly professional, many of them having been submitted by students. In October 1984 the team of Prof. Janez Koželj (including students from the Faculty of Architecture, among them Marija Starič Jenko [see interview in Appendix 1]) was announced as the winner.

The POT is part of "the mosaic of Ljubljana" and raises all kinds of spatial problems of the city, as well as solving others. The POT is a mix of architecture of open space, a connecting structure that should generate development of the city. It can be a complete structure while appearing to be separate parts. It connects different areas visually. (Koželj's memo on strategy for the competition: a "poetic manifesto"; Jujić, 2005)

A ceremonial opening of the POT on May 9, 1985 declared the Path a monument of socialist development, a cultural historical monument and a monument of landscape design. The protection of the entire Path was thus virtually assured.

Construction of a section of the Path in early 1985 (Kos, 2006)
In 1985, the committee on urbanism officially declared the Path a monument. The declaration also included all the crossing points of Path with major arteries and specified that these should be developed and that people should take the declaration seriously. "The POT is a living monument and citizens should accept it as their own and in every way. The POT should also be used every year for a commemorative march (on May 9) as a manifestation where we show our commitment to socialism" (POT report, 1986). The declaration also recommended that the march be included in school programs so that young people would be involved and know the important history of Ljubljana. The POT was also mentioned as being important as a potential tourist attraction.

The report of 1986 listed financial contributions, expenses and how money was raised, broken down by areas of the city. Also explained were the workings of the committee, the number of meetings, and, in fact, exhibited a great deal of pomp, promotion and propaganda! In 1986 the budget for maintenance increased to its highest level since money was first allocated to taking care of the Path, and the committee boasted that the Path was even being maintained to higher standards than any other green areas in Ljubljana (POT report, 1986).

The committee on urbanism also made certain recommendations on expanding the scope of use of the Path to include: organizing memorial events; promotion for tourism; promotion of the Path for everyday recreation among citizens of Ljubljana; use for sports and political manifestations; involvement by the Army in political manifestations; and inclusion of the Path in the city guide book. A script was prepared called a "Guide to the POT" by the education committee to use as a text for youngsters in school, especially in history classes; and a flyer was prepared, designed by the now ubiquitous Janez Koželj for tourists and citizens, proclaiming that the POT does not exist anywhere else in the world except Ljubljana. Later, a book was also proposed called "Wired City" (POT report, 1987). It is fairly evident from examining the report on the POT that, underlying these moves was still a subtext of communist feeling that would play off the Path as an increasingly recognized and important feature of Ljubljana's public space.

The year 1988 brought a decree that the Path be remembered by the city of Ljubljana, and it attained further official status as a "communal and recreational object" in the overall system of green areas as the walking path with tree allées and monuments at the intersections of the Path with streets, as well as all memorial markers and jambo (masts), information boards, direction markers and ground markers, and benches and some tables at rest spots (Krajnc et al., 2006).

INDEPENDENCE

After Slovenia's declaration of independence in 1991 from the Socialist Federative Republic of Yugoslavia, and the remarkable 10-day war that immediately followed, Slovenia was transformed, and the process that led to dramatic changes (EU membership in 2004, for example) also led to a political move to the right. In this context, the city secretary for
communal matters ordered the removal of the symbolic *jambori* that had marked the Path (see below) with the obviously flimsy excuse that they were being taken down for maintenance. Angry citizens claimed that "the masts were taken down the night before the 50th anniversary of the OF(osvobodilni fronta)", i.e. the invasion of Ljubljana and the partisan uprising (Potočnik, 2006). Some memorial stones were taken down or destroyed as well. The city initiated mechanisms that would have potentially led to the demise of the Path. No one referred to the Path as PST any longer, and maintenance was reduced to an absolute minimum. Instead of the designation PST, the Path was now referred to simply as POT, as Koželj had suggested, given that it carried much less political baggage (Krajnc et al., 2006).

The radical changes provoked a definite reaction to the threatened abandonment of the Path among citizens and the formation of a committee. In 1992 on the initiative of the committee to preserve the Path, the so-called Society of the Green Ring (Društvo zeleni prstan) was established as a means of lobbying for continued preservation as well as demanding maintenance. The Society, with over 1000 members, also pressed for finishing parts of the POT that were never completed (Krajnc et al., 2006).

The political games and expression of feelings for and against the Path also took place in the professional arena as well, although one would have expected that the professionals would judge it as a spatial quality, a physical fact of the urban green system. Some recent propositions for the development of the Path were ignored. At the same time, there were other urban designers who really felt responsible for the urban space in Ljubljana. They were, and still are, professionally involved in some projects for the future of Ljubljana and they have proposed to rebuild the Path in a new project for the Ljubljana green system. (Gazvoda, 1996:174)

The Society, rising as a force in continued development of the POT, led to further initiatives from Janez Koželj, particularly a new vocabulary for the design and placement of *mlaj* as path markers at major intersections with city streets with the idea of introducing decidedly apolitical imagery compared to the Constructivist *jambori* or masts that had made a direct allusion to the Path's communist political impulse – the red star, but that had also met the sad fate of destruction the year before. The chosen design for the marker also related very much

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13 the *mlaj* is the traditional "maypole", which is still erected annually around Central Europe: an extremely tall pole with a fir tree on top and other decorations symbolizing spring and especially used to indicate that a marriage has taken place in a village.
to the "pole" in front of Plečnik's "flat iron-style" Peglezen building in the old town of Ljubljana (Gazvoda interview, Appendix 1).

Koželj wrote an extensive memo (dated May 22, 1993) on the design of this new series of monuments:

The pole should be neutral, but using the colors of Slovenian flag. Mlaj is related to it… mlaj celebrates spring, the 1st of May and Labor Day, and often is often used as an announcement of people getting married in the village. This symbolic meaning of the pole should be a traditional and multi-layered message that should not be explained but let people imagine on their own…

(Koželj archive)

The bottom structure was made of steel and with wooden segments to form the tapering pole, and thus relatively simple to construct. In the memo, Koželj repeats that the pole should include all different kinds of symbolism, to be acceptable among the people and that it should not be a reminder of the old masts, but a new design. This time each pole would be a different design, and four other poles were proposed, but only one was built. The concept
was to identify the characteristics of different places in the city with different poles, but he also explained that "it is just one idea..." to replace just one of the old poles to satisfy those people "who also remember those years" (Koželj archive).

In 1994, the Institute of Landscape Architecture defined the green system of Ljubljana with the Path as a primary element, which with its connecting meaning "enriches the city space". Between 1995 and 2000, a total of about 300 trees were replaced (Krajnc et al., 2006); however, apart from these modest achievements, activity surrounding the POT remained relatively dormant, with the "march" still being held each year, but attracting dwindling numbers according to published statistics (see newspaper article later in this chapter).

In 1996, the Society of the Green Ring put out an initiative for a "park of friendship", near the bunker (actually the renovated remains of a bunker) between Rožna Dolina and Brdo¹⁴ (one of the particularly "green" sections of the POT), designed as a space where citizens or visitors could plant trees. They suggested that the municipality buy the land so that they could make a bigger park, combined with a future botanical garden. Then in 1998, MOL (Mestna občina Ljubljana, or the Municipality of Ljubljana) ordered the reorganization and completion of the program of the Path (sanacija in programske dopolnitve [reclamation and programmatic additions], see project logo below) (MOL, 2004). Janez Koželj was again called upon to participate, with the collaboration of architect Polona Šušteršič, despite the clearly changed and more modest initiative of rehabilitation and completion of what was already proposed, i.e. a more modest task in terms of design and vision. The proposal called for the Path being considered a "superior structure", a unique systematic organizer of the city, as well as a strategy not only stressing uniqueness, but emphasizing diversity while keeping maintenance as low as possible with the use of "hearty inexpensive plants" (Koželj archive). This is of course a major shift from his proposal of 1984, which was more adventurous in the use of built form. The fifth point in the proposal (prekritje temeljev jamborjev) is particularly poignant, i.e. to cover over the foundations of the former jambori which were left in place as an agonizing reminder of the masts after they were taken down. The project of sanacija in programske dopolnitve was never implemented.

¹⁴ See Appendix 2 for photos of the renovated bunker foundation.
In 2004, as part of the general plan for the city, the Department of Urbanism of the City of Ljubljana (MOL) published a major document on the Path, defining its route, content and future directions. In essence, the document treats the Path as a systematic connection of open green areas in the city and emphasizes that there are a lot of possibilities for enriching the content of open space around it.

The POT was never exactly defined in terms of landscape architecture. We have lost track of POT places where there is no trail at all and sometimes it has been relocated to unacceptable locations that break the connection of open space. It has a great historical role among citizens, but not so much as green area. It was the largest open space organized in Ljubljana after WWII. …For the future, create a system of connections throughout the city, linking to other paths, develop new program and bring more green areas into the city. (MOL, 2004)

The document makes specific reference to the Path as an element of cultural heritage, a green monument of great importance as well as a spatial reality as connection of open green areas, just as they are. The idea would be to integrate these areas as a preservation strategy, and solicit the collaboration of various institutions in the preservation. In so far as ownership is concerned, the document asserts that about 55% of the POT is in direct possession of the city of Ljubljana, 5% is owned by the state (road infrastructure at some crossings of state roads and certain left-over spaces) and 40% is privately owned (individuals and companies). Many irregularities still exist, especially in the area of Golovec Hill, where the trail is not precisely defined. Because the Path goes through so many different zones, it has been impossible to establish any sort of eminent domain. The MOL document concludes with three "principles": bring program elements into closer alliance with the Path itself, connect other open areas to the POT, and connect green spaces outside the city with bike paths. All of the above should be accomplished "with different segments with different characters, but acknowledging that they are part of one thing" (MOL, 2004).

In 2005 a tender offer from the MOL department of research set up a two-year research project for the Path, including promotion through an exhibition, on the occasion of the sixtieth anniversary of the liberation of Ljubljana; the Society of the Green Ring put on an exhibition and published a book with the history of the Path – Pot spominov in tovarišev, the 50th memorial walk and ideas of freedom by Janez Kos. A second exhibition, along with its published catalogue, appeared in Ljubljana's excellent Museum of Contemporary History in Tivoli Park, which included a reconstructed bunker, a historic tank and other weapons, a number of other artifacts of bunkers and artifacts, and a series of historical photographs and documents. Finally, the Slovenian Tourist Association has considered enhancing its promotion of the Path among the other tourist attractions in Ljubljana.

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15 See interview with Grega Košak in Appendix 2 in which he notes that there have been no new parks created in the city since the war.
16 In November 2001, the POT was inscribed as a cultural monument.
17 The idea of institutional participation will be developed in Chapter 5.
18 This question is of course at the heart of the debate of the future identity of the POT: how to achieve conceptual unity when the Path is so long and so diverse in terms of the environments it traverses, and does it have to be a complete circle? This issue will be deal with extensively in Chapter 4.
Simplified map of Ljubljana showing the current trace of the Path (Ljubljana Information Center, 2006).

Land use map showing uses of adjacent sites and the variety of the urban "mosaic" (adapted by the author from Jujić, 2005).
COMMENTARY IN THE PRESS

Excerpts from a variety of articles about the Path [translated by Elvira Jujić, adapted by the author] give a sense of the immediacy of the issue of the Path among the public. Most of the articles appeared around May 9 each year, on the occasion of the traditional pohod, the march around the Path.

And what about cutting down the poles

What happened to the other monuments with the red stars? A lot of people were very upset by this. There was no specific protest that they were destroyed, even though they were declared as part of the monument. They were cut down and laid down on Litijska cesta for a couple of years. Then architect Janez Koželj designed new poles (five different designs), but they only put one across the street from AMSZ [on Dunajska]. Janez Dražnik, director of the city council, is always speaking about the importance of the POT, but he was really a hangman, against the idea, from the right wing. He said there is no way they will put up the old poles again. He will try to figure out where the cut down poles are and he will personally take care that they are removed. This new pole was just put up to try to see if it is acceptable to the people. They will try the other four poles if there is enough money and will. In a short time he will invite urbanists and experts to find out how to deal with this… POT is important for the city and don’t forget the march! (Dnevnik newspaper, 1995)
Ideas are presented, but they always remain on paper
[ critiques the city administration for never doing anything. Note photo of mlaj monument and trashcan for recycling glass on the base of a former jambor. The areas with the new poles could be used as forma vita [sculpture] green areas. But such a proposal has not been implemented. (Primož Žrnec, Delo newspaper, May 10, 2001)

The old one is decaying
Ljubljana forgot about the old masts [jambor]… They didn't finish…just put dirt on top of them. [He is criticizing the plan to cover the triangular bases of the old masts by planting over them… cheaper than removing them, but he doesn't like this. He does not propose any solution, however.] They are using these plates as bases for big trashcans. Without permission. The city should control permission of stuff around the POT, out of respect for the monument. (Jure Brankovič, Dnevnik newspaper, April 25, 2002)

Marching on the Pot is not a revolution
It is not to be equated with being a communist. In areas where trees are not planted, this could be an event for politicians or sports figures to celebrate planting these areas. With plaques saying who planted them. I spoke to the president of Green Ring Society, who said that several times a year they are organizing clean-ups of different areas, for any citizen to attend and help. The members are maintaining the POT as volunteers but they get a symbolic payment of 100 tolars a year! The Pot is a unique monument in Europe, not trying to be part of politics, just a green area. (Vito Avgostin, Dnevnik newspaper, April 1, 2004)

On the Pot
"It's a good thing Ljubljana is not such a big city…can you imagine walking all the way around the city of New York?" (overheard from some students walking on the POT). On the march, there are points where you can get a stamp to prove you were there, and at the end you get a diploma. Some very important citizens (Kučan [the former president] and Danica Simšič [the former mayor of Ljubljana]) go every year. If you attend the march five times, you get a silver medal from agency for sport. Ten times and you get a gold medal. The student also said he has been attending this march only because it is a family tradition… but he would do it anyway for the recreation. An older man already walked around 500 times! (Sonja Primožič, Dnevnik newspaper, May 10, 2004)

Parked monument
The POT is turning into parking lot…and politicians are forgetting about the meaning of the POT. I spoke to a traffic inspector who said that they get calls from citizens saying that people are parking their cars there so that it is impossible to pass… The inspector came to the spot but didn't give any tickets. The inspectors say that the situation is improving, but it really isn't, the point being that the POT isn't very important for them. (Aleksandar Mičič, Mladina magazine, May 10, 2004)

Green Ring
[again interviewing the president of Green Ring Society, asking what the society did in the last year for maintenance.] He said they replaced about 200 trees and also maintained some benches. In 2004 there were around 2000 members in the society. (Vito Avgostin, Dnevnik newspaper, May 18, 2004)
1171 days in a wired prison

1300 Italian soldiers and 100 Carabinieri soldiers, and how many bunkers, they divided Ljubljana into 13 sections. They dealt with people section by section and house by house, and took suspicious people to “work camps” in Gonars and Rab. This wire fence was built by four Italian contractors with wood from Rožnik, with soldiers as labor. There were also heavy artillery on the castle hill and on Rožnik. Ljubljana was like a concentration camp in that period. It was punishable by death to take pictures of the bunkers and fence, therefore pictures are very rare. I spoke with Nuša Kerševan, a member and past president of the Green Ring: she was 11 years old when the Italian occupation came and remembers those years vividly. The first march was organized in 1957. The year 1972 was very important because the young students (mladinci) proposed making the POT. [Omersa et al.] and then Koželj in 1984. In 1991 the city government removed the steel monuments, saying that they are removing them for painting and maintenance, but now they are covered with rust and dust… They were supposed to be moved to the museum of contemporary history, but are they there? This was also the year of the fewest number of people on the march. This is not a dead monument… it is used everyday… and foreign people are also very fond of the POT. (Bogo Župančič, Delo newspaper, May 7, 2005)
For the city obviously well maintained

"POT is one of the greatest unrealized potentials of the city, if not the only one after the World War," says Koželj, but his plans were only partially realized and never fully brought to bear. "This is an important urbanistic element. POT could be important in a way because Ljubljana is suffering from a big reduction in urban scale projects. It could be a project to revive decaying urbanism with a great project. Obviously, the city government does not get the importance of the POT. The status quo is enough for them. They are just maintaining it just to be there and not make any progress… These days, the complete POT has not been brought together… some parts are just substitutes for the real plan. And the city shows no interest. Even though people are walking around the POT, they do not think about its ideology, but it has become something beyond that." And despite the fact that the city ordered Koželj to develop the plan, these ideas just remained on the paper. He has no problems with the maintenance, since it has been well maintained by the firm that employs disabled people. (Mateja Gruden, Delo newspaper, May 6, 2004)

Behind the wire

In beginning of '90s, the POT had a lot of problems among citizens because some of the places around it were used for communist activities, meetings, singing the International, and so on. Now the political meaning is wearing off. It wasn’t a celebration of communism but patriotism, and the memory of winning out against fascism and the occupation. It’s a very strange monument because even though it was made in the memory of patriotism, people are now asking what the celebration on May 9 is all about… I was very fond of the old name PST rather than POT. The change took away a lot. (Alenka Puhar, Delo newspaper, Saturday supplement, May 15, 2004)

THE FUTURE PATH?

In 1991 with the first free elections and Slovenian statehood, the fate of the Path as a communist symbol was threatened. Certain monuments were destroyed (taken down for maintenance, as it is claimed), and the number of participants on the annual march fell well below 10,000, having been as high as 134,000 in 1975 and nearly 100,000 in 1985 (Delo, May 7, 2005). However, by then, the citizens of Ljubljana had more or less accepted the Path as a historical monument to the occupation and resistance, and more to the point, as a favorite recreation area, at least in some of the most "natural" parts. As of 2007, the May 9 march continues as a tradition, now in increasing numbers, promoted by the Green Ring and the Agency for Sports. But this use is overshadowed perhaps by the daily or weekly use of sections of the Path (typically in the northwest sector between Vič and Šiška, passing near Rožna Dolina) for short outings or bike rides. As such, a gentle identity of the Path has been established, along with its "persistence", despite the fact that the historical memory of its origins may be waning among younger populations of the city. Thus, the debate of whether the Path really ought to be celebrated and preserved as a monument has turned many people to the opinion that it simply ought to be taken "as it is" (as expressed in some interviews in Appendix 1), as a major element of landscape architecture that also traverses industrial parts of the city, joining and at times literally disappearing into the city grid of ordinary streets and sidewalks and winding its way in and through various urban areas, though a "mosaic" of cityscapes and environments. What is the Path, really, and what is its future potential as a unique element of urban design and as a model for innovative use or development in
Ljubljana, especially now in a decidedly technological age? This and other questions are examined in the Chapter 4. Chapter 5 then synthesizes the history and situation of the Path, taking into account the intentions of the city as described in the present chapter as well as the opinions of architects and designers, some of whom have been directly involved with the development of the Path. This then becomes the background for a variety of proposals and interventions, a kind of conclusion in the form of a project brief, linked to the theory of urban layers. A complete atlas of the Path is presented in Appendix 2.

*Pot ob žici* [Path of wire], a banner stretched across Dunajska, one of Ljubljana’s major city streets, announcing the 50th anniversary march on May 9, 2006. Despite its complicated and difficult legacy, the spirit of the Path remains present in the lives of citizens of Ljubljana (photo by author).
CHAPTER 4
Case study analysis

History is a landscape emerging from the mists.

Space is shaped by society in time. The open space is inside and around the city and is a specific entity whose structure and attributes can be described.
--Davorin Gazvoda, "Persistent Urban Landscapes" (1996)

An open, pluralistic environment of ideological, social and political currents is necessary in any culture, but here plurality has given way to a state of ambivalence.
-MVA Arhitekti, "Ruptured Continuity, Reconstructed Identity" (www.mvarch.com, 2006)

Genius loci of the Path of Remembrance and Comradeship: at a major road intersection, parallel to the ring highway, lush secluded green, in a residential project, a contemplative rest spot, typical tree allée with rough gravel pavement, iconic bridge over a stream, industrial zone and monument (photos by author; see complete atlas of the Path in Appendix 2).
INTRODUCTION

In the introduction to the previous chapter, the theory of the urban space as a three-layered phenomenon was brought together with a search for an appropriate case study which resonated with that theory. The point of the selection of the Path of Remembrance and Comradeship in Ljubljana was to study an interesting and somewhat non-obvious example of how a fully developed "space", in terms of having characteristics of all three hypothetical layers, is a starting point for guidelines or tools for future development, especially looking at how technology has deepened the second (dynamic) and third (hyperdynamic) layers, as well as a means of further consideration of the notion the urban space itself. It was argued that the conventional or static urban layer could be insufficient for activating dynamic (infrastructure and entertainment) and hyperdynamic (social networking and an urban imagination) vitality, and that articulation with motion, the variety of nature and changing views, and a patchwork of experiences from broad open spaces to dense urbanized environments were necessary.

Just as buildings and plazas may not provide an adequate experiential vocabulary for the modern city, the landscape itself is not urban, cannot provide sufficient enclosure or small-scale definition of interior space, although edge conditions such as rows of trees or other landscape features adjacent to paths or streets are in fact components of the classic sense of place. On the other hand, there is no surface above, or control of light or privacy or support of specific functions of living and working, which architecture contributes to the theoretical urban equation; it is also conceivable that architecture may inhibit the development of a virtual urban mindscape or visualization of personal networks critical to the third layer.

If the extreme example of habitation of outer space is considered, an illuminating shift of the priorities and relationships of the theoretical layers might be possible: the vast black open space and the need to come to terms with it as an environment would generate a very active hyperdynamic sensibility, against a background of heavenly bodies and twinkling stars, with wireless communication connecting enormous distances and the need to ponder the abstract meaning of such fundamentally alien surroundings devoid of any landscape or reference plane; the first layer would be supplying essentially primitive needs, i.e. protection from a hostile vacuum and definition of functional interior space, while the second would contribute movement (rotation) for generating gravitational force, and electrical power and light. Such environments exist (the international space station for example), and space resorts and hotels continue to be talked about and proposed (Stover, 2004:81), clearly the result of marketing new and entertaining adventures but also a pursuit of new spatial experiences that may in the far future contribute to added definitions within a very broad urban lexicon.

This brief extraterrestrial thought excursion only serves to support the manifold aspects of identity and perception as well as the influence of the landscape as the "floor" of the Earth and the foundation (site and topography) or tabula rasa for the urban environment. To the natural surface and background of hills and vegetation are added the space-defining masses and infrastructural geometries that delimit and activate the urban space. The Path is one such example, as a ring traversing and enclosing landscapes and urban spaces, in some cases so
seemingly independent of the neighboring environment that it becomes an analogue of a habitable ring floating in outer space, with an equally unique internal logic (in this case responding to the history of an imprisoning fence, budgets, politics, nature and design).¹

Ring geometry conceptually mutates the urban layer metaphor into circumferential zones ringing a hub, and is typical in many European cities, where the old town (Ljubljana or Bratislava, for example) is the generating "seed" of the future city, defined by a certain density of architecture and slow pace of pedestrian movement, as these centers often exclude vehicles. Further out of the center, in newer industrial areas or suburbs, infrastructure takes over and speed, wider spaces and lack of conventional places of repose or gathering dominate. Beyond the city, as density decreases, the landscape provides a third layer of relative emptiness, but full of the dynamics and beauty of nature. Thus, in theory, the layers that have been argued here to blanket the city also surround it in plan, hemispherically, and as such, imagining the interaction of these nested layers of urban life becomes more complex.

A proposed "space hotel" hovers above the Earth, constructed from empty shuttle rockets and arranged in ring fashion necessary for rotation of the assembly to produce some amount of artificial gravity (Stover, 2004:81); the Path of Remembrance and Comradeship in Ljubljana portrayed as a spatial ring overlaid on the city.

So in fact, what is the Path of Remembrance and Comradeship? Its identity is arguably multifaceted and therefore multidisciplinary, and as such offers rich potential for this case study. First, it is not productive to designate the Path simplistically as "just a park" or "just a monument", or a historical trace or recreational path. To open the question of the identity of the Path, this chapter starts with a survey of linear landscape spaces in other cities. Second is the question of how the Path should it be preserved and whether it should be further developed, and if so how? This is of course a matter of speculation; however, the issue will be considered with respect to various criteria as well as input from a number of architects and planners in Ljubljana (Appendix 1). Finally, how is the case study of the Path related to the issues of identity and perception, and specifically, how do the hypothetical urban layers interact? These issues are dealt with later in this chapter and in detail in Chapter 5.

On the matter of the identity, meaning and future of the Path, opinions vary widely and in part according to varying demographics. Obviously, certain residents have "bonded" with the path, connected by memory, tradition or recognition of a certain phenomenological or natural

¹ See the aerial view of a section of the Path later in this chapter on page 110 as a representation of its sometimes mysterious directional logic.
beauty (e.g. Kučan interview). Some architects and expert observers feel that the historical meaning of the path should be allowed to fade, while preserving or enhancing or developing the Path from its present concrete reality, just as it is found, as a physical object only (e.g. Gazvoda and Maechtig). The differences in opinions also vary generationally. Anecdotal evidence among students spoke of a certain understandable disinterest in the history of the Path, appreciating it, if they do, as a recreational feature of the city and an easy way to escape into nature within the city limits; this notwithstanding, certain other students were familiar with the Path from their studies or from their parents, and showed interest in its history and meaning. Older generations (e.g. Grega Košak) felt a very direct connection to the historical significance of the Path, if only because they were alive during the Italian invasion and the events that followed, and thus had a deeper connection to the Path as a memorial. Given the diversity of opinion, shifting politics and documents, all of which portray different images of the Path, it is difficult if not impossible to say that there is any sort of consensus, other than general appreciation. The interviews with architects and planners, as well as with trained architects whose careers led them in other directions, reveal an interesting variety of insights and opinions, all of which are potentially valuable for establishing an approach to the future of the Path, albeit theoretical. Extracts from these interviews are presented later in this chapter as a summary. In view of this sociological richness, the selection of the Path as a complex and non-obvious urban space is meant to avoid less conventional urban environments: the grid of New York City or the Piazza San Marco in Venice, for example. It is more interesting to situate and work with the theory of three layers in an unexpected context, and vice versa, to try to understand the Path using the construct of the theory.

What one can take from the research of the Path of Remembrance and Comradeship is that it is now a sleeping giant, a snake lying dormant, curled up around the city, divested of its once-deadly historical venom and kept alive by a moderately enthusiastic and often admiring population. If it is not so beautiful in parts, then at least its conceptual existence as a symbolic ring attracts, even seduces, the minds of people, and it still possess the ability to lure them benignly to at least have a walk down the lanes of trees that define it in its most glorious green habitat, in the western segment in particular (see land use map in Ch.3).

The Path is seen positively by the population as a mode of recreation, in an environment (Ljubljana and Slovenia) where people are used to enjoying nature, walking and biking. The enormous length, if not breadth, as city or linear parks go, is sure to provide enough room and experiences for everyone. But what of the future? If the Path does indeed have potential, how should this potential be exploited, to use the highly charged and risky term "exploit"? Or should it be left alone as a quiet enigma and be maintained as it is, as some urge (Nikšič et al.)? Whatever the approach, it must be sensitive and address the multifarious concerns of the city and its people, and as such avoid extensive conventional architectural development. On this point it is pertinent here to invoke Christopher Alexander, particularly in The Oregon Experiment (Alexander, 1975), with reference to the notion that the Path should not be considered a megastructure, and planned or programmed in a blanket fashion without regard to the variety of small "ecosystems" that are operating or to the variety of needs of users. The
parallel between the university community (the subject of Alexander's study) and the Path, in so far as the sensitivities and attachment of all users, is extremely interesting, idealistic and varied, and all scales, issues, amenities, details and personal interests must be equally and democratically celebrated and supported in whatever scheme for development is pursued. Here, also, the theories of Steven Johnson (2001) or Howard Rheingold (2002), concerning the idea of "emergence" or "swarm" behavior (see Chapter 2) among groups of people, respectively, are applicable. Such ideas might have important and innovative consequences in thinking of the Path itself as an organism in which "bottom-up", lightly programmed initiatives might lead to a new sort of development in which users are directly involved (in the tradition of the collaborative participation of youth brigades in the Path's construction, for example, as referred to in Chapter 3), to some extent outside the present confines of standard urban design.

Not only must the development of the Path take into account the activities and interests of its users, but also consider the perceptions of those users. Clearly, the idea that the Path should be taken as it is in its existing physical reality is an approach squarely positioned in the static layer. Notwithstanding the fact that this layer, in talking about architecture and associated physical elements like street furniture, sidewalks or public squares, deals primarily with built form, the principles of this layer are equally relevant to the definition of space with natural landscape elements (see interviews with Goličnik and Nikšič, Gazvoda and Kučan in Appendix 1). In fact, the Path is a hybrid of architectural space and natural space, and thus conforms to Gazvoda's discussion of "urban landscape":

The answers [about the definition of urban landscape] can be generalized and grouped in two categories: the first...is that the urban landscape [is] a complex environment of natural and man-made elements and the second... specifies that the urban landscape is a part of cities, often as green, natural space caught inside the city... [The landscape itself] can be seen as a space into which the urban fabric (buildings and infrastructure) is set. It represents a spatial frame for the city. Its characteristics may influence the urban structure and they may persist inside the city as urban landscapes. (Gazvoda, 1996)

The potential to develop the "urban landscape" as physical fact is obviously enormous, but it is also important to view the Path as a "participant" in second- and third-layer phenomena as well. Despite arguably being an urban landscape, the Path is also an element of infrastructure, and its role in connecting the city's green spaces and neighborhoods has been amply referred to in strategic planning documents (MOL, 2004 for example). The MOL plan goes so far as to suggest bicycle path connections as far as the town of Polhov Gradec to the west of Ljubljana (MOL, 2004), thus clearly indicating that the Path (as its very name implies) functions as a linear element of infrastructure, experienced in time and in motion, passing by the very landscape elements that it in fact helps define. It is explicitly clear that the Path, if it is to be developed, must also address the dynamic urban layer, not purely in terms of motion, but also in terms of development infrastructure such as utilities, wireless communication, signage and lighting.
Finally, there is no doubt that the Path must be read as an element in the hyperdynamic layer as well. Here it is evocative of history, and the voices of its past, according to many, must continue to be heard, and perhaps the images of its past seen. Historically, this was accomplished through "first layer" monuments, i.e., built form, but the very fixity of the monuments lead in some cases to their demise, as they obviously could not respond to the changing times. Destruction unfortunately sprang forth as an option. As for the voices of the past, these were heard in anecdotes from parents and elders and reinforced in schools. Now, one must consider whether technology can preserve, reinforce and in a sense replace these sensations and perceptions, subtly and sensitively, with projection in some areas, mobile phones and wireless technologies. This possibility is explored in the next chapter.

The phenomenology of the Path also cannot be ignored, its texture, color, sensation, sound and other subliminal input that would attract people and quietly enhance the experience of the Path. Here, the notion of "land art" (see for example Tibergein, 1995) becomes a possibility. The point is to realize that in the third layer, the individual perceptions of people are paramount, and the Path already represents an escape into a different, i.e. perceptual urban landscape, physically connected to but also separate from the city: it also does this mentally, and through a series of these different environments becomes a "different world".

The Path as a linear park, iconically characterized by rows of trees along a path, although directly adjacent to or cutting across agricultural land, open green spaces and forest (photo by author). Where the Path introduces green into a green landscape, it appears to be well integrated, and yet it is also detached and independent, sometimes inscrutable, as it is in many areas responding to a historical map of the city from more than 60 years ago, a time when some of these areas were completely undeveloped. In this sense, the Path as an element begins to be more of a floating ring superimposed on the space than a network or trace deriving entirely from within an existing landscape.

**SPACE AND LINEARITY IN LJUBLJANA**

A preponderance of linear spaces in the city of Ljubljana (riverfront zones particularly) establishes a context for understanding the Path as a "linear park". Ironically, the two major public spaces in Ljubljana, Prešeren Square and Congress Square, have both been burdened by vehicular traffic. Prešeren, adjacent to the famous Triple Bridge of Plečnik, until late 2007 accommodated bus traffic, along with pedestrians and bicycles crisscrossing the space.
Congress Square, populated thickly with trees, is surrounded by vehicular traffic, including city and tourist buses, and people only gather along the one edge nearest the river. Going between these two spaces is either along the riverfront or along the narrow Wolfova Street.\(^2\)

The public in the center of Ljubljana is in motion, and neither public space really "gathers" people, other than tourists taking photos or having a drink at the Pločnik outdoor café. Prešeren Square is not a classic European square in terms of geometry; it is an intersection to pass through more than a place to congregate in. Its strange, nearly octopus shape, resembling in smaller scale the layout of the tentacled city layout itself, does not readily define "place". The riverbanks are much more attractive and dynamic, with a string of cafés and an endless promenade of people. Even when there was no practical reason or destination, people expressed a strong preference for a stroll along the river (Nikšič, 2005). Simoneti referred to a similar situation along the river in nearby Graz, Austria, noting a lack of "places" to sit but also the dynamic of constant pedestrian and vehicular activity. It is thus not a static public space, but rather a "thoroughfare" with views of the river, which also attracts people leaning against the rails in urban and distant contemplation, suggesting that such linear systems are inherently different from ordinary public squares and parks. In this context, the linearity of the Path, as well as the streets that connect the Path to the center or to other parts of the city is a parallel. In the absence of strongly articulated piazzas, the characteristic spatial organization of the city is given over to linear or unclearly defined open spaces that "flow" in line with building façades, along thoroughfares, and most certainly along the river banks that

\(^2\) The situation has improved as of the time of this writing, as vehicular traffic in Prešeren Square, and on Wolfova, the street feeding into the square, has been banned as of the beginning of September 2007.
were developed by Plečnik as a distinguishing urban feature, quite intensively in the city center, but somewhat less so beyond, with sculpted terraces along the edges of the Ljubljanica River in the Trnovo district.

**LINEAR PARK**

One way to grapple with the definition and potential of the Path is to consider it in more detail as a linear park, a special subset of open public green space, and then in comparison with other such linear green elements in other cities. The linear park is a typology: a dynamic space as opposed to an open meadow. It is interactive with people in that it forces a given route, defining the way to move, like a railway track. The Path as a linear park is also a hybrid, since it is not only characterized by natural landscape elements but also offers views and traversals of urbanized residential and industrial areas, some of which are entirely devoid of green or other forms of natural definition.

The linear park also implies a destination, starting and stopping points, or in the case of a closed circle, continuity, or being able to enter the ring, move, and then exit. In a linear arrangement, there is also a mental map of its geometry, a line or a circle, and the anticipation of what is coming next in sequence; if the line is long enough, the experience begins to take on the aspect of a narrative, looking for familiar landmarks or spontaneous events or new features, a length of shade on a hot day, etc. (according to Cedric Price’s Thinkbelt project, for example, as described later in this chapter). It also activates a sense of orientation and the questions “where am I and where am I going?” for the familiar user and first time visitor alike. In a ring, the mental map includes the fact that you will not get lost but will eventually come to where you started. A linear park, then, also implies mobility (distance vs. time) and hence is one of the fundamental bridges between the static and dynamic city layers. As mentioned above, a linear park will generally parallel existing architectural, urban and natural features, thus making for distinct legibility and activity by direct reference.

![Aerial view of a section of the Path showing its linear character and varied adjacent environments: residential, agricultural and forest (Krajnc et al., 2006). Emerging from a forest and sharply cleaving through a meadow, the Path then dies into obscurity in the adjacent residential neighborhood (upper right of photo).](image-url)
The Path also often departs from such a parallel configuration and instead cuts a swath through other environments, making a kind of corridor. And then suddenly the trace may become invisible as it melds entirely into a street grid or follow a sidewalk in totally anonymity. It is precisely these characteristics which make the Path visually dynamic (as well as frustrating!) and this changing nature is what has characterized it as a "mosaic" by Kučan and Koželj, although it might be more to the point to call it a string of different colored beads instead. In either metaphor, the narrative aspect and changing dynamic of the Path is well established.

The following section surveys examples of the basic typology, primarily hybrids of linear natural/urban spaces, provided here as background for considering the number, scope and features of such spaces in order to understand the role these spaces play in the cities or environments in which they are situated.

### COMPARATIVE ANALYSIS (LINEAR AND ANNULAR LANDSCAPES)

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<tbody>
<tr>
<td>Park Loop Road, Acadia National Park</td>
<td>Mt. Desert Island, Maine, USA</td>
<td>43 km</td>
<td>Designed by renowned landscape architect Frederick Law Olmsted, Jr., construction started in 1922 and continued through the 1950s.</td>
<td>Although primarily to vehicles, the Loop Road is an example of a linear park with magnificent views of nature. It was researched in detail by Carl Steinitz at Harvard GSD in 1990, leading to a methodology for analyzing this typology.</td>
</tr>
<tr>
<td>Path of Switzerland</td>
<td>Lake Lucerne, CH</td>
<td>35 km</td>
<td>Opened in 1991 to celebrate the 700th anniversary of the Swiss Confederation.</td>
<td>Historic connections and shared responsibility of the cantons, i.e. democratic and collaborative.</td>
</tr>
<tr>
<td>Path of Remembrance and Comradeship</td>
<td>Ljubljana, SI</td>
<td>33 km</td>
<td>Officially established in the '70s, various proposals for development led to the declaration of the Path as a monument, securing it a place in the cultural heritage.</td>
<td>Closed circular memorial recreation path, developed in some areas, marked with signage system, passes through residential, agricultural, industrial areas.</td>
</tr>
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³ The so-called inner border separating former East and West Berlin extends for 43 km, whereas the outer ring that once separated West Berlin from the GDR measures a further 112 km (www.berlin.de/mauer/mauerweg/index/index.de.php).
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<tr>
<td>Promenade Plantée</td>
<td>Paris, FR</td>
<td>4.5 km</td>
<td>Opened in 1993. To date, the only completed elevated linear park.</td>
<td>Elevated viaduct. Like the Path, the promenade passes adjacent to urban areas.</td>
</tr>
<tr>
<td>Vienna Ring</td>
<td>Vienna</td>
<td>4 km</td>
<td>Completed in 1865, an iconic inner ring road.</td>
<td>Closed circle, primarily urban.</td>
</tr>
<tr>
<td>Planty</td>
<td>Krakow, PL</td>
<td>3.8 km</td>
<td>Developed in 1820 when the medieval walls were largely demolished.</td>
<td>Closed circle, green walking path around the trace of former city wall.</td>
</tr>
<tr>
<td>High Line</td>
<td>New York, NY, USA</td>
<td>2.3 km</td>
<td>Project.</td>
<td>Unique repurposing of a disused elevated rail line as a linear park, with views down to street level as well as of buildings and the Hudson River.</td>
</tr>
<tr>
<td>Philosophers' Walk</td>
<td>Kyoto, JP</td>
<td>1.85 km</td>
<td>Part of the construction of the Biwa Canal (1885-1894).</td>
<td>Linear park paralleling water (branch of the Biwa Canal), lushly landscaped and contemplative.</td>
</tr>
<tr>
<td>Holbeck Viaduct</td>
<td>Leeds, UK</td>
<td>1.75 km</td>
<td>Project.</td>
<td>Similar to New York's highline project, a landscaped viaduct.</td>
</tr>
<tr>
<td>Hofpleinlijn</td>
<td>Rotterdam, NL</td>
<td>2 km</td>
<td>Project.</td>
<td>Reuse of a portion of disused rail right of way.</td>
</tr>
<tr>
<td>Puławska Street</td>
<td>Warsaw, PL</td>
<td>1.3 km</td>
<td>Wall surrounding Służewiec Racetrack.</td>
<td>Graffiti wall with changing images, very little green landscaping, experience while in motion in cars and buses.</td>
</tr>
</tbody>
</table>

**Berliner Mauerweg (Berlin Wall)**

In the years following the events of 13 August 1961, the GDR leadership expanded the border fortifications between East and West Berlin to create a system of many different control elements. "The border walls and fences were as high as 3.60 meters in places, while the 'no man's land' that separated them was between five and several hundred meters wide." Today most of that area has been built over. In some parts, green spaces or memorial sites contribute to making this a "commemorative landscape" (www.berlin.de/mauer/verlauf/index/index.en.php).

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4 [http://kyoto.asanoxn.com/places/higashiyama_nth/sosui/is_biwakososui.htm](http://kyoto.asanoxn.com/places/higashiyama_nth/sosui/is_biwakososui.htm)
The former course of the Berlin Wall is marked by a double row of cobblestones and metal plaques inscribed *Berliner Mauer 1961-1989*. A government decision in late 2001 was the basis for the implementation of the "Berlin Wall" project. The aim of the project is the creation and identification of a continuous path for pedestrians and cyclists on the route of the former border of West Berlin through the use of still-existing patrol paths or customs routes. The signage for the wall route was completed in 2005 and further installation of information boards took place during 2006, along with implementation of additional trail construction (www.berlin.de/mauer/mauerweg/index/index.de.php). As the longest linear landscape commemorative path in the group of such features being studied, the Berliner Mauerweg is also a very recent addition to the list, and because of its date of origin it is not a prototype for the Path of Remembrance and Comradeship in Ljubljana, but is nevertheless, with the Path, certainly a similar defining example that still remains rather rare as a typology in cities.

The Park Loop Road, Acadia National Park, Maine
The 27-mile-long Park Loop Road is the primary avenue for navigating through Acadia National Park on Mount Desert Island by vehicle. An example of the work of American landscape designer (for example, Fenway Park in Boston) Frederick Law Olmstead, Jr., the Loop Road offers "views of a wide variety of nature, including of course, views of the ocean when the road parallels the coast and when it gains in altitude more inland, passing through forests and open fields"(www.outdoorplaces.com). Although it is oriented to cars (a one-way road in most sections), the road clearly exhibits all the characteristics of a linear park and was the subject of a study by Professor Carl Steinitz at the Department of Landscape Architecture.
at Harvard's Graduate School of Design in 1990, for which Steinitz developed a methodology of analyzing strategies for development, particularly the renovation of the road in 2000.

The Path of Switzerland (Weg der Schweiz)
Lake Lucerne – Rütli Meadow, Brunnen / Umersee
The Path of Switzerland, a scenic hiking trail around the southern part of Lake Lucerne, was officially opened in 1991. The trail was constructed as a joint project of the cantons on the occasion of the 700th anniversary of the Confederation (1291–1991), beginning on the Rütli Meadow, where the Confederation was founded. Each canton created one of the 26 sections of the Path, and the order of the cantons on the 35-km-long path corresponds to the order of their acceptance into the Confederation. The Path is thus an educational and recreational walk with encounters of local history and culture (www.uri.info; www.myswitzerland.com).

The idea behind the path is to provide a lasting reminder of the state of the nation in 1991. Each of the 26 cantons is represented by a length of the path proportionate to its population: impossibly meticulous attention to detail has calculated that every 5mm of the route represents a single Swiss citizen. (http://switzerland.isyours.com/e/guide/zentral_schweiz/swisspath.html)
Promenade Plantée, Paris

From the late 1980s through the mid-1990s, the city of Paris successfully converted the 19th-century elevated Viaduc Daumesnil, in the 12th Arrondissement, near the Bastille, into a pedestrian walkway called the Promenade Plantée. Rail traffic had stopped on the viaduct in 1969. The 4.5-km linear park, designed by Philippe Mathieu and Jacques Vergely, is lavishly planted and offers stairs and elevators for access. Retail spaces were created in the spaces under the masonry arches supporting the structure. The project as a whole helped revitalize the surrounding neighborhood, inspiring new residents and businesses to come to the area (www.promenade-plantee.org).

Vienna Ring, Vienna

The Vienna Ring Boulevard is 4 kilometres long and circles the city centre. The construction of the Ring Boulevard was initiated by Emperor Franz Joseph I in December 1857 and completed in 1865. It is a 23-meter-wide double carriageway, and rather than being a linear park really functions as an urban inner ring road with landscaping.

The magnificent road was erected on the space which emerged after tearing down the former city walls... protecting the city center. By this the emperor hoped to overcome the separation of the center and the suburbs, which had officially become part of Vienna in 1850. The Ring was generously planned, leaving sufficient space for a shaded avenue and monumental buildings. Even though most buildings have been planned and built at pretty much the same time, their styles vary strongly. This mix of architectural styles is often referred to as "Ringstrassenstil." (www.actilingua.com/AboutVienna/sights/ring.php)
Planty Garden Ring, Krakow
Krakow's medieval city walls were largely demolished after 1807 except the main gate, its adjoining towers and fortifications. Fortunately, a green belt of public parks called the Planty was designed following the plan of the walls in the 1820s. The green ring encloses Krakow's old town and Wawel Castle, also linking many of its monuments. Along with views of some of Krakow’s oldest buildings, the Planty offers a journey through the art of gardening since the ring is actually a chain of some 30 gardens in varied styles. The Planty hosts 13 monuments to famous figures, including of course Frederic Chopin (www.krakow-info.com/planty.htm).

High Line, New York City
Constructed between 1929 and 1934 by the city of New York as an elevated rail line spanning 22 blocks and traversing about 2.3 km, the disused Highline is being converted into a linear park raised above ground level that will give unexpected views of nearby buildings from a vantage point otherwise unachievable as well as views of parts of the Manhattan skyline and the Hudson River. The High Line will make it possible to walk from Penn Station to Hudson River Park in a landscaped route without cars. Since the mid-1980s, a group of private property owners who purchased land under the High Line lobbied for demolition of the entire structure; however, local residents rallied (compare to the Green Ring Society saving the Path in Ljubljana) and constituted the Friends of the High Line in 1999 to press for the High Line's preservation and reuse as public open space. According to the FHL, the intention is to make the High Line a model for the innovative reuse of these structures to create open space, sustainable transportation options, and social and economic benefits (www.thehighline.org). The High Line is among several special cases in the category of linear urban landscape examples that are elevated, and hence largely disconnected physically from the spaces adjacent to it, albeit there is a strong and certainly unique visual connection to buildings and views. It is also unique in its repurposing from an elevated railway line into a landscaped pedestrian way, although this is an emerging variant (see two later examples).
The Philosopher's Walk 哲学の道 (Tetsugaku no Michi), Kyoto

The Philosopher's Walk is a nearly 2-km-long path besides a branch of the Lake Biwa Canal in Kyoto and connects Ginkakuji (the famous Silver Pavilion, designated as a national treasure) with the vicinity of another of Kyoto's famous temples, Nanzenji. Cherry trees are planted along most of the path, and as such it blooms in spectacular color in spring. (www.japan-guide.com/e/e3906.html)

Appearances to the contrary, this site is one of the most famous tourist sites in Kyoto. The reasons for this are twofold: first is the spectacular cherry trees planted along the roadside… Second is the reason for the path's name. Prior to the Second World War, Kyoto Imperial University gave rise to a group of talented academics known as the "Kyoto School."… Nearly all professors at that time lived near the university, creating a place where they could meet and mingle without regard for their respective specializations. At the same time, there was a place close at hand where they could go to be by themselves, and just think. (www.kyoto-u.ac.jp)

Two additional projects are included in this analysis to illustrate the increasing interest in conversion of historic rights of way that have significant preservation value and issues involving city politics and local initiative of residents leading to their implementation. If not
memorials or monuments, they are linear elements as an organizing "spine" of the preservation of the surrounding architecture that depends on landscaping for its further definition and attraction:

**Holbeck Viaduct, Leeds**
The reuse of this former rail-freight viaduct is proposed as part of the Holbeck Urban Village redevelopment, a revitalization of a former industrial section of Leeds. The redevelopment project focuses on environmental sustainability in its mixed residential, cultural and commercial development. The Holbeck Viaduct, a 1.1-mile elevated structure built in 1882, is supported by 92 stone arches, which may be used for retail spaces. This is a proposal, not yet realized (www.holbeckurbanvillage.co.uk).

![Holbeck viaduct project](www.holbeckurbanvillage.co.uk)

**Hofpleinlijn, Rotterdam**
The Hofpleinlijn is a 1.2-mile-long concrete elevated rail track built in 1908 in the harbor city of Rotterdam. The structure has been designated as a national landmark, and it houses approximately 140 small, commercial and retail spaces under the rail track. Due to a new rail configuration in the Rotterdam metropolitan area, trains will stop running in 2009 (www.hofpleinlijn.org).

![Hofpleinlijn](www.hofpleinlijn.org)
Puławska Street, Warsaw
The final example, a 1.3-km-long graffiti wall in Warsaw, does not precisely fit the definition of linear park, given that it is not landscaped, but rather runs very close to and parallel to a large boulevard, the longest street in Warsaw. The roadside is not well planted, and the green area does not represent the typical attraction of a park. On the other hand, it illustrates a rather rare prototype of linear space and interaction in the urban landscape.

The oldest, largest and probably most well know legal wall in Poland is the wall surrounding the Służewiec Racetrack, also called Wyscigi. This is the most active legal spot for Warsaw taggers. Depending on the weather, from 5 to 30 pieces are done here weekly. Unfortunately the wall itself is in very bad shape so it needs to be grounded very well before painting. (www.graffiti.org/wyscigi)

Not only is the wall almost a cinematic showcase for graffiti to be viewed in motion (a wonderful and unexpected example of a Venturian, second-layer, dynamic interaction in the city – art seen from a moving vehicle), but it itself is dynamic, in that the artwork changes often, as old ones deteriorate and new ones are added.

With respect to the range of examples presented, it is fairly clear that this is an emerging typology, based on several prototypes, the Path among them, of linear or annular landscaped spaces in or near urban environments. The two oldest examples, the Planty and the Vienna Ring are fundamentally different, although they share a common origin in that they are traces around old town centers, once defined by defense walls. The Planty and Inner Ring are relatively short, and the Ring is so deeply embedded in the urban fabric that it totally loses its identity as an autonomous element and "reads" as a large curving boulevard that happens to have trees along it in some parts. The closest relative to the Path is the Berliner Mauerweg, although it is much longer. Like the Path, it carries a strong memorial function related to war and has autonomy in that it is not strictly locked or parallel to other features. it is also characterized by signage and photos that perform an educational function. The Philosopher's Walk is also an old prototype, but in this case derives from a walkway along a canal, not a natural feature but a constructed one, and integrating a walkway undoubtedly had a
maintenance function, although it is strongly defined aesthetically and experientially by following a route of flowing water. It is also very short compared to the Path.

The remaining examples in the list were created in the 1990s or later, and several are as yet unrealized proposals, motivated by proposed reuse of existing rail structures. The linearity of these features of course derives from their railway origin; this raises the general issue, with the decline of some railways, of what to do with disused rail rights of way, which also involve oddly configured ancillary spaces. In a more abstract fashion, however, it is obvious that these linear spaces also resonate with the abstract qualities of the second theoretical (dynamic) layer, i.e. infrastructure, and as such, new uses almost by definition become attached to this dynamic quality, so that, for example, a rail line that becomes a landscape space, becomes a linear landscape space, not a public square. Dynamic reuse is thus stimulated: bicycling, walking, technical infrastructure, connection, etc. Such a project also stimulates involvement of city bodies as well as citizen groups, with the possible later addition of commercial enterprises.

The Path of Switzerland is the least urban of these examples, although it does pass adjacent to towns. It's significance here is its historic connection, and furthermore, its shared responsibility of ownership and maintenance, i.e. by all of the Swiss cantons. Thus it promotes a model of democratic participation, a critical component of Rowe's "civic realism" (1997) and Gazvoda's "persistence" (1996).

Distilling information from these examples points to issues or features which ought reasonably to be considered and conceivably be part of the urban development of such linear urban/landscape spaces, not to mention the general urban lexicon: 1) autonomy of the linear space, i.e. it should not blend entirely into the surrounding environment but retain its own character where possible to give it a stronger identity, recognition and clarity; 2) historical reference or context, expressed through specific geometry, signage or other technological addition to the space so that it functions as a "learning element" or potential educational feature; 3) variety, as Steinitz determined in his study of Park Loop Road (see discussion later in this chapter), characterizes most of these linear spaces, if only because their geometry implies passing through different ambiences (urban and natural, as in Berlin and Ljubljana, but also the possibility of construction with a variety of materials in different sections; 4) participation of different institutions and commercial entities, to distribute responsibilities such as maintenance costs and continued animation of the space; 5) democratic participation, leading to a bottom-up strategy for use and further development; 6) preservation of historical, pre-existing or natural elements, from an ecological perspective, including cultural heritage as well as natural, native or reusable materials.

Considering the above characteristics, it is also clear that it is not only linear spaces that generate them, and thus the study here should widen to include other approaches and aspects of hybrid natural and urban environments with special historical, aesthetic or conceptual identity.
CONCEPTUAL PROTOTYPES

Clearly, the Path is not simply a linear park, nor is it in fact a park at all, especially in certain of the industrial and residential areas it passes through. The question then arises as to what other elements of identity or strategies for its development, conceptual and practical, can be found. Visually and experientially, the Path is at times connected to large adjacent spaces. Thus, apart from issues of ownership of parcels of adjacent land, the future planning of the Path, which ultimately would mean programming and implementation of projects, would have to take these spaces into account. Assuming that additional programming might involve architectural or sculptural interventions, then it is useful to look at Tschumi’s Parc de la Villette as an example. The risk of too many interventions in the case of the Path is partly ameliorated by the fact that the Path is so large and passes through as yet undeveloped areas of open land. Villette, for example, has been criticized as being excessively programmed.

Famous for its grid of red "follies," Parc de la Villette is a case study in how not to design a park. Human use seems to have been a very low priority for architect Bernard Tschumi, who envisioned this park as an exercise in deconstructionist technique. The result is a dull landscape that substitutes absurd sculpture and disproportionately scaled structures for playfulness and variety. Once the novelty of the structures wears off, there is little to sustain one’s interest or imagination, although the dense programming offsets the inhumanity of the surroundings to a certain extent (commentary by PPS, a nonprofit consulting organization, www.pps.org).

On the other hand, Villette is an experiment intending to topple traditional landscape planning.

Tschumi destroyed the nineteenth-century notion of a park as a place where one forgets the city. Instead, he produced an "urban park" for the twenty-first century. This park meant a radical break with tradition as the architect moved drastically away from modernist functionalism. Yet, Tschumi’s "follies" and "cases vides", red cubicles standing at a regular distance from each other throughout the park...couldn’t be further away from modernist utopian thought. (van der Straeten, 2003)

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5 Simonetti and others were particularly adamant on this point. In her interview, Simonetti placed as her highest priority making an inventory of adjacent spaces and establishing contact with owners to include them in planning.

6 Karin Košak pointed to Parc de la Villette as an example of the overlay of a grid as an organizing principle of intervention, in the placement of the well known architectural follies.
And if the goal of the project, or at least the underlying deconstructivist approach, very much influenced by Derrida, is taking apart architecture and planning, then it is achieved through a "constructivist" process of layering, actually of superimposing three layers: surface, point and line. To draw a parallel to the theory of three superimposed layers of the city is enticing here, as in this process of "reassembling" the Parc in apparently unrelated layers of geometry, an unexpected richness results, precisely the intention of thinking of the urban layers, not necessarily related, blanketing and interacting with each other. That Parc de la Villette was the subject of mixed reviews is encouraging, and in a sense precisely the point, as clearly the perceptions of visitors and critics alike were tickled with fresh input.

The design questions the conventional conception of a park as green open space. While there is plenty of grass here, the "natural" park is clearly designed to express the fact that it is artificial, domesticated. Several thematic gardens are incorporated into the scheme, offering places of discovery and unexpected encounters and juxtapositions between seemingly natural and man-made artifacts. (Jay Berman, 1999 at www.galinsky.com/buildings/villette/)

Whether deconstructivist theory is operating here or not, or whether in fact the theory is evident at all to the visitor, it is probable that the result is complex enough to intrigue people into wondering what the algorithm that produced the design really was. As has been stated in the interviews about the Path of Remembrance and Comradeship, it is always possible to take an urban feature "as it is", sensing that there is layered meaning behind it (be it historical, cultural, mathematical or philosophical), but forgoing that direction for reacting directly to what is actually there on site. The more complex the underlying process, the more we expect an engaging result, or updated Vitruvian "delight"; on the other hand we also know to be aware that complexity does not necessarily equate to profundity. Parc de la Villette is essentially static, adding fixed punctuation marks rather than interactive features to the landscape; however, it is useful as a point of comparison and even inspiration for the Path in Ljubljana. And to the extent that it furthers the notion of a hybrid of natural and constructed features, and given that abstract or conceptual ideas led to its "layered" design, it serves in some way as a kind of prototype.

Tschumi's three layers for Parc de la Villette: surface, point and line – a surprising parallel to the theoretical three layers presented in this thesis. This diagram could easily serve as a metaphor for that theory. Note that the conceit is even taken into the presentation boards, with plan and elevation rendered, or layered, simultaneously (www.fba.fh-darmstadt.de/lehrinhalte/Allgemein/Fachgruppen/Darstellung/Geometrie/Plakate/images/).
Parc de la Villette introduces the idea of a gridded overlay and conceptual layering of built form in an open space, as an organizing principle, whereas in another example, the Muenster Sculpture Project, the fourth of which occurred in 2007 (the event is a decennial exhibition; since 1977 this large exhibition invites artists from all over the world to create new work in the city of Muenster), raises two other issues, namely time (a temporary exhibition lasting 100 days) and mapping of the urban space via a distributed exhibition. An international array of artists create site-specific works for the exhibition, which according to Skulptur Projekte Muenster "have put Muenster on the map of world renowned addresses for contemporary art" (www.skulptur-projekte.de/aktuell/?lang=en).

By incorporating works of art, the city gradually changes in the appearance of its public spaces and in a sense redefines parts of the city that become inhabited by sculpture, and a dynamic process is set in motion. The act of visiting this exhibition involves therefore the creation of a mental map and seeing familiar spaces in the city in a different way, as the projects "examine the interdependence between the arts, the city, and the public" (http://neme.org/main/574/muenster-sculpture-project-2007). The urban installation Stadtlounge by Pipilotti Rist in St. Gallen from 2005 is a similar example of dramatic transformation of urban space with artistic intervention, although in this case not temporary and very directly attacking the surface of the space with red paving, which like an ocean wave breaking on the beach appears to have flowed over all the objects in its path. Lighting from floating silver spheroids illuminates the space at night (www.stadtlounge.ch).
By covering over any detail of the surface, this red carpet changes the reading of the space, much in the same way that a fresh snowfall does. This intervention also pulls people through the space, with a sort of irresistible attraction and clear sense of humor. Both the Muenster Project and this one in St. Gallen have enhanced the identity of each of these cities, of course in art circles, but also much more generally for visitors and residents in terms of a specific and aesthetic visual signature present in the city.

Another variant in the category of landscaped open urban spaces with special conceptual features are memorial parks. Most urban cemeteries are in this group, in that they are generally green open spaces populated with sculptural interventions with specific memorial meaning, which could also be read as conceptual art, especially in the case of national cemeteries or war memorials and in view of the overlay of history, tragedy and yet tranquil evocation memory in nature.

Two such examples are the Parque de la Memoria in Buenos Aires and the Vietnam Memorial in Washington, DC, both of which share a particular type of intervention in the landscape in the form of diagonal cuts, evocative of a physical wound.

Parque de la Memoria covers 14 hectares and is set on the banks of the Río de la Plata as a public walk so that, upon facing the horrors committed during the last Argentine military dictatorship, society becomes aware of the horrific violations of human rights. The Monument to the Victims of State Terrorism will be erected in the Park, as well as a group of commemorative sculptures (www.parquedelamemoria.org.ar/parque-ing/index.htm). As of the date of this writing, the entrance plaza has been constructed, but the remaining space connecting this plaza are with the river has not been completed and is designed as a series of descending angular gashes in the landscape with inscribed names of victims, much inspired by the "scarred" landscape designed by Maya Lin in Washington. States Patricia Valdez in 2004:

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7 On March 24, 1976, when dictatorship was established in Argentina, the practice of forced disappearance was turned into a systematic method, applied massively (www.parquedelamemoria.org.ar/parque-ing/index.htm).
The essential message of these monuments is to recover the individuality of those who lost their lives. So the names point to each individual as unique and different... but what is overwhelmingly convincing is the sheer quantity, 30,000, which reflects the extent of the loss.  
(www.memoriaabierta.org.ar/recursos_culturas_memorias_y_traumas.php)

Parque de la Memoria, schematic plan (left) of the descending cuts connecting the entrance place to the river bank: according to the scheme: “The monument cuts deep like a wound into the elevated grassy surface of the park that faces the river. Visitors will enter the monument underground from the city side of the wall, and move through the zig-zag structure until they are released toward the river and the shoreline walkway. The overall design is classically modernist in its geometric configuration and minimalist in its lack of ornamentation and monumental ambition.” (www.parquedelamemoria.org.ar/parque-ing/index.htm). Plaza de Acceso (right) (www.pps.org)

Despite the claims of the designers about not aestheticizing traumatic memory, the Plaza de Acceso, which has been completed in advance of the rest of the park, seems, from a distance anyway, to lack the visual power to substantiate its claims, and appears thus far to be a conventional park with sculptures. It has been criticized by one observer as an utter failure in urbanistic and aesthetic terms:

> It will be a forgotten space in the city, important only in its own mind. This context presents challenges to creating a place useful to people, but also incredible opportunities for unique urban experience. …But here are no uses or activities to speak of. The sculptures seem to be the intended place of activity and interest because of their great size and the fact that they are recognizable as “art”. However, they invite little human interaction and few interesting experiences and as such are lonely, self-important, ill-placed oddities in the plaza. It is unfortunate that there are no places to study for the huge number of students so close by, no place for viewing the planes coming in, no nice experiences of the river.  
(www.pps.org/great_public_spaces)

In advance of the completion of the main part of the park, critic Andreas Huyssen writes more about the general and difficult issues of "how to represent historical trauma, how to find persuasive means of public remembrance, how to construct monuments that evade the fate of imminent invisibility, and …how can one counteract any monument's inherent tendency to domesticate or even freeze memory?"

Nowhere do the politics of public trauma manifest themselves more intensely than in debates about concrete interventions in the built urban environment. Once embodied in monuments or memorial sites, remembrance of traumatic events seems less susceptible to the vagaries of memory…

But the innumerable monuments in 19th century style that litter the boulevards and public spaces of the city of Buenos Aires, as of most European cities, remind us that nothing may be so invisible as a monument, as Austrian novelist Robert Musil once said. Aesthetic appeal, formal construction, and persuasive execution remain the sine qua non for a monument to maintain a visible presence in the urban public sphere. (Huyssen, 2001:1)
The issue is likewise true at the Viet Nam Memorial, where the gash in the landscape surrounded by classical sculptural monuments and urban features, which has attracted so many visitors, remains a unique and potent solution to the problems of memorials in the city. The reason undoubtedly lies in its conceptual quality rather than formal realization, the third urban layer, rather than the static stylized statement of conventional statuary architecture. To use the metaphor of this thesis, Lin's design engages the hyperdynamic character of thought, coupled with the quiet surroundings and changes of nature through the seasons, allowing contemplation and a flow of shared communication and empathy, along with cascades of memory – to extend the used of the term "space of flows" (Castells, 2002).

MONUMENTS AND EXPOSITION
Is the Path of Remembrance and Comradeship in Ljubljana a monument? Strictly speaking, a monument ought to be "a sculptural object or building or other edifice created to commemorate a person or important event", and here the Path corresponds in spirit yet not in physical form. As such, it is verticality and the aspect of being a solitary, stand-alone object that characterizes a monument, as in the case of the Washington Monument or the Taj Mahal. Despite being arguably monumental in scale, the Path is really more properly a memorial ("something, such as a monument or holiday, intended to celebrate or honor the memory of a person or an event"). One example that blurs the definitions is the Holocaust Memorial in Berlin by architect Peter Eisenman, which opened in 2005. Although it has characteristic monumental forms (monumental concrete monoliths), these forms are repeated to such an extent that any verticality melts into a horizontal, variegated and apparently vast surface, a landscape in fact. The much older, but equally challenging and poignant Vietnam Memorial in Washington, DC pointed to the same issue, a fallen monument embedded in the landscape and very much not wanting to stand vertically as if to proclaim a proud victory.

8 Definition at http://en.wikipedia.org/wiki/Monument, for example.
9 Definition at http://www.thefreedictionary.com/memorial
Repetition and extension of a single element to a vast undulating plane transforms the memorial as an object into a space: Berlin Holocaust Memorial (photos by author).

The Path must surely be considered in this special subset of memorials, those with unconventional monumentality, horizontality, large scale and an identity blended with the surrounding landscape. As in Berlin, the Path invites human interaction and exploration of its spaces, and yet despite a rather dark memory, it is not bleak. The modest monuments contained within it do not speak loudly, and their repetition diffuses the singular importance of any one of them. That the Path actually has content, in the form of its monuments, and images, in the form of its views, and that it can be occupied and experienced dynamically, also qualifies it as a museum, or at least an exhibition venue.

Honoring the past does not mean embalming it, but rather elaborating its traces, testing its assumptions and inherited doctrines – in fact, keeping it contemporary. (Fisher, 2006:79)

With a sequence of spaces, changing microenvironments and repeated elements (the "memorial" groupings of 88 trees marking the death of Tito [see examples in Appendix 2], as well as the simple stone markers), this exhibition takes on a narrative quality. Once a rhythm has been set up, especially energized by movement (walking or riding a bicycle), the anticipation of the next "phrase" or "chapter" becomes palpable.

Along with the material, historic and artistic values that are characteristic of very few things, every thing, every object, even the most insignificant, can possess a personal or lyrical value. This value is derived from the degree of experience and meaning that the given things has absorbed, the extent to which it has been incorporated into… spiritual activity. If we can discern in it a significant meaning, or if we find a signature or commentary affixed to it, then this is an item worthy of inclusion in a lyrical museum. The intent of the museum is to reveal the endless variety and profound significance of things in human life… (Epstein, 1995:254)¹⁰

Ruins have this narrative, lyrical quality, since in addition to the memory of their lost meaning, the passage of time distances the physical reality of their very materials and surely generates wonder in the minds of visitors about how to relate to these distanced objects that

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¹⁰ Mikhail Epstein was among the first to write on the Russian neo-avant-garde in poetry and prose. His proposition of a lyrical museum, with everyday objects, disconnected from their tangible reality become vessels for the stories attached to them. This is useful in thinking about monuments, memorials and the interpretation of the Path.
have begun to "die" into the landscape. Land artist Robert Morris characterizes the experience as "presentness".11

Presentness is the intimate inseparability of the experience of physical space and that of an ongoing immediate present. Real space is not experienced except in real time. The body is in motion, the eyes make endless movements at varying focal distances, fixing on innumerable static or moving images… Language, memory, reflection and fantasy may or may not accompany the experience. (Morris, 1994:177-178)

Umberto Eco, in an essay on expositions in Travels in Hyper Reality,12 points to this inherent conundrum in relating to objects from the past:

At first contact and first reaction, exhibitions assume the form of an inventory, an enormous gathering of evidence from Stone to Space Age, an accumulation of objects useless and precious, an immense catalogue of things produced by man…over the last ten thousand years, displayed so that humanity will not forget them. (Eco, 1986:292)

Thus, it is human memory, and its relative fragility, that gives rise to the necessity for memorials in the form of monuments, to preserve and objectify that which we are afraid to lose and that which we cannot concretely understand. This is a fundamental characteristic of the third urban layer, and a reason why the memory of the Path is essential to its identity and meaning. Its large scale and "presence" in nature, and the fact that its memories are not really objectified, contributes to its uniqueness and importance. Likewise, the idea of taking the Path "as it is", implying stripping it of the attachments that humans cannot avoid making and of the perceptions that are basic to human perception, is unthinkable. The presence of unexpected features in the landscape is a pointer to the possibility of some other significance…and the user is thus "tapped on the shoulder" or "whispered to", if not directly intellectually stimulated to think about what that significance might be. To keep the Path from becoming only an exhibition, or worse a ruin, a "strategy of suggestion" might be called for, a sensitive approach to preserving numerous valuable historical aspects of the Path while also gently activating new ones in order to experiment with a more sophisticated lexicon of urbanity that the Path might make possible.

**CEDRIC PRICE AND THE THINKBELT**

There are plenty of precedents presented in this chapter for considering the Path as simply a linear park. Certainly, however, the aspects of the Path go much farther than landscape design, as other aspects of the research have shown. The complexity of the Path's history, as laid out in Chapter 3, plus the broad comments from the interviews (see summary in this chapter and full text in Appendix 2) show that the Path is really an "urban landscape" (a concrete term for the variety of environments it passes through and connects, only some of which are green) as well as "cultural landscape" (a less concrete and more conceptual term for

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11 This term relates in an interesting way to the idea of "presence", as in presence on the Internet, a fundamental quality of identity.

12 Eco's book of essays and excursions is interestingly relevant to this thesis, including its title, which is indicative of the idea that city residents, particularly the younger population experiences the city as "travel in hyperreality", given that they are connected virtually and thus transcend the real. Of particular interest here, however, are the essays "Towards a Semiological Guerilla Warfare" ("Communication has been transformed into heavy industry") and in more detail "A Theory of Expositions", which allows an interpretation of the case study of the Path as an exhibition space, albeit one that is outdoors and thus has the potential to combine complex existing natural environment with a series of cultural, artistic and spatial expositions.
the way in which the Path embodies cultural values such as recreation and historical values), and as such, any approach to its development must take numerous factors into account. Finally, while it can be argued that linear parks possess all the elements of the three theoretical urban layers (static spaces defined by green elements, dynamism in traversing the path on foot or by bicycle, and the open mind space that a natural environment provides), it is evident that a richer model is necessary to capture second- and third-layer issues, such as interactivity and urban mindspace, supportive of the activities of the people who use it. Thus, one possible source of inspiration here might be the work of Cedric Price (1934–2003), particularly the proposal for the Potteries Thinkbelt. Price’s vision in these projects unfortunately remains unrealized, and yet the conceptual approach and architectural manifesto are particularly relevant to thinking about the Path. The very term "thinkbelt" is extremely provocative in considering a connective ring (a sort of extended Kyoto-style Philosopher’s Walk) around a city with such a large university and educational tradition. This has in part contributed to the idea of conceiving the Path as an open university rather than solely as a large meandering, recreationally oriented green space. Price was also proposing the repurposing and adaptation of exiting structures, not with a rigid program, but infused with unpredictability, interactivity and participation. As conceptual projects, they also remain entirely open to interpretation.

Price challenged architects to recognize that their true objective should not be the creation of monuments symbolizing the image of a city, but simply the provision of the means of "improvement of life". (Matthews, 2003:354)

In 1964, Price launched what effectively was a critique of the traditional university system in his Potteries Thinkbelt project.13 Radically reconsidering the basic concept of a university, his proposal provided a mobile learning resource for 20,000 students utilizing the infrastructure of a declining industrial zone.

"The lack of awareness of both the correct scale and intensity at which such education should occur. present institutions are too small and too exclusive. The present context is in danger of lacking, on the one hand, recognisable social relevance, and on the other, the capacity to initiate progress rather than attempt to catch up with it." (Cedric Price in Matthews, 2003:352)

Documentation from the Potteries Thinkbelt at www.thepotteries.org/maps/thinkbelt.htm

13 For a more thorough presentation of the project see Stanley Mathews, Potteries Thinkbelt: An Architecture of Calculated Uncertainty, 2000 at people.hws.edu/mathews/potteries_thinkbelt.htm
According to one of Price's major biographers, Stanley Matthews, he was arguably the first architect to develop an architecture of programmatic variability, or as he put it "calculated uncertainty". Social advancement and individual freedom deeply motivated Cedric Price and informed his use of technology. The architect must therefore acknowledge the impossibility of totalized planning and build in a degree of indeterminacy to allow for uncertainties in program, obsolescence and complete changes of use throughout the life of the building. For Price, the best of all possible designs is that which people can manipulate in the future and use as they see fit. And thus the idea develops of an open university in a renovated factory complex, for all modes of education and life-long learning, a partnership with industry, and a dynamic center for social participation and interaction.

He refused to refer to the Thinkbelt as a "university" because he disliked the upper-class connotations of the word, complaining that universities were little more than "medieval castles with power points [electrical outlets]", located in gentlemanly seclusion. In opposition to the traditional practice of segregation of universities, Price proposed a thorough integration of the Thinkbelt with local industries (the few that remained functional) and with the community at large. He also sought to break down the distinctions between practical and theoretical learning, between learning and working and between learning and living. (Matthews, 2003:363)

Price intended to rehabilitate the North Staffordshire, UK ceramic factories, which in addition to being a once thriving industry also played a role in the development of modern transportation technologies, with an extensive system of canals supplanted by railroads. The landscape of the Potteries was dotted with ceramic factories and foundries using the latest technological innovations of the day, connected by a matrix of railway lines (Matthews, 2003: 356). Later the coal mines would shut down and industry came to halt, much like heavy industry would collapse in Ljubljana, at the Litostroj Steel Works, for example, a manufacturer of water turbines, equipment for hydroelectric power stations and pumping stations, as well as heavy industrial forming equipment. The factory does continue to operate, but at an attenuated level compared to its Yugoslav past and 150-year tradition (www.litostroj-ei.si).

The "PtB," as it became known, was not a "building" and perhaps not even "architecture" as it was understood at the time. Price proposed utilizing the derelict railway network of the vast Potteries district as the basic infrastructure for a new technical "school." Mobile classroom, laboratory and residential modules would be placed on the disused railway lines and shunted around the region, to be grouped and assembled as required by current needs, and then moved and regrouped as those needs changed. Modular housing and administrative units would be assembled at various fixed points along the rail lines. (http://people.hws.edu/mathews/potteries_thinkbelt.htm)

The once thriving textile industry in Slovenia has virtually disappeared, and now Ljubljana wants to reinvigorate the country with innovation and technology and the full implementation of the information society. What better way than with a solid basis in education and innovation, and with providing physical and technological and wireless infrastructure to do it, organized along the Path? Thus the Path should be an integral generator of the city plan as an organizing principle rather than just as a green belt, thus making good use of present situation

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14 As it turns out, the Litostroy complex is directly adjacent to the Path
and providing the spine or central arc of a zone for all kinds of future, technologically oriented development.

As with the Thinkbelt and with Price, who felt that the potential of the Potteries lay not in their design but in their infrastructural possibilities and of course in reuse, the same is true of Ljubljana’s Path. While the focus of the Path has been on the political questions of its past and its future identity, mostly in terms of recreation and landscape design, it has not been thoroughly dealt with as potential infrastructure. But infrastructure for what? The Ljubljana urban plan of 2004 specified using the Path to connect residential areas. Some of the architects interviewed also mentioned pedestrian connections to the center and possible shortcuts or "secants" across the circle. But there has been no proposal for comprehensive infrastructure that could give form and purpose to the Path at a grander scale, in the way that Price tried to present an overall development plan for the Thinkbelt, an effort which started with its evocative name and was infused with metaphor (of railway transport). This is critically important as a means of conception and a means of communicating the ideas to others so that the image is clear and transferable. Once named and properly conceived, a big idea begins to take on its own life.

For the Thinkbelt, not only was the plan based on an existing rail infrastructure, modular learning units and residences, but it also used the railway as an image and educational metaphor. According to Steenson, "these didactic notations … perform more than just a conceptual, diagrammatic or notational role. They become narratives…".

As Price writes in his "Essays on Paths": the strong character of the path … is a metaphorical statement as well. It engendered interactivity and encounter, creating outcomes that nobody – neither user, nor designer, nor architect – expected. It learns, it responds, it surprises. …the program is responsiveness; responsiveness is the program. (Steenson, 2007:96)

At some point, one has to stop and ask the question of why Price’s practice consisted almost entirely of unbuilt and unfinished work. Indeed, even the projects themselves consist only in rough conceptual sketches. A possible answer has to do with the profession itself, one of the functions of which is to theorize via the medium of the project as the architect’s mode of research. A second response is that architectural projects, particularly at large scale, constitute
all the major problems of politics, economics and a variety of other practical constraints. The exception in the 21st century is clearly China, where an unbelievable and unprecedented scale of production is going on, as testified to by a number of foreign architects now engaged in large scale projects there.\textsuperscript{15} Clearly, for some architects, Michael Sorkin\textsuperscript{16} included, hypothetical projects are a means of important communication and critique. Price is certainly in this category.

As for the Path in Ljubljana and its future, visionary proposals can only go so far, and yet the "specter" of Cedric Price lurks in the background. Is it an overt example of modern romanticism, especially in the generation of architects and planners who were educated in a certain era and knew directly about Archigram and dreamed of at least some realization of these crazy ideas? If so, that would not explain the continuing interest in his work, nor the Kunsthaus in Graz of Peter Cook, nor the homage paid to Price indirectly by Rem Koolhaas in his statement about his own submission for Parc de la Villete:

\begin{quote}
We see this scheme not simply as a design but mostly as a tactical proposal to derive maximum benefit from the implantation on the site of a number of activities...The underlying principle of programmatic indeterminacy as a basis of the formal concept allows any shift, modification, replacement or substitution to occur without damaging the initial hypothesis. (in Matthews, 2003:393)
\end{quote}

It is unfortunate that so few of Price's projects were built; nevertheless, projects like the Thinkbelt serve a useful purpose to stimulate new ideas, and certainly are a means by which an overall concept can be organized, developed and shared, but ultimately these have to be translated through the filter of civic realism, dynamically, over time and interactively, with people's participation and willingness to see the attraction and viability of the vision in the same way. And last but not least to introduce some hope into the future of urban design that it can succeed in ways it had not before and in fact were never imagined.

CHARACTERISTICS OF THE PATH IN TERMS OF AN URBAN LEXICON

The analysis of the Path of Remembrance and Comradeship in Ljubljana thus far has first considered the typology of the linear park, or hybrid linear urban/landscape space, and second, various conceptual prototypes that deal with issues of open space planning and functioning. With a model of a space punctuated by structures and laid out with some implication of abstract concepts as planning principles (deconstruction at Parc de la Villette, for example), with the activation of numerous public spaces in the city with temporary sculpture exhibitions (Muenster), with the approaches to memorial spaces (Buenos Aires and Washington), and finally with Price's repurposing of existing structures, strong use of metaphor and his avoidance of overprogramming the functions of a space, the possible interpretations and methodologies for understanding the Path have widened considerably, calling into question the simple proposition made by some Ljubljana architects and planners

\textsuperscript{16} See Sorkin's website at www.sorkigstudio.com
about "taking the space as it is". Logically, a space such as the Path is too complex for such a simple approach, and taking it as it is would amount to ignoring some of its unique aspects and potentials. Moreover, the Path is a public space, and the way the space is viewed by residents and visitors alike must be taken into account. One such study which does this is Carl Steinitz's analysis prior to the renovation of the Loop Road in Acadia National Park, undertaken in order to establish ecological compatibility (preservation of flora and fauna) but also to determine "user preferences", i.e. to find out what visitors to the park and travelers on the road thought to be the most beautiful (and the ugliest) views of the surroundings. The analysis was carried out with a population of several hundred visitors, who were asked to rate a series of actual photographs and simulated photographs showing various vistas seen from a selected route of only half (21.5 km) the total distance. An detailed model of preferences was then developed (Steinitz, 1999). Although such an extensive survey for the Path is beyond the scope of this thesis, the interviews in Appendix 1 and anecdotal information from conversations with Ljubljana residents constitute an abbreviated form of such a survey. We know very well that the expressed top priority for the Path is continued maintenance of the Path itself, along with its signage, so that it is comfortable, available and preserved for use. Second was the overwhelming preference for the most beautiful, green and natural parts of the Path, much to the exclusion of others, to the extent that most people were relatively to completely unaware or uninterested in the "other parts", that is, segments that passed through industrial areas or where the Path "got lost" in the general street grid or where signs disappeared or were confusing.

In the case of the Loop Road, it is the methodology and some related conclusions that are pertinent. First, the methodology points to a desirable form of "bottom-up" approach, in which users can affect the final outcome of any initiative. Second, Steinitz discovered several useful and perhaps unexpected reactions of users to a linear park in nature: "people do not wish to see a developed or urbanized landscape or evidence of crowded use; they like a sense of mystery; they wish to be further drawn into the scene; they like …development which is considered generic…with a distinctly historical character; they like to see water; they do not like to see tourist-oriented commercial development; they like long distance views; they like to see a 'folded' landscape…i.e. mountains; and they like to see a diverse and well-maintained vegetation distribution in the foreground and middle ground of the view" (Steinitz, 1999).

In so far as taking visitors' visual preferences into account, Steinitz carefully leads us to what he terms "conservative conclusions":

There is great risk of negative visual impact from developing an undeveloped landscape, even under the best of architectural assumptions; extending development, if it is necessary, in already modified areas is much preferred to spreading it thinly throughout the landscape; there is also considerable benefit to hiding development, if that is possible; and there can be substantial benefit in opening views toward more distant landforms…However, these must be in relatively underdeveloped landscapes or in landscapes which can be protected from future cultural modification, and should not harm the ecological values of that place. (Steinitz, 1999)
From these general observations based on visitor input, we can see the way in which people become attached to a landscape or elements of a space, obviously perceiving a personal connection to it. This translates into a "conservative" approach, if it is necessary to call it that, in which people want a certain identity preserved, not undermined. Second, the preference for distant views represents a sort of idealism on the one hand (a survey of the scope and scale of nature) as much as it also might indicate a familiarity with "images" of what people think nature looks like, whether directly experienced or seen in different media. Obviously, new development is then somewhat of a threat, no matter what its quality, and it goes without saying that "ugly" interventions (parking cars for example) must be avoided or concealed.

These points correlate well with Kučan's study of the identity of the Slovenian landscape, which employed a related methodology (Kučan, 1997), and very clearly resonate with Alexander (1975). From this it appears that (for people in general) there really ARE immutable qualities of identity and perception, and that successful projects address these universal qualities directly. It is necessary to restate, as Steinitz does, that these qualities are generally viewed as "conservative", but perhaps such a label needs to be rethought. Either it is true, or a function of the influence of the media or a lack of sophistication and education, or a combination of these: it is the same issue as preference for Mozart over the dissonant experiments of contemporary classical music, which has never had much of a following except among a small population of cœgnescenti. Perhaps it is a very natural function of the fact that humans are OF NATURE, where development proceeds slowly, beautifully and without irretrievable errors of judgment. This issue has profound impact, then, on the urban lexicon, and when and if certain "terms" should be used and what their likely effect will be in terms of expression and popular acceptability of that expression.

Obviously, this analysis of the Path must also take into account negative factors, since the history of the Path as described in the previous chapter shows its development as rather slow and certainly troubled. It is likely that any future development, or in the terms being used here, expansion of the urban lexicon, will also encounter difficulties. First, the sheer size of the project has frustrated its maintenance, in that a rather large budget must be allocated for keeping the Path in its present condition; the disrepair evident is some sections indicates the shortfall of that budget. Second, additional funds for development beyond standard maintenance must be large enough to cover planting of additional trees, restoration of signage and providing the kinds of programming that has been talked about in the interviews and in urban plans to attract more users. Third, the absence of "public will" practically led to the total demise of the Path in the early '90s; thanks to the efforts of the Green Ring Society, the Path was saved and use is on the upswing (see Ch. 3). Fourth, historical political baggage has been stultifying – it will take an enlightened mayor with a vision to make changes and once and for all take the Path out of the arena of political shenanigans and totally depoliticize it. Part of this aspect is the unitary control of this urban feature, as is often the case with city infrastructure; thus the city government can stall development or ignore the project entirely without terribly serious consequences. Among the proposals in Ch. 5 is the suggestion that control of the Path needs to be decentralized so that numerous stakeholders instead of a
monolithic and distant body are involved on a democratic basis. As Roberto Unger, professor of law at Harvard University, puts it:

> Once we see civil society as a dense network of interlocking experiments, with analogous and fluid rather than starkly contrasting and fetishized physical forms, we can enrich our view of what the most public of our public spaces should be like. Instead of a single authoritative expression of the national past and the national future, we need a range of alternative expressions, speaking the voices of different groups and traditions of a society. (Unger, 1995:18)

Fifth, the problem of ownership of real estate, in this case the numerous sites adjacent to the Path with undefined or disputed ownership, has stopped efforts toward further development. Until these problems are resolved, progress is likely to be slow or nonexistent. Finally, the Path has a mixed identity and is perceived very differently by citizens and visitors: from deep attachment to its historical significance to total disinterest in this history, with many observers wanting to take the Path "as it is"; from proposals for adding program functions (commercial development) to an adamant stance that the Path should not be changed at all; and from daily use and familiarity with some sections to complete lack of knowledge that the Path even exists. In Rowe's terms, civic realism as regards the Path is not synergistic and is likely to encounter obstacles if the present circumstances do not change (Rowe, 1997).

**COMMENTS FROM THE INTERVIEWS**

In line with the notion of presented above, as in Steinitz's study, of understanding user preferences and inclusion of a variety of points of view about the Path, one of the major areas of research for this thesis was interviews with 13 Ljubljana architects, artists, urbanists and designers, all of whom were trained initially in architecture, landscape architecture and urban design. The interviews were conducted over a period of about one year, and consisted of a two-hour conversation, on average, dealing with three main points: the identity of cities as an issue, the specific identity of Ljubljana and a discussion of the background and development possibilities of the Path itself. Many of the professionals interviewed went into different creative fields; many are also professors at the University of Ljubljana. All had strong and informed opinions about the Path, its role in the city and its future. The following section excerpts highlights of important points from the interviews relating to the Path. While the interviews should be read in their entirety for context (full texts in Appendix 1), the following extracts show a pattern of expert and personal opinion about what could or should happen to the Path in the coming years.

Karin Košak

> I think that maybe there should be some locations recognized as turning points and these could be …developed…into meeting points, with content, with design and maybe all of them different. I would probably think in the way of La Villette. Again, a structure which you have to make, a grid, a system to function.

Tito's Yugoslavia is a brand, speaking in the terms of marketing. Also Ljubljana could be a brand. It has been developing for several years and lots of tourists have come to see it, and it could really develop as a destination for Christmas holidays. Like Landry says: "don't try to be good at all things, but put effort into the great things to make them special". Like theatre, the city has to develop its own design language, not an adaptation.
I also found out that the people of Ljubljana know very little of their own history. Even me. I am interested but I still don't know a lot… and history is something that can make people proud. They would like their town if they know more about it. So, I think this idea of "Ljubljana stories" has big potential. The Romeo and Juliet story, for example… a whole city lives on this idea! (Verona)

Grega Košak

Just after the war, after liberation, life was hard. Some of the fortifications were taken down. It was organized as volunteer work. If you didn't go you had to have very strong reasons to explain! To destroy the fence, it was locally organized by the communities (quarters) to bring away a part of history we didn’t like. Participation was stronger than it is today.

It was civic initiative of young architects. They questioned all kinds of ceremonies and this was an initiative of free thinking. They made initiative in town planning to institute as recreation and as remembrance.

It seems to me that if we are looking at history, there are two polar opposites: emotional and the rational. And trends or mainstreams are always going from one to the other. Action always provokes reaction. Now the change goes from material things to the direction of software.

Jože Baršič

When I was at architecture school they still had the ideas that you could plan something. But now urban planning is not so important, and suddenly money means much more.

We became the capital city of Slovenia, but we have no idea what the idea of capital means. Maybe something more ambitious, not just fighting for little houses. From my side, if the story has some kind of history it is more important, more interesting… and it doesn’t matter if this doesn’t mean anything to this generation. You have some kind of connection through time. This is not formalistic. It is a sort of foundation. Not just an idea of one urban planner.

At Metelkova [former barracks near the train station made into hostels and youth cultural center] you can hear great lectures – retired people who are really old but really smart. I said why not make a mobile roof, to protect from the rain to make lectures outside anywhere. Why not spread Metelkova, to be more open and fresh. I like this idea just to have a walk and at the same time you can see twenty people sitting and listening.

Knowledge is much more important than building something. You can send SMS around announcing lectures. In Philippines they brought down the government using SMS. Using sound [would also be] really excellent. In Ljubljana there was once a project that when you came to some building suddenly all the cell phones started to play some kind of music. This is possible. I think that Mobitel is this kind of company that may [sponsor projects like this].

No one really talks about POT at all. Maybe the history is still too strong. Talking not about the history but more about what will be the future would be useful. This open university or events or getting lost on the path, this kind of thing… different kinds of things from monuments.

Sasa Maechtig

Christopher Alexander returned to the past, but he made it more sophisticated and made recipes for designing the environment without forgetting human behaviors.

The problem of POT is that it is disconnected in certain parts and it’s difficult to make a circle. And the city administration should take this project more seriously and do whatever is possible to connect it. It's too complicated. Last time I tried to go around I got lost!
I don't think its historical meaning is important. It's important to protect the urban design elements. If you look at other parts of the city you see that it is not important to know the historical background. The Napoleon column for example. It's just what it is. Most people enjoy POT simply as a nice environment, not only for recreation but also as an attraction – the beauty of the view, etc. It has a story, and all good architecture or part of the city has a story, and that's why this part of the city is precious because it has a story inside. But on the other hand I look at this fact as something that need to be maintained because it's so beautiful. It lifts you.

When somebody calls you and you take out your mobile phone you fall into a kind of trance. You are in a different world and you don't see anything around you. But after that talk you land softly on your city ground again and you have different connections with the people around you. You just "click" from one situation to another. And you use technology to improve your advantages to be in the city. Being in the city gives you the chances to physically connect to people, and I think we enjoy this advantage to be physically mentally and virtually connected to people who are on your menu!

Marija Jenko

I remember when we were doing this POT competition and we wanted to make a big accent in nature as a big metal construction. It was like Tatlin's construction made of sticks, to my point of a view a nice structure was formed, and painted red, a little like Tschumi's constructions in Parc de la Villette. When we were studying, this Tschumi project was much discussed and this red was modern at that time. This suited the idea of our towers to be all red.

This idea of landscape planning was really new for us. We did a lot of compositions with trees. As I said, I see architecture as a sequence of frames, and also here you need this sequence and that's how it was formed. What is the accent…how you enter, what happens when it curves. We also thought about various surfaces: plants, grass, tress, what kind of trees, but in a city planning way.

We made a whole hierarchy of architecture elements, from surfaces and signs to more three dimensional and visible elements. That's how we came to these big monuments. Without these monuments the hierarchy is broken and you don't have the accents that would be needed.

POT will never be forgotten. It has somehow merged much with the city. It has been neglected. Maybe sometimes it's better to be neglected than to put something ugly. But I miss those gateways a lot, I must say. And the signs should be put back properly. I think POT is loved by people. It's inhabited!

Davor Gazvoda

You don't have to invent a new Path, it's there. And when you connect it you get this very heterogeneous situation with all this… it's changing all the time. It's even different in a few sections because it depends which way you go, because you get completely different views. You may see Alps on one side and marsh on the other, so it's about looking for the best spots on the Path.

Koželj designed a set of resting places with benches and even pergolas, and other designers considered the Path a good starting point for open space design. Now, with changes of ownership, many were abandoned. Maintenance is the biggest problem. After reprivatizing, it was never clear who should pay for maintenance.

Continuity is only really important on May 9. It's really about certain sections that are more beautiful than others. There are a lot of visitors who come, they walk dogs, and there is no place to park. We need
entrances to the Path, because nobody is really starting the walk in the
city fabric… then there’s no problem. But they drive from urbanized
areas to other parts of the Path. We should get some projects to build
parking! We need that, because on nice weekends, you find cars in the
forest! We can use the Path to expand the landscape areas in that areas that
are good for that…part of the urban green system and a good physical
connection.

The Path is crowning evidence of what a persistent landscape is. It
remains in the same form regardless of the reason for its origin. We lost
the reasons, but it is still in the same condition and it is even used in a
different way now.

The first sequences of the Path you should address is where the Path gets
lost, more or less. Regardless of the solution, should it be implemented
for the whole Path? Probably not. But in the urban areas there are a lot of
problems. Personally I would rather have technology [as we talked about
in the interview: Wi-Fi, projection, etc.] in the urbanized area.

U: We don’t have a city wall to preserve, so we found another way to
mark the city. It’s a demanding project. It’s not so easy to organize this
amount of land. And to put that much money in a project anymore. You
need a big initiative, a big political idea, you need brigades to come build
it. It's this whole spirit that is lacking now. The POT is site-specific. It
should stay as it is, just maintain it.

T: Young people don’t care [about the history]. They just use it.

U: We are all so eager to take the monuments of the past down, but we
don’t put up new ones. The same happened on POT. But nothing
replaced the monuments. There is a potential to say that a part from point
A to B is a forma viva for student work at the end of the semester, and
another section for land art. And then we come to the urban part of the
city and let’s make an Amazon forest there or something! So you invent
these different situations and different characters.

T: But it’s already there! Why should you do it? You can make these
things in other parts of the city.

U: Yes but you know how many people walk there and you know how
many people you will address. The POT "wants" to be all the same
character, but it cannot be the same, so it ends up different. They just
paved some POT and people came; make it better and even more people
will come.

We were born here and it was there forever, just like another street or the
castle on the hill. You know the background, these black and white
photographs, the constructivist structures, but it doesn’t really mean
anything. You don’t really question it.

Ljubljana is actually quite beautiful. Outside the city center is what I
associate with Ljubljana, and this is like a blob, something which is not
formal in any way. Totally chaos. Because planning has failed. But I don't
think this is for the worse. There is quite a bit of research on the gray
areas in Ljubljana, not from the urban institute necessarily. I am very
proud to be a Ljubljana citizen, because there has been an upsurge of civil
initiatives. People can be and are very articulate here.

I think the Path is one of the most successful projects in the last 20 or 30
years of Slovenian history. It's very beautiful because it's not like an
object. I was never sure what to do with it because it fulfills all the
requirements of a monument: it venerates, it educates and it’s beautiful by
Ana Kučan

The POT also needs space around it, to give it visibility…especially since some of the neighborhoods it passes through (green wedges) risk being filled up. The original urban plan of Ljubljana capitalized on the hilly configuration and marshland and exaggerated the already developed star shape of Ljubljana with an urban planning concept. I agree this area should be developed, since agricultural land has no more value here, but with some respect to the space around the Path, because it carries a piece of more recent history. If you let it be in the future, the POT will certainly act as a very attractive and very comfortable, accessible recreational area which happens to be linear and happens to be a circle. But without history it's a bit poorer.

I think it's good that we get rid of the ideological message. I think it's a great idea that instead of building a monument, you know... in the seventies, which were an "iron age" in Yugoslavia, people were clever enough to build a public landscape!

If we can keep the whole circle then I think we should. Even though on a daily basis most people don't use the whole thing, it's worth preserving the whole thing because when you decide to follow it, it takes you through places you wouldn't otherwise go. This unfolding of the unknown that is suddenly presented to you, and when you only do it occasionally, you see the change. These areas are experiencing big changes from industrial into commercial or from fields to urbanized areas, so it's worth preserving the whole structure.

I think there are ideas to get sponsors to plant trees around the POT, and so "adopting" a portion of POT by this action. A landscape cannot be persistent by itself. The best guarantee for its future longevity is the way people use it. You could introduce new programs for new recreation and needs that will only emerge in the future, you could locate them there, and the POT could serve as a means of access to them. I also think the POT could become a tourist attraction, not as bold as the castle or any other, but it's definitely forming the identity of Ljubljana, even though it is not so loudly promoted or acknowledged.

Barbara Goličnik

M: Actually, public space focuses on the physical aspect too much.

B: At the end of the day, urban design must suit people who live in the city. It think it's OK to do research and calculations, but at the same time it's important to check these general approaches. For me, urban design is everything everywhere! We are also talking about four dimensions. Time is very important. And sequences. I think that's the point of urban design.

M: Maybe I'm already poisoned by my studies, but "bottom up" really means people. Users. This is the only dimension which is really, really bottom up: perceptions and understandings, or needs. I think of it from the users' perspective. It's difficult to see it any other way.
The POT has to be identified better in the urban areas. What to do and how to do it should be different from in the open green spaces. I'm OK if it has different identities in different locations, or if it causes different feelings. You feel something here and something else in another part. But it still has to be one unit.

M: Dealing with POT as a way of establishing radial connections of the same quality, to the center, would also be important. I like the idea of involving the university faculties, but POT itself doesn't really have to change its identity. We shouldn't deal with this, but how to make these radial connections to enhance the "operation" of the POT.

B: Other parts [than the currently popular parts like Koseze] should be promoted and improved, but they should stay kind of rough. We don't need to polish them and make them nice. On the other hand, like with cultural and natural heritage, it has to be upgraded and up to date and go along with the current spirit of the society somehow.

This idea of involving the university is one idea, and also combining with local people is very good, but I doubt it could work out. How would they get involved? If you invite the school of architecture, they would put boxes along it. If you involve sociology, they would be happy to discuss things with people there! But what actions or events are possible?

As far as I believe, it has more to do with the fact that no one in this part of the world, not just Ljubljana, no one has an idea how important open green space is. If I compare it to Britain or other countries, this is something that holds us back and we can't develop the potential. There is no equality in Europe on this; there are huge differences. And it goes to this historical memory and passive experience. Five years ago people didn't understand anything [how to do anything on their own]. And now people are just starting to look around and realize the situation is not good.

I strongly believe we should put as many layers [!] on the POT as possible. If you make it alive, you would do many things at once. You would equip it, you would open all the possibilities for people to use it in many ways, you would put it on the map touristically, and you would make some interesting things for the identity of the town.

The POT does not have so much potential in the spatial dimension, but there are dedicated spaces [adjacent to it] to be connected, and spaces that come together with other uses…and those spaces that are not well designed have potential for that idea.

This would be a good idea like you say to involve the university, but I would also systematically call in all owners who have land alongside the Path and find out how to improve these in-between parts, and what they would like to do. I would also like to open the space to people who are already active, like this society. I would put up a website, I would try to involve younger people, I would do some design competitions, to put back the signs that Koželj developed, also the red stars on pillars were really crazy! I would put them back! I would never just leave it as it is.

Why can't we be proud of our history? People have to be proud of some things. Ok, we can be proud of nature or our economic success, but then again 2 million people in such a small place…there are these small "proudnesses", and you should build them!
CONCLUSION: THE MATERIAL, THE IMMATURAL AND THE THREE LAYERS

Summarizing the analysis presented in this chapter leads to a complex profile of understanding of the Path. The study of linear parks and hybrid urban/landscape spaces pointed to 6 characteristics: 1) autonomy (i.e. some form of identity) of the linear space; 2) historical context expressed; 3) variety of different ambiences, feelings, materials and views; 4) participation of different institutions and commercial entities; 5) democratic participation, leading to a bottom-up strategy for use and further development; 6) preservation or reuse of historical, pre-existing or natural elements.

Furthermore, the references to several conceptual prototypes reinforced these and yielded additional important potentials for complex urban open spaces: 1) an expressed conceptual organization or overlay, 2) "punctuation marks" (e.g. "follies"), 3) changing displays and interventions, 4) media center, 5) expression of remembrance, 6) avoiding aestheticizing memory with formalistic solutions, 7) acknowledging learning values and rethinking educational structures, 8) integration of adjacent disused architecture, 9) programmatic indeterminacy, 10) input from the bottom up by various users.

Finally, the contributions of the interviews has further emphasized and elaborated many of the characteristics listed above: 1) implementing an organizing principle as an overlay; 2) branding as a means of reinforcing identity (particularly for tourists and visitors); 3) narrative, as a means of integrating history and a sequence of spaces; 4) civic initiative and volunteerism, especially on the part of young architects and students; 5) integration of current communications technologies; 6) diversity of spaces along the Path, but with preservation of its unity and physical aspect as a complete circle; 7) importance of maintenance and continued use by people; 8) subtle interventions, rough and natural in character, not highly polished; 9) corporate and institutional sponsorship for maintenance and development; 10) involvement of businesses located adjacent to the Path; 11) open university; 12) pride.

Taken together, the above points constellate around three fundamental issues, each basically reflecting a core aspect of each of the three hypothetical urban layers:

1) The identity and persistence of desirable, important, even previously ignored tangible assets of the city, such as the Path. In the context described by Gazvoda (1996) and others (Kučan interview, etc.), persistence translates into use of such assets by people and the pleasure and understanding they derive from that use. A greater sphere of participation, and hence persistence, would evolve from investment (monetary and participatory) and shared responsibility, extending to institutions and owners of business adjacent to the Path (Simoneti interview).

2) Consideration of distinctive linear urban spaces in terms of the "space of flows" (Castells, 2002), or in the context of this thesis, in terms of the dynamic layer.

Our societies are constructed around flows: flows of capital, flows of information, flows of technology, flows of organizational interactions, flows of images, sounds and symbols... Thus, I
propose the idea that there is a new spatial form characteristic of social practices that dominate and shape the network society: the space of flows, …purposeful, repetitive, programmable sequences of exchange and interaction between physically disjointed positions held by social actors. (Castells, 1996:412)

Urban spaces characterized by movement have, in the modern city, taken over many of the functions of first, layer, static spaces as elements of urban function. Thus, time, motion and change (walking, cycling, driving, "life on the street" and all sorts of forms of exhibition and commerce) take their place alongside architecture and classically composed urban outdoor space as important elements of urban identity. From this dynamism, according to Johnson, new behaviors of residents may emerge.

Indeed, traditional cities… are rarely built with any aim at all: they just happen… They are the sum of thousands of local interactions: clustering, sharing, crowding, trading – all the disparate activities that coalesce into the totality of urban living. (Johnson, 2001:109)

For the Path, its movement-based experience, passing through various kinds of environments and neighborhoods, places it squarely in the dynamic layer as an analogue to the railroad, a precisely defined track linking heterogeneous environments and specific stopping points or events.

3) The city is a "test bed" for technology and a space of mediation of the real and virtual. While technology and the rapid development of networked and virtual "identities" via the Internet and other forms of electronic communication are creating worlds apart from the city, the fact that most users of these technologies are located in cities tend to make the city itself a laboratory for the merging of real and virtual urbanity. This then implies a virtual identity and role of the Path, a "presence" on the Web as well as a potentially important "ring" of communications and physical infrastructure: a sort of Philosopher's Walk of the third urban layer, an "open space" in all the implications of the term.

Once, the natural condition of cities was opacity; architects created limited transparency by means of door and window openings, enfilades, open rooms, and public spaces. Today, the default condition is electronic transparency, and you have to work hard to produce limited zones of privacy. (Mitchell, 2003:29)

Not only are electronic enhancements possible for uses such as tourism, but a major technology park is being constructed in Ljubljana that is adjacent to the Path in the western sector, near Vić (see indication on map in Ch. 5), for which the Path might be a potential adjunct, symbol of identity and connector to other such facilities or centers of research. The consequences for education, especially given the importance of the university in Ljubljana, are also notable, extending the idea of education out into open public space, as imagined by Cedric Price.

In the next chapter, various specific schemes of implementation of many of the above aspects are presented, particularly in the context of the theory of three layers. The premise here is that the Path already possess significant potential as a complex urban open space, resonant with all three layers, and it is of course the positioning of a space in balance in these layers that points to the definition of a viable, contemporary and persistent urban identity, in
present and future terms. This balance in the present context means addressing and activating the characteristics of those layers, i.e. in the development of a mature and varied urban lexicon. The use of technology is also proposed, deriving from the discussion of the influence that technology has on the perception of cities, to enhance certain functions in the third level, where urban perception is more subtle, personal and even ethereal, in that it increasingly incorporates a virtual image of the city in the minds of residents and visitors alike.

In the dynamics of urban life, new information quickly flows everywhere and the interaction of people and cyberspace increases. The balance of the immaterial vs. the material has become a pervasive issue in 21st century thinking, and decidedly also underlies any interpretation of architecture and urbanism, as attested to by the authors referenced in the first two chapters. Here the theory of three layers is important, since it in fact declares that the layers of materiality, transition and immateriality coexist, and that the city itself is becoming the result, as well as the host, of these layers. Each layer alone does not contain sufficient vocabulary to describe the city. The static layer in and of itself, i.e. what we would like to call the "real", obviously cannot suffice, for even though it is an expression of basic human behaviors (creativity, commerce, society, etc.) it fails to adequately "host" other, more dynamic, psychological, perceptual or philosophical needs and reactions. The fact that the layers not only coexist but deeply interact, as argued in Chapter 2, and the difficulty of capturing the urban organism in an abridged lexicon or metaphor, is what gives richness to human existence, and of course to cities. The city is the very mechanism that allows these layers to interact: it is big, ambitious, complex and ultimately a mirror of the enigmatic aggregate of human life. All great creative endeavors do this – traversing the material and the immaterial – and the city is no exception; in fact the city could be considered the zenith of human creative expression. It is only that its sheer scale and practical problems make it nearly unmanageable and definitely paradoxical. And with the battle of the material and immaterial, of politics and money, of rich and poor, of incomplete vision and lack of the means of implementing most plans, the city has fallen into too many of the "wrong hands", and planners may be nearly powerless to do anything about it.

In human beings, there is most certainly perceptual machinery that brings novelty to the forefront and that pushes the familiar into the background. Novelties attract attention, but it is only a matter of observation time and mental processing until the brain has understood and incorporated them, shifting perception into the backroom of memory. Thus memorials turn into mere statues, buildings lose their original purpose, styles mutate, and the former visions, the immaterial, is frozen into the material. The Path is also an example of this.

A foreigner's or other outsider's perspective can re-awaken the city and its archive of material, sometimes to remind us of what we once deeply appreciated. As regards the Path, despite its tragic origin and despite the political baggage heaped upon it, a great deal of this burden has faded in memory, diluted each time its story is passed from generation to generation. Thus we are told to accept it "as it is", as a material reality. And thus it flattens into a static first-layer reality. The point of the analysis in this chapter is to begin to recover the full urban lexicon.
and to reinterpret "take it as it is" as "take it as it can be", and transform the immaterial into the material, and vice versa. Otherwise, the Path just becomes a long and imperfect green swath, a green peculiarity.

The city is psyches, not only materials. And we are just at the beginning of what will likely be a long period of transition wherein the virtual gets more integrated with the physical, until such time that the layers are so thoroughly mixed that they are indistinguishable. In that sense, this thesis is a contribution to a collective manifesto and a reminder to keep the door open to ways in which the psyche and the material can interact. The Path is one example. Even when the use and recognition of the Path fell to its lowest level in 1991 and its very existence was threatened and maintenance virtually eliminated, and when symbolically the masts that had come to represent it were torn down, a number of people rallied, their psyches obviously shaken. It should, however, not only be adversity that promotes participation, but something more positive. How this might be implemented is the subject of the final chapter.
CHAPTER 5
Synthesis: Wireless Ljubljana (Brezžična Ljubljana)

The act of walking is to the urban system what the speech act is to language or to the statements uttered… It thus seems possible to give a preliminary definition of walking as a space of enunciation.

-de Certeau, "Walking the City" (1984)

At the dawn of the twenty-first century, "master planning" is an obsolete design method. It was dominant in the twentieth century, closely allied to scientific modernism, and intellectually responsible for the much-hated sterile concrete deserts which characterized urbanisation in the age of totalitarianism and dictatorship of the bureaucratariat.

-Tom Turner and David Watson, "Dead Masterplans and Digital Creativity" (2000)

[The Path] is just an urban element which should be maintained, not because of history, but because it is physically a precious part of the city. And it’s here. If you have such parts of the city you should maintain them and care about them. Simple fact!

-Saša Macchtig, Interview

The interactive relationship between the society and the space seems to be more important than its physical appearance. If the Path takes on a permanent, even fixed character, it will not be so interesting anymore, and its active role in the process of shaping the entire urban form will be decreased.


The PROJECT would be a creator of unexpected outcomes.

-Cedric Price (in Steenson, 2007)

INTRODUCTION
The speculation of the present thesis is that cities are changing under the influence of technology, leading to a sort of "mental urbanism" and turning away or going beyond the standard approaches to understanding the city, and perhaps more importantly that people in cities are also changing with this same influence, meaning that the thrust of urban design strategy must at some point take these deep changes into account. Thus the purpose of Part 1 (Chs. 1 and 2) was to examine the identity of cities and the perceptions of inhabitants, proposing a theory for understanding and categorizing urban dynamics in terms of contemporary technological trends and likely forecasts of the future. Part 2 (Chs. 3 and 4) took another direction, a more tangible one, in the form of a presentation and analysis of the the case study on the Path of Remembrance and Comradeship in Ljubljana, from numerous viewpoints, particularly as an example of a unique urban treasure that is already resonant with the theory that city identity operates on three specific and interacting layers. Now, at the conclusion, the task is to somehow reconcile the theory more concretely with this element of "urban reality", i.e. the Path. This synthesis has two parts, the first being a further discussion of the issues raised, while the second is an outline proposal, a number of schematic guidelines actually, to embody the synthesis as a series of interventions.

If architecture and urban design projects are accepted as experiments, then it also must be recognized that a project is also a form of synthesis, in the vocabulary familiar to architects, a merging of research with new ideas, with intuition and all the skills of the designer, expressed in built form (as well as in "virtual" and technological intervention) and manipulation of the
environment. Not only does the Path represent a selected case study that, as argued in the previous chapters, attempts to illuminate the theory presented here, but it is also a real "testbed", as the analysis in Ch. 4 claimed, for the application of ideas and proposals for preservation and development, for the Path itself and as a possible paradigm for cities in general. This extrapolation has been expressed as "expansion of the urban lexicon". It should also be noted that experiments or research projects are expected to end with a conclusion, especially if the results lead in an unexpected direction. In the field of architecture or urban design, however, it is more difficult to state results definitively, given that the parameters of any such study are complex, and moreover, not entirely quantifiable. Every architectural project or urban intervention is an educated guess, the consequences of which only manifest over a long period of time, as the building begins to fulfill its intended function, or as a public space begins to generate its intended use.

In the case of urban projects, in view of their large scale, cost and complexity and of course their impact on people and the city fabric, it might be wise to first ask: "Why do anything?" One need not look far to find examples of the failure of architecture and urban design to satisfy the needs of cities and their residents, of the pollution of the environment and destruction of nature, and of the dominance of all sorts of urban development motivated solely by economics and an inflated interpretation of the idea of "growth", while at the same time infrastructure deteriorates and local features of cities are homogenized by globalization into commodities or, in effect, follies. A better response to cities ought to include more active civic participation and greater sensitivity to the impact of projects (not to mention addressing pollution, healthcare and other critical issues that cities are party to). In fact, the unique "resources" of individual cities are precious, and along with their preservation a more sophisticated idea of "development" has to evolve. Therefore, collective civic responsibility is a mechanism for making cities actually work to the benefit of residents and as a crucial element of culture, and indeed, civilization. As Michael Sorkin passionately writes:

As both traditional and contemporary urban culture become more and more alienated from both experience and nature, the singularity of new cities will more and more rely on artistic invention as a point of origin for self-expression… New cities must be born with challenging, beautiful, functional, and sustainable characters, engaging their citizens at once with the promise of both a life well-lived and with a thick texture of annealing points to which local identity can attach itself. This is no luxury. The modern culture of the minimum that informs so much of our urban ideology… must be opposed by numerous acts of inventive love. Universal architecture is the enemy of the most important of our universal values: difference, tolerance, sustainability, and the beautiful. (Sorkin, www.terreform.org, 2007)

With such an urgent and emotional call for the engagement of people in the future of cities, what can we say about the "will of the people" to attain this condition, especially in Slovenia? The analysis of the very theory that attempts to characterize the detachment of people in cities as they depart further into their own "virtual" technologically enhanced worlds, also shows that the perceptual layers are not disconnected, as the city is capable of mediating between all three. On the other hand, we have seen in several of the interviews presented here that Slovenia is still in a complex crisis of national and individual identity, only 16 years after a the collapse of a socialist system that had defined those values in a different way. Is it
really possible to revive the motivations that led to the extensive volunteerism and participation of young people in the building of the Path, and put that same energy into the Path's use and development in the future? Or will consumerism, apathy and the irresistibly seductive pull of digital media lead to even further estrangement? Surely the stronger the vision for the Path, given that it is a feature that has been shown to be generally prized by residents, the more likely the energy to maintain and exploit this unique resource is likely to develop in a positive direction.

The history of architecture and urban form, reduced and oversimplified to its formal task, has to a great extent been about how to organize the urban landscape, buildings and the space between them. The façades of buildings that surround public spaces supply the wallpaper of the city's "living rooms", while at the same time, and this is fully obvious today, the city welcomes more and more visually dramatic objects that simply draw attention to themselves. It is "Lynch meets Venturi", trapped somewhere between the first and second layers, the attractive, character-giving skyline that Lynch valued, the dynamic form that Arnheim talked about, along with some of the glitz and entertainment promoted by Venturi. As the newest elements joining the city's building stock become increasingly showy and ego-oriented, it becomes correspondingly more difficult to preserve or support or integrate new buildings into the kind of pleasingly homogeneous fabric that characterized earlier times and that formed the core of the urbanist's palette. And as some designers ponder how to do that, others are indeed wondering if the conventional city is even necessary or relevant any more (Rhiengold, 2002 and Lerup, 2000 for example). And if physical orientation, the fundamental pleasures of open space and the human need for a quality of life are frustrated in cities, then another approach is surely necessary: to link elements in time, to mark a larger sense of orientation (sun, compass direction, other cities) and to use new tools to supply the desirable experiences that are uniquely urban and that generate the sort of "inventive love" that Sorkin pleads for.

It may be impossible to truly answer the above questions or to propose a bona fide formula for the Path or for cities in general, and thus the goal of this study must simply be stated as a manifesto combined with a guess, yet another analysis added to many others that intends to reinforce the precious heritage present in cities and the need for an expanded methodology of expression of values in urban design.

THE PATH AND THE THREE URBAN LAYERS: DISCUSSION
While the theory of three layers functions as a metaphor, there is no doubt that the content of these layers does exist: we obviously see and use the static layer, we move about and entertain ourselves in the second, and drift into more distant mindspaces in the third. Manifestations of the third layer abound, and it is really our collective task to come to terms with these manifestations. Recognition of technology and its mindspace has been the subject of various large-scale initiatives, many originating in the EU as it contemplates its own identity under
increasingly pressing globalized conditions,\(^1\) also evident in Slovenia in a series of measures
designed to thoroughly integrate information technology (Information Society).\(^2\) When both
business AND government embrace such a diffuse notion, this is certainly one form of
concrete evidence of its reality. And yet computerization of government, enhancement of
business with computers and the myriad conveniences of other communication technologies
is not only what this about. The more interesting question really concerns the "unexpected
outcomes" championed by Cedric Price and how people's changing perceptions, behaviors
and thus needs, can be addressed in cities. The potential exists, therefore, for considering the
Path in this light, as established by its size, complexity and uncertain future development.

One point of view that has emerged from this study, from thinking about the identity and
perception of cities and from the history and situation of the Path itself, is that the Path
already exists in the three layers, and moreover that it passes through and conjoins these
layers as a powerful and in a sense unexpected urban element. With its designed and
"persistent" green spaces, with the motion it generates along an infrastructural trajectory, and
with its views of nature and city, contemplative spaces and history, as well as its controversy,
the Path is inherently "multidisciplinary".\(^3\) Initiatives for its development, however, have
mostly been about the first layer only, the traditional approach of urban design to the
concrete reality of the space. While comprehensive in scope (treating the whole 33-km trace,
landscape strategies, signage, maintenance, etc.), these proposals have largely gotten nowhere,
either because of costs or politics, or the demonstrated resistance to change expressed in the
society (e.g. interview with Maechtig and Vrhunec). Further proposals are now in the works,
stimulated by Janez Koželj's recent appointment as vice mayor in charge of urban projects.\(^4\) A
new proposal for a second, landscaped "path", this time along the Ljubljanica River (as
described by Simoneti) has been made, further grounding the typology of hybrid linear
urban/landscape space. It is interesting to note that this would be in effect a "second-layer"
intervention, i.e. recognizing the importance of motion as an attractor for dynamic
participation in the urban landscape.

The third layer has also been tacitly present in the history of the Path; with its role of
"remembrance" and "comradeship" it historically intended to activate memory, thinking and
symbolism, not normally elements of ordinary urban green spaces. Unfortunately, it failed on
that level, as the highly politicized symbolic elements were removed and the function of
recreation was dramatically heightened and pointed to as a positive but decidedly neutral
characterization, almost totally in order to cover the foundation of its past with a more
palatable overlay, as Ch. 3 points out.

\(^1\) The Lisbon Strategy for one, established in 2000 by the European Council and "aimed at making the European Union (EU) the
most competitive economy in the world and achieving full employment by 2010", and at "preparing the ground for the transition
to a competitive, dynamic, knowledge-based economy. Emphasis is placed on the need to adapt constantly to changes in the
information society and to boost research and development" (http://europa.eu/scadplus/glossary/lisbon_strategy_en.htm).
\(^2\) The Ministry of Information Society is now incorporated in the Ministry of Higher Education, Science and Technology as the
Information Society Directorate (www.vlada.si).
\(^3\) Borrowing the term from the area of education and curriculum development.
\(^4\) *Ljubljana* magazine (Glasilo Mestne občine Ljubljana), April 2007.
The interviews have clearly shown (Kučan and Goličnik) that people are capable of "bonding" with urban spaces, much as they do with "home", or identify with or appreciate specific buildings; the third layer, in which people form virtual attachments in networks and "presence" largely through technological engagement, has the potential to strengthen and deepen this bond. More than planting new trees or restoring stone monuments, the future development of the Path must surely include the second layer, in the form of infrastructural connections (as expressed by Nikšič and Gazvoda) with other parts of the city, with increased use and hence dynamism, perhaps involving promotion of the use of the Path by tourists, and the third layer, where a "fog" of information technology and wireless communication could enhance it without limitation, without physical restriction, and in a sense also constitute virtual infrastructure, i.e. connections and virtual presence. People would therefore "learn" and create a bond with learning and information as they also find a conceptual environment conducive to contemplation of their own perceptions and private identities and formation of all sorts of extended communities, independent of place. From this, the theoretical layers morph specifically for the Path into: 1) people in place – program and green; 2) people in motion – infrastructure and recreation; and 3) people in thought – the information society, transparent but present; tradition, history and learning; and collective mindspaces.

If the Path is inherently multi-layered already, it would take its place in a sort of lineage of new urban layers blanketing and subsuming the previous ones, as new technologies make this possible and alter the behavior and perception of people. Thus the Roman Wall, which at first defined the identity of Ljubljana's predecessor settlement Aemona, was overlaid by the fully expressive Baroque town, transformed by earthquake into a much more heterogeneous architectural patchwork, and, as changing politics altered the national identity, and now as globalized technology subsumes all the concrete reality into a complicated amalgam of individual stories, transmuted into present-day "wireless" Ljubljana. The city started as an idea with real needs, developed into a mechanism of trade and protection, acquired a picturesque backdrop, then cinematic dynamism, then a marketable image and now a conceptual and virtual one with various technologies of structuring the city, transforming into technologies of portraying it and activating it. Likewise with the Path: its starting point ought to be wrapped into its current narrative and function, rather than being forgotten or replaced.

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In the technical sense of wireless communication as well as in the poetic sense of "unbounded", i.e. with all layers populated.
Another way of looking at the Path is as a kind of "living museum". With its origin in war and occupation, the Path tacitly gave the city of Ljubljana a historical identity and later acquired a related identity as a political and memorial symbol, all of which left a number of artifacts at various scales (the trace itself, along with bunkers and large and small memorials), despite a willful transformation into a recreational resource as "neutral territory", shifting to a celebration of the Slovenian tradition of fitness and outdoor recreation. The idea of active exhibition has not been exploited at all, given that many of the former artifacts were destroyed or removed, but also given budgetary shortfalls and furthermore an ambivalent and shifting political scenario, particularly surrounding independence and the wholesale rejection of the past. Nevertheless, the idea of exposition could be taken much further, as a part of a general concept of the Path as an educational resource, or "open university", particularly with participation from various institutions and museums in Ljubljana, especially the City Museum and the National Museum of Contemporary History. In fact, a tradition of exhibition itself permeates the visual culture in this country, with not only galleries but also student exhibitions occupying a place of traditional importance. A second tradition exists in Slovenia, which could also be considered a prototype, that of the so-called "forest learning path" and the idea of learning in nature, primarily with the identification of tree and plant species. Technology, and the ability to transmit information wirelessly to mobile phones or other portable electronic devices (the newly released Apple iPhone being one example), could activate the exhibition and learning aspects of the Path and the city. Ljubljana's enormous university, especially in proportion to the small size of the city, and Slovenia's nearly 250 registered museums provide ample background for development of the Path as a unique site for exhibition content and technology, not to mention a unique and unexpected venue that would stand out among the few such linear "monuments" in Europe (e.g. Berliner Mauerweg) and that would support Slovenia's aforementioned reforms aimed at turning the country into a technology-savvy, actively wired network and center of innovation. The idea of "Wireless Ljubljana", then, could be extrapolated to promotion of the country itself, its future as well as its heritage, internationally via the Internet. While cities have been touted for their cultural patrimony, architectural heritage and the attraction of their places, monuments, collections and natural features, the idea of the city as an educational mechanism itself has rarely been mentioned, and as such, it becomes a potential new guiding principle in urban design, and most certainly for the purposes of this case study.

Finally, the identity of the Path, like the identity of the city itself, in the most simplistic terms is really what people think it is, aggregated and filtered through the mechanism of their own perceptions. No serious development strategy will work without participation and without some measure of the dramatic (and important) "willing suspension of disbelief" about the

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6 As developed by Eco (1986), see Chapter 4.
7 Mestni muzej Ljubljana (www.mm-lj.si); Muzej novejše zgodovine Slovenije (http://www.muzej-nz.si)
8 For examples see http://www.pohorje.org/poleti_ENG/default.asp?id=454 and http://www2.arnes.si/~osngso3s/forest/our_day_in_nature.htm
9 www.apple.com/iphone
10 See footnote 9 in Ch. 1. The willing suspension of disbelief allows participation in the city as a form of urban drama, and as such becomes an important component of the "public will".
CIVIC REALISM REVISITED

Returning to Peter Rowe's concept of civic realism, essentially focused on the static layer, there would appear to be an opportunity for redefinition of the concept in terms of dynamic and hyperdynamic urban activity in Ljubljana, and in many other cities as well. While Ljubljana architects bemoan the fact that "nothing ever happens" (see again the interview with Maechtig and Vrhune), meaning that architectural and urban projects tend to be bound up in endless criticism and stasis, one cannot say that there is a lack of urban activity. The number of exhibitions, concerts and a variety of other activities is impressive given the small size of the city. The same holds true for the city in motion, as on any given day the number of cyclists and pedestrians in the city, not to mention drivers, gives the city a dynamic quality. Factoring in the gigantic BTC shopping center and electronic displays on Slovenska, and numerous people out for recreation on some sections of the Path, leads to the conclusion that Ljubljana has a well developed second layer. A possible explanation for the stasis of architectural projects is that the culture of private real estate development is not mature, or that the city budgets are too meager and the government lacks a clear vision of what might or should be done. The interviews have amply pointed to the lack of public interest in civic projects, a component that Rowe held to be necessary for successful projects.

...the civic realm – roughly speaking – lies somewhere between the more strictly public and private aspects of our lives, although it tends to be produced by both. As much as anything, it derives from networks of associations within society, many of which are informal. Consequently, the term civic is usually highly correlated with the idea of civil society, which as we have seen is also neither strictly public nor private. (Rowe, 1997:203)

Indeed, the private aspects of city life are increasingly determined by communications and information technology. And this is also how networks of "informal associations" are being formed and maintained. Both Johnson (2001) and Rheingold (2002) have attested to this phenomenon. One could argue, then, that development might take another direction, towards "civic virtuality", and here is where the Path could serve as an interesting example, in the hyperdynamic layer, the mindspace of the public. Additionally, the possibilities for lower budget projects than major architectural development initiatives would then exist; providing a wireless network along the entirety of the Path, for example, or various modes of transmitting information content, for entertainment or education outdoors, might represent interesting potential for the city. When Rowe claims that "realism, at least in aesthetic terms, is also concerned with a public nature of things often distinct from the state per se, and excludes as legitimate purely subjective responses" (Rowe, 1997:205), this situation could be modified to say that virtuality is also concerned, in aesthetic (and sensory) terms, with the public nature of
things as completely separate from static, conventional state urban projects, and specifically includes all kinds of subjective responses and tacit support of the possibilities of the private realm! Here may lie some potential for bottom-up initiatives, as well as the activity of institutions and companies, in the relative absence of, and autonomy from, high-level planning, zoning and building codes and public administration.

PRINCIPLES

To approach the future of the Path requires a vision, in addition to a synthesis of the sort of information referred to throughout this thesis, and there is surely the viewpoint of residents and not only "experts" to be taken into account, not to mention what is to be learned from examples of other linear parks. All this must be combined with the possibility of linking and creating social space, and in fact shaping a new breed of city dweller, not just mentally residing in another disconnected virtual world, as we sometimes think, but fully inhabiting all three layers in an integrated way. As such, however, and in the spirit of speculating about the identity and dynamics of cities, this chapter culminates in a series of reasoned proposals for the Path, along with hypothetical interventions that highlight important issues. The supposition is that these interventions and issues can also be adapted to cities in general.

This final section begins with several principles:

1. Openness, variability and lightness in programming functions. It is obvious that the Path is a sensitive organism, as clearly seen in the interviews. It is useful here to refer again to Alexander's premise in the Oregon Experiment (Alexander, 1975) in saying that the Path cannot be considered as a megastructure, but rather must be thought of as a series of experiences and opportunities to be dealt with specifically and individually, with no one intervention necessarily dominating any other.

2. The Path is certainly more than a linear park; it has infrastructural potential as a connector and organizing element. Proposals have been made to integrate the Path within the city network of green space, but this network does not really exist at present, so creating it is one possibility. Yet this ignores other sorts of connections, functionally for pedestrians (in much the same way that the ring highway works now) but also as an "information highway", linking various institutions and industries conceptually, technologically and physically, along with its role as recreational and tourist experience (an element of identity to be sure).

3. Civic realism is exactly that – "real", and yet this thesis has endeavored to show that reality, urban reality, is a much larger issue than normally addressed by city planning. Given that most proposed projects for the Path have failed, it is also true that other sorts of projects, in the second and third layers, might be less costly and more in tune with what residents and users need, want and understand (entertainment, escape, community and identity), and even to a certain extent might be able to independently implement.

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The term "programming", used in the traditional sense of architectural program, or program functions, begins to take on another common meaning, that of computer programming or software, and herinafter, both meanings are intentional.
4. Technology could potentially redefine civic realism for the Path. If the Path does in fact exist strongly in the third layer, then its potential ought to be exploited within that layer, i.e. with Wi-Fi wireless Internet, SMS, mobile communication and GPS, not to mention technologies which may develop in the future. These technologies could also support the Path as a tool of education, and certainly enhance the experience of the Path, for residents and tourists alike, as a place to work (on laptops and mobile devices) and explore (specially equipped tourist bicycles, GPS tagged photography, sound and historical information).

5. The full range of the urban layers should be exploited, including some normal built elements of the static layer but only to a limited degree, otherwise the Path will be "urbanized" in the same way as any other urban space, and thus become homogenized and incorporated without a separate identity (as just another green space). Features from the second and third layers should be emphasized. The "genius loci" or spirit of the Path is complex (and tantalizing), and solutions and interventions must be diverse, crossing and combining all three layers.

6. Previous proposals for the enhancement of the Path merit implementation, at a minimum for maintenance, but also completing the upgrading of the physical parts of the Path (more trees, replacement of monuments, walking surface, etc.) in the context of green areas of Ljubljana. This point derives both from planning initiatives proposed by MOL, as well as in documents such as the planning guideline POT: najve ča nãrtovana javna zelnã površina v Ljubljani [POT: A Comprehensive Plan for Public Green Space in Ljubljana] (Krajnc et al., 2006).

**WIRELESS LJUBLJANA / BREZŽIČNA LJUBLJANA: A RING CYCLE**

Author's conception of a new logo for the Path, capturing the symbology of a ring, interrupted by a hill (Golovec), shaded to imply depth (the gradient of black to white). The hill symbol also points to the sky, where the hyperdynamic city layer, and in a sense human freedom, knows no bounds.

In the sections that follow, specific proposals are accompanied by illustrations, some taken from the Internet and some fabricated digitally, that attempt to bring the projects to life. This

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12 This is a play on words: the technological wireless network and wireless in the historical sense of Ljubljana no longer imprisoned by wire. The term "ring cycle" is explained later in this chapter.
is in line with the very idea of identity, going far beyond the notion that "a picture is worth a thousand words" to the fact that ideas committed to paper in specific form generate a sense of reality. In this vein, a hypothetical website for the Path, as depicted later, suggests a future reality that can actually be imagined as if it were real. This principle is fundamentally the basis of the third layer and why imagined realities have an equal role with the reality we think of as "concrete". The computer is the primary tool for this merging of perceptions, particularly with software, such as Photoshop, that permits in a sense the fabrication and transformation of the world. The idea here is to propose a range of interventions for the Path, and to integrate the characteristics of the three layers in a diverse offering, to enhance the identity and perception of the Path as it meanders concretely and metaphorically through its 33-km-long collage of urban landscape. These are not intended as specific proposals in terms of design, but rather as broad strokes that capture the spirit of the Path in long-term development and "crystallize" the proposed content.

The Path is already considered by many to be a monument and is visually lodged in some segments of the landscape with its signature rows of trees and to some extent its signage; in other areas, however, it is much less solid, and these areas are most likely for enhancement. In order to address concerns that the Path should not change too much, if at all, the scope of the interventions should include and perhaps even emphasize the "virtual" while at the same time respecting the "real". In this manner it becomes more difficult to define "place" in the classical sense; however, if as theorized the city is equally a mental construct, certain tools and a larger range of possibilities hypothetically can broaden this definition.

In a mathematical expression of "inhabitants of Ljubljana per kilometer of the Path", each person represents .00011 km, or 11 cm. And while no one person would ever claim such ownership, it is very important that somehow everyone is represented in terms of the possibilities, a variety of experiences and the formation of a multitude of personal identities.

It is also proposed here, given the argument that the Path already hosts the three urban layers and that the Path is linear, time-based and not the same as a static space, that the experience of the Path is a kind of "ring cycle" to be repeated again and again, dynamically, making new discoveries, with different impressions and forming new perceptions each time. The pleasure of repetition is a basic and yet not completely obvious aspect and deserves to be mentioned here. It is the very reason that people can "experience" architecture (of home, workplace or public buildings) and repeatedly listen to the same song or piece of music. The denotation as ring cycle does not end with repetition, but also places the Path concentrically with other rings around Ljubljana, as mentioned in the previous chapter, primarily the ring highway (and to a minor extent the partial inner ring road).

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13 Referring to the calculation made for the Swiss Way (see Ch. 4).
14 To make a blatantly provocative reference to the operatic work of Richard Wagner and the succession or interweaving of musical stories, performed again and again, in the multilayered vocabulary of opera.
15 See map later in this chapter.
Whatever approach is taken, the Path needs a firm identity that people can relate to and a number of means of participation to support that identity. One important innovation could come in the form of sponsorship, or the specific allocation of sections of the Path to groups or institutions as part of the toolset of participation and for the purpose of distributed responsibility and thus "ownership", building on a tradition of volunteerism that led to the construction of the Path in the first place. Other toolsets are proposed to give the Path some amount of vibrance and comprehensibility, all as part of an overall framework. This resonates with the insightful comments of planner Maja Simoneti (see interview) about the need for a framework of comprehension for any big urban plan made up of individual projects.

TOOLS OF ORIENTATION

Given the historical, architectural and cultural riches of cities, large and small, in Europe, it is amazing what the average person on the street takes for granted. Occasionally, there are signs and plaques indicating historical significance, but these are not generally an active part of what we have come to know as "street furniture". The city is to some extent an unrecognized or "unvisualized" network of place and mobility. The images of pavement, paths, bus routes, traffic signals occur in the minds of users as functional information, usually without a deeper sense of the structure of which these routes are a part.

If the street in fact functions as dynamic, uncurated public museum, the design professions (architects, planners, industrial designers, graphic designers and media artists) might well focus their collective attention on the opportunity to "curate" cities, to visualize for preservation, understanding and enjoyment, the depth of information contained in city spaces and along lines of movement. The collection of street elements should function as a sort of "macroscope", a means of revealing by observation. Tools of orientation are meant to let people see the environment and network of the city differently. This, in fact, could be stated

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16 Again, the Swiss Way is a related conceptual prototype, in its clearly stated representation and involvement of all 26 Swiss cantons, proportionate to their size, and democratic participation, expressed however superficially that each person in Switzerland represents 5 mm on the route. (http://switzerland.isyours.com/e/guide/zentral_schweiz/swisspath.html)
as the goal of a dynamic museum, with devices and furniture defining small private moments in a public space.

The primary means of orientation on the Path is the signage system developed by Koželj in 1984. Historically, the 102 stone pillars, many of which still line the Path are examples of tools of orientation: apart from their value as memorial symbols, with the familiar barbed wire intaglio symbol of "wired Ljubljana" (Appendix 2, M11, F5), they also recur in an unpredictable rhythm, so on the Path one comes to expect that there will always be another one to be counted, observed or even searched for.

The problem that has often been mentioned and which is obvious when trying to circumnavigate the whole Path is that the signage is insufficient for orientation: to put it bluntly, one gets lost. Legibility could be much improved simply with more signs and clearer signs, especially when the Path has a point of discontinuity, such as at street crossings. It must also be said that there is a positive aspect to not having simpleminded or foolproof directions, since there is a challenge and in fact an invitation to explore a trail that is not immediately legible. One could argue that this detective work is an engaging form of interaction, and yet on the other hand, curiosity must be rewarded with an unexpected view or place, and at a minimum eventually finding the way. At present, this is impossible in some areas (Bežigrad in the northern industrial area of the city, and to the east where the Path goes outside the ring road). Even long-time residents of the city cannot find their way without a map (Maechtig interview).

Recalling the current tools of orientation of the Path: stone memorial markers, some of which are located as resting spots like this one (left), and signboards with a map and the familiar POT logo (right). These are defining moments for the identity of the Path in terms of history but not effective enough in terms of orientation orientation. New signs might be desirable, but designers would have to be careful not to clutter the Path with endless signage and street furniture (photos by author).

The issue, then, is whether the toolset of orientation can be expanded further into a group of recurring objects, symbols and devices that repeat over the entire length of the Path to reinforce a sense of orientation (knowledge that this is a hybrid linear urban/landscape path in the form of a full circle) through the three layers and at a variety of scales.

1) Layer 1 (static elements)

Option 1: refurbish the existing signage system and insert new signs where needed. Many of the existing signs are in disrepair and a number have been lost (especially plaques imbedded
in the pavement that were not replaced after repairs. The goal would be continuous orientation, mapped according to the most recent study that identified specific wayfinding problem areas (Krajnc et al., 2006) and perhaps with additional user testing.

Option 2: a new signage system. The benefit of a new system, say to celebrate the 25th anniversary of the present signage in 2009, would be updated graphics, and a furthering of the identity of the Path with the name proposed here, "Wireless Ljubljana", and the possibility of graphic coordination with the second ring, the highway. While the disadvantage might be added cost, the advantage would be in creating clear identity and wayfinding. Not only could these signs be conventionally mounted on poles, but also painted on pavement, especially at crosswalks where the Path crosses streets (identification of these crossings was called for in numerous versions of the urban plan for Ljubljana, see Ch. 3). And like the Slovenian signs that are beginning to appear on the highway that crosses the country, photorealistic printing technology can now enhance the formerly purely symbolic signs (see Velenje example below).

The failure of legibility of the Path has been referred to often in the interviews. The most recent comprehensive study of the Path by Krajnc et al. documents this "deficiency", among other problems, in detail, presumably in part as a preliminary to rectifying some of these issues if the proposed upgrading of the Path takes place. Historically, the signage problem has been due a lack of a sufficient budget to supply all the necessary signs and markers, plus the fact that many markers have been removed or destroyed. In places where there are large distances between signs, the configuration of the basic POT sign itself has also revealed a certain shortcoming; because of its shape, it appears to be indicating direction (as a pointer), and yet the signs are often positioned perpendicular to the axis of the Path (to be seen from both sides), and as such can give misleading information to the visitor or even resident who is determined to follow the correct trace.

The fact that the Path is not the only ring around Ljubljana also bears further consideration. Although conceptually a ring, the highway is not topologically a closed loop (considering the

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17 The year 2006 marked the 50th ceremonial march around the city of Ljubljana, and as such, generated a number of publications concerning the Path (see Kos and Potočnik), along with several exhibitions. This book is the most comprehensive recent analysis of the Path and its potential in the context of the general urban planning of the city of Ljubljana. The historical section is brief, but the general idea of analyzing, contextualizing and in a sense preserving the Path as an important urban feature may well aid in the future implementation of new Path initiatives, and hopefully also its sustained maintenance.

18 The project is on the "second list" of priorities of the mayor of Ljubljana according to Maja Simoneti.
two major interchanges or divergences from the loop in the bypass to/from Maribor and to/from Trieste), and it is possible to confuse the geometry, thanks in part to ambiguous or indecipherable signage. The result is often literally taking the wrong road – and a place name alone cannot always resolve this. Nearing Ljubljana from the northeast, no indication whatsoever of the beginning of a ring highway is given and the situation is impossible to visualize (see photo). The sign is particularly "schizophrenic", since in color the left sign is green (European highway signage convention) while the one on the right is blue (local road signage convention). In fact, either direction will lead to Trieste, since the road to Italy is 180 degrees around the ring. Oddly enough, even though pictorial signs hinting at the identity of several smaller cities have recently been placed on the east-west main highway between Ljubljana and Maribor (as shown for the town of Velenje), there are only three of them, as of this writing, with none portraying Ljubljana itself!

The project of new signage for the highway, with a strong, easily identifiable symbol would make sense to coordinate with signage for the Path, at which point Ljubljana would begin to take on an identity of a "city of rings", and add immeasurably to ease of orientation on foot and by car while also enriching the "user experience" through good information design.

As Paul Coelho (2000) wrote: "Where's Ljubljana?" This is a question, especially for first-time visitors arriving by car.
Samples of new Path signage on poles and on pavement, which can be applied in much the same way as bicycle lanes are presently identifies and crosswalks marked in the city. (photomontages by author).

It is tempting in dealing with first-layer tools of orientation to imagine an extensive series of signs and directional markers, which at first glance would present an interesting counterpoint to the largely natural green environment. Nevertheless, further physical orientational elements on the Path should probably be added very judiciously. In fact, the current benches of wood and stone that are present in some of the rest areas now, blend easily and contribute no unwanted personality to the surroundings, appropriately so. An excessive number of new elements (signs, masts, monuments) risk becoming a form of visual pollution in an otherwise fairly calm visual field. Ultimately it may be more interesting to rely on elements in the second and third layers.

2) Layer 2 (dynamic elements): Establishing and coordinating orientation around the Path would not necessarily only be a matter of conventional signage. A more dynamic and larger scale sense of orientation is also conceivable.

Option 1: provide repeated elements designed to emphasize the rhythm of motion, particularly while riding a bicycle. One such example is given below, in the alignment of repeated stone spheres along a side road near Žale Cemetery in Ljubljana.

Option 2: sight lines and direction, as well as framing distant views and bringing them into a different scale can be achieved with optical devices such as the pay-per-view type of telescope often found in public nature parks. In the northern part of the Path, and especially in the open meadow areas near Žale Cemetery where views of the Alps are visible, and in the less explored eastern part of the Path near the cable-stay highway bridge (Appendix 2, M26, K9), bringing distant objects into foreground view would make perceptual connections that are not otherwise as evident. Sundials, from smaller ones at rest areas to several larger ones along the Path, would remind visitors of a larger sense of orientation to time and motion.
Option 3: in the Venturian sense of architecture enhanced with pixels, digital displays could be placed at selected points along the Path, say in Bežigrad, where industrial buildings provide possible wall surfaces for projection. This option might also include a laser beam shot along a section of the Path, onto trees or a bridge, or into the night sky as a marker, which would be most interesting in a natural section of the Path, where the trace of the Path is actually straight (parallel to the highway, see Appendix 2, M13, J7). This proposal is for night only, and should be part of a general initiative for use of the Path after dark in some sections.

Repeated elements give rhythm to walkways (Žale cemetery in Ljubljana – photo by author); pay per view telescope as a view framer. This would be suitable in different sections of the Path; coin operated binoculars from Digilens Co., Ltd. Taiwan (www.alibaba.com); Smith Chart Sundial, 2001, Columbia College, Columbia, Maryland (www.creativeformliners.com); lasers on the Path (photomontage by author)

3) Layer 3 (hyperdynamic elements): media-based links for orientation. The same devices will also be useful for the transmission of educational content, as explained in later sections.

Option 1: radio could be immensely helpful in transmitting information via short-range transmitters: programming would only be available on or immediately adjacent to the Path.

Option 2: where you are and where you are going, as charted by moving map devices. These could be handheld units, which are becoming more and more common, especially as features of mobile phones and cameras. Applications for special tourist bicycles would also be possible.

Radio can link cars with the identity of places off the highway, as shown here in Austria. While not a new technology, short-range conventional radio transmitters could link specific city content to the ring highway and the Path; portable Internet radio is just becoming available, making wireless transmission possible (GM One Phoenix). GPS moving-map devices in cars, on bicycles and for hikers represent tools of orientation and wayfinding without paper maps or signage. Such capabilities are becoming available in mobile devices, including cameras with the ability to tag photos on Google Earth. (http://www.thegpsstore.com/images/) (www.nytimes.com/2007/08/09/business/09pogue.html (Apple iPhone, simulation by author)
TOOLS OF EXPRESSION

As de Certeau said, the act of walking is a "space of enunciation" (de Certeau, 1984), in effect a declaration of "presence". In a completely abstract environment, devoid of features, walking would define the space or create the means of inhabiting it. Lerup poetically illuminates this: "use, in all its splendid complexity, brings energy forth across the plains, along mountainsides, in valleys, in cities, in neighborhoods" (Lerup, 2000:114). In a provocative space, however, walking is only one means of engagement and interaction, of stimulus and response. The Path itself, while its form, content and history invite participation by walking, at the same time serves as both means and background for expression. The background is a complex yet contemplative environment that could promote thought and even work; its adjacent spaces are also a canvas for a variety of creative and suitable interventions.

Option 1: land art – the act of using the natural landscape quite literally as an artistic strategy. From Stonehenge to the smaller-scale work of Andy Goldsworthy, man-made intrusion into the landscape has constituted a unique means of artistic expression.

Herbert Bayer, Mill Creek Canyon Earthworks 1979–1982, USA, Kent Washington; Nancy Holt, Missoula Ranch Locators, Missouri, USA; Richard Long, Angleterre, 1967, literally framing the landscape with a freestanding portal (all photos above in Tiberghein, 1995). The framing and viewing devices in the second and third photos relate to tools of orientation as well, in that they direct the viewer's gaze and recontextualize distant views.


Option 2: in the past, the Path was partially programmed horticulturally, in terms of the specification of trees along the Path that grow favorably in the given soil and sun conditions (see Chapter 3). This can be taken much father into a scheme of planting that responds to nature and the seasons with color and species, and that might form a sort of code for long-term expression in time and an open-ended possibility for participation (planting, etc.) in
spaces adjacent to the Path. Interpretive signs indicating tree species and plants, supporting a nature learning path, would logically be an excellent project for students in the department of landscape architecture of the University of Ljubljana.

Horticulture as a form of dynamic land art, changing according to the seasons and composed in the landscape. Determination of actual content of the proposed scheme is beyond the scope of this thesis, but these illustrations suggest only a small selection for the variety of plant materials that could be used (www.realworldimagery.com/plants/blooming_thumbnailsls.html).

Option 3: experimental architecture. In one way in line with the "follies" of Parc de la Villete, this option is to a greater extent inspired by two architectural "laboratory" projects in the 1980s in the Netherlands. Experimentation was the idea at De Fantasie (1982 – 9 projects) and De Realiteit (1985 – 17 projects) in Almere, a project of reclaimed land in the Flevoland polder north of Amsterdam. Architects competed with designs for residential structures, which were not dictated by building codes or other regulations, with the winning projects actually built to remain on site for a period of five years. The houses are still standing (www.casla.nl/index.php).

Such a project on land next to the Path could be run with the sponsorship of the school of architecture. Like De Fantasie and De Realiteit, building parcels would be given for a period of five years, with a competition for winning designs to be constructed there. In addition,

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20 See also van Oenen, 2003. The essay deals with small pockets of difficult parcels of land in Holland and what to do with them. The problem of land use has been considered in Holland along with support of innovative architectural solutions, small and experimental housing, in greater depth and with greater seriousness than in most other countries: "...these indigestible remains of Dutch soil are of vital importance for the political, cultural and social metabolism of a Netherlands otherwise planned to capacity. The question is: what is the potential surplus value of these artistic havens?"
cooperation would be solicited from Slovenian builders and companies making industrial components, building materials and appliances, e.g. Gorenje (www.gorenje.si).

Option 4: exhibitions. As previously mentioned, the museum culture in Slovenia is very well established, not only in the capital but also in smaller cities and towns. More than this, the culture of exhibition itself is also prevalent, from public displays of work of students in various design departments of the university, to the expected numerous showings of artwork in private galleries. Outdoor exhibitions of artwork are also common, such as large-scale photography displays along the Jakopič Promenade (leading into Tivoli Park from near the Museum of Modern Art) and the Forma Viva sculpture biennale at the Kostanjevica monastery in southern Slovenia (www.galerija-bj.si/aindex.htm). New international exhibitions could also be envisioned using the Path as a linear exhibition space, much in the way the decennial Muenster project animates that city every ten years (www.skulptur-projekte.de). A new natural history museum (Prirodoslovni muzej), designed by architect Aleš Vodopivec, is slated for construction near the Path, close to the Biotechnical Faculty in Ljubljana, further emphasizing the Path as a connector of exhibition venues for art and science, especially in connection with nature.

TOOLS OF INTERACTION
While the Path has historically been seen as a memorial and recreational feature of the city, it has also been referred to as a potential infrastructural element in two ways: first for pedestrians and cyclists, to provide functional interconnections between parts of the city (Gazvoda suggests "diagonal" connecting sub-paths as secants cutting across the main circuit, rather than radial connections); and second, as a connector of other green spaces in the city. One proposition mentioned in the interviews was also to connect the Path to the old town center, although such connections exist along the radiating city streets (Tržaška, Celovška and Dunajska, for example); however, these streets are not well landscaped, and thus are not green connectors per se. While important as a tool of interaction while walking or bike riding (the expected interactions in a relatively small city of chance encounters with friends or experiencing changing views or getting from one place to another), this approach misses the potential of the Path as a broader organizational ring, laying the infrastructural groundwork for development besides its role in the network of green. In a larger context, the Path would
have synergistic results: tourism, education, and environmentally friendly and idealistic development. Thus, as expanded tools of interaction, the following options are proposed:

Option 1: information infrastructure. This option would consist of implementing Wireless Ljubljana as a ring of technology, information and education. A dedicated wireless Internet network could easily be established with antennas for the entire Path, to encourage the use of this linear outdoor space for communications and learning (see also Tools of Education). Interestingly enough, as mentioned in Chapter 3, a Wi-Fi network extending along the Thames in London has just been installed, offering free access to email and the Web. The network covers an imposing 36-km-long stretch, roughly equivalent to the length of the Path in Ljubljana. Whereas complete wireless coverage of the city of Ljubljana would be possible (as Paris and other cities intend), the case of London indicates that it is initially wise to cover special areas of intensive use and spur further activity in these areas. The project in London validates the notion of the hybrid linear urban/landscape space as a dynamic, second-layer feature of the city in motion, moreover creating an electronic definition of "sense of place". While it may seem ironic that wireless services imply connecting to laptop computers, which are used while seated, the second-layer version of this phenomenon combines walking or riding with stopping to work or explore, and welcomes the miniaturization of handheld computers and the obvious trend of mobile phones becoming entirely ubiquitous, often as a complete substitute for fixed landline phones, not to mention their increasingly competent support for Web browsers and email. A second aspect of this option would be sponsored webcams, connecting the Path to the Internet and to various educational institutions.

Option 2: website. The Internet, or presence of any entity on the Internet, has become iconic for identity in the third layer, and this is certainly true of cities, not only for tourist information but for many people an essential flow of information for urban life.

The scope of the Web today is hard to fathom. The total number of Web pages, including those that are dynamically created upon request and document files available through links, exceeds 600 billion. That’s 100 pages per person alive. (Kelly, 2005:96)

21 Witness the recent (as of 29 June 2007) explosive successful reaction to the Apple iPhone with Internet-based multimedia capabilities (GPS, Web, communication), as well as a number of phones designed to take advantage of Skype.
Hypothetical website for the Path. Live webcams, links to a historical video archive, plus curriculum of educational activities on the Path, would be complemented by sponsorship and institutional information as well as calendars and invitations to participate. The plan of the Path and its connections to webcams and sponsor institutions also intentionally evokes the image of a printed circuit board (design by author).

Even the modest website shown here for the Path as a sample has enormous power of suggestion of something that actually exists, as it is cast in the format of what we have come to expect. Each site is a touchpoint for identity, and the audience is already prepared to accept the Internet as evidence of a certain kind of reality. Thus, such a website also becomes a powerful tool of interaction as well as an element of "persistence", especially with a historical archive (see below) with testimonial videos and documents about the legacy and meaning of the Path. Curriculum content (an idea also developed later in this chapter) would entail educational projects associated with the Path, organized by institutions and faculties of the University of Ljubljana. Various other interactive features would link to events and possibilities for individual participation. Logically, this site would be administered by the Green Ring Society, which is now the responsible body for maintenance of the Path and its ongoing activities, such as the annual commemorative march around the city on May 9.

A crucial point of shared sponsorship is the transformation from a unitary monolithic system of management of the Path into a distributed system, with multiple responsibilities and activity going on in parallel while also being networked and interactive. Ideally, then, the Path becomes self-sustaining as a collection of partly autonomous segments, and its variety and openness is assured.

22 "A simple link, it turns out, is the most powerful invention of the decade" (Kelly, 2005:96).
23 Distributed computing is a method of computer processing in which different parts of a program run simultaneously on two or more computers that are communicating with each other over a network... Distributed computing is a natural result of the use of networks to allow computers to efficiently communicate (http://en.wikipedia.org/wiki/Distributed_computing).
Option 3: energy infrastructure. The Path is an obvious venue for an energy park, or a linear series of devices for irrigation water collection (e.g. for nearby gardens) and solar energy collection. Such energy could be used to power lighting along sections of the Path at night, or for powering other equipment (transmitters, sound devices) that might be installed, as mentioned in some of the other sections in this chapter.

TOOLS OF SENSATION

Option 1: the Path at night. Night and artificial lighting activates an entirely new kind of experience, a defining experience for second-layer urban activity, since distant views become nearly invisible and the feeling of the context changes completely. Illumination of the Path has been characterized by Simoneti as a wonderful potential addition to the Path, although adequate lighting for safety would obviously be essential. Given the large number of trees in the allée configuration, interesting landscape illumination would create a magical effect, likely to attract users on warm summer evenings, or even in winter when snow is falling. Most lights would probably be buried in the ground. Solar-energy-powered night lighting would obviate the need for embedding hardwired electrical infrastructure.

Option 2: soundscape. In parallel with the night lighting option to transform the phenomenology of the Path, a strategy for developing a "soundscape" would lead to the possibility of son et lumière24 experiences. In a way, the Path is already subtly programmed for sound, largely in the form of different paving materials and various acoustic environments, from rural to urban. The gravel parts of the Path have a distinctive sound when traversed on foot as well as by bicycle, in contrast to asphalt paving, for example. The issue is whether this

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24 Sound and light shows in many French chateaux, for example, that dramatize the history of the building and the region (see www.ville-blois.fr/article.php as an example at Blois).
aspect can be enhanced at a basic level. It is certainly possible to imagine electronic sound enhancement, with historical audio programs or the sorts of sound effects used by Ljubljana’s National Museum of Contemporary History (www.muzej-nz.si) in its World War I permanent exhibition. Sensors in the Path could easily trigger such sound. In addition, highly focused loudspeakers, called "audio spotlights", now exist that are only audible in a very narrow range of about one meter, and thus without creating any background noise or stray sound whatsoever.

TOOLS OF EDUCATION
One of the more interesting potential aspects of the Path, deriving from the notion of a forest learning path previously mentioned (see also footnote 8) and given Ljubljana’s identity as an "education city", is a conception as a generalized learning path, or in fact as an "open university". Such an idea would also resonate with the Lisbon Strategy and with the various EU educational exchange and mobility programs such as ERASMUS.26

Option 1: connection and sponsorships by the University of Ljubljana and selected institutions. Sponsorship would first entail assigning sections of the Path to different faculties and academies of the university. Second, industry would also become supporters, in the tradition of the sponsorship of the original stone markers that still line the path. This approach amounts to a form of privatization, although not in the economic sense as much as withdrawing total control of the Path from the politics that usually beset urban design projects. Here the issue is private but distributed responsibility for program content or stimulating participation in the Path for its enhancement as an educational resource. With the inclusion of research entities such as the Jožef Stefan Institute, the door to education-industry cooperation is also opened.

As the idea of sponsorship or shared participation in the development and maintenance of the Path matures, it would eventually be divided into sections allocated to the sponsors. One very likely such institution is Technology Park Ljubljana, which will be opening in early 2008 at a site very near the Path (www.tp-lj.si/en; see also marker C in the map below). As with the linking of exhibition spaces, the role of the Path as a physical and conceptual connector of centers of innovation becomes an interesting infrastructural possibility, not to mention its development as Ljubljana’s version of the Philosopher's Walk (see Ch. 4) for scientists – a place to think, walk and meet other researchers and exchange ideas in public. With the realization of this approach and the full implementation of such a project, the Path, at least in this particular section, would become a brilliant example of the merging of identity, function, urbanity, landscape, public and professional use, experience and technology, hence also representing the valid interconnection and coexistence of the three theoretical city layers.

26 The ERASMUS program "seeks to enhance the quality and reinforce the European dimension of higher education by encouraging transnational cooperation between universities, boosting European mobility and improving the transparency and full academic recognition of studies and qualifications throughout the Union" (http://ec.europa.eu/education/programmes/llp/erasmus/erasmus_en.html).
Option 2: nature learning path. This is the first obvious educational objective for the Path, in view of the horticultural features already in place, which, however, lack any form of identification of species. A modest signage program can be developed (so-called interpretive signs) for such identification. As a precedent, an existing well developed nature path in Finland is presented, (Nature Path of Vartiosaari) just outside Helsinki, about 5 km long, full of identified aspects of flora and fauna.
Option 3: in an expanded view of the Path as an open university, its content would be governed by a curriculum, the standard educational guideline. This curriculum would be conceived by joint venture of the various faculties and institutions, with specific content proposed by each institution. This content would be in the form of outdoor lectures, announced on the Path website, as well as virtual content transmitted via a wireless network, or even using Second Life on the web (see Ch. 1). As a conceptual interpretation of a sequence of learning activities, typically expressed in a curriculum, from an example of life-long learning for adults as part of the EU Leonardo da Vinci program is presented as a curriculum and information-based "learning path.27

A curriculum conceived and illustrated as a life-long learning path at www.toolkit.secondchance.boie.pl

Option 4: Wireless Ljubljana learning center at Litrostoj. This factory complex is adjacent to the Path and could become the main "faculty siding" (Matthews, 2003:375). Cedric Price, in the Potteries Thinkbelt project, transformed a factory complex with an extensive internal rail network into a proposal for an open university (see Ch. 4) and used railway terminology as a

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27 The Leonardo Da Vinci (LdV) program was launched in 1995 as part of the European Commission's new Lifelong Learning Program designed to build a skilled workforce through European partnerships.
metaphor. The parallel opportunity in Ljubljana would be the Litostroj factory complex, of historic importance as a steel foundry and heavy industry manufacturer of turbine components,\(^{28}\) which has sufficient, unused facilities that could be adapted for such a learning center.

Notably, Ana Kučan refers in her interview (Appendix 1) to the unique historical choice of the Path as a green memorial, one which is uniquely "unmonumental". Here, the sheer size of the Path, its less obvious personality (just a path in nature after all!) and its essential dynamic and hyperdynamic character suggest that development in the future could continue in this vein. In this spirit, instead of a museum of tangible artifacts, a very apt model is found in the Shoah Foundation for Visual History and Education at the University of Southern California in Los Angeles (www.usc.edu/schools/college/vhi), initiated by Steven Spielberg. Here are archived over 50,000 video testimonials of Holocaust survivors. Such an archive, to be developed and housed at Litostroj, would become a definitive collection of the Path’s historical memoirs, which could still be created while there are witnesses who are still alive, but would also include interviews with current users. This memory center furthermore need not restrict itself to recollections of war atrocities or the imprisonment of Ljubljana, but rather transform the idea of a memorial into a continuous archive of personal identities of the residents of Ljubljana and archive of the very perceptions in the minds of residents that in turn form the collective identity of the city. The Shoah Foundation emphasizes that survivors are tacitly educators for future generations. In the context of Ljubljana as an education city as well as considering the importance of technology in the city and in present urban life, a similar living archive would be entirely appropriate. All content would be available on the Internet.

\(\text{Cedric Price Potteries Thinkbelt, project, Staffordshire, England, axonometric of Madeley Transfer Area 1964-66 (www.moma.org/collection/browse_results.php) as an example of a "faculty siding", i.e. a turn-off from the main track that functions as a learning center; compared to Litostroj in Ljubljana, adjacent to the Path (bold white line), the complex of buildings shown in the upper right quadrant of the aerial photo (Google Earth).}\)

**TOOLS OF PARTICIPATION**

The final toolset for the Path is the most general, and would consist of means of encouraging all kinds of participation in activities on the Path. This is an open-ended category, and only

\(^{28}\) For the history of Litostroj, see www.litostroj.com
several options are presented here. The principle expressed in this thesis of differentiation of the "mosaic" of the Path is important here for solutions tailored to the specific environment of each section, i.e. in programming the Path with new activities, the diversity of those activities is important.

Option 1: tourism. The Path is currently relatively unknown as a tourist destination in the city. Although the Tourist Association makes available a small brochure about the Path (www.ljubljana.si/en/tourist_services/publications/62306/podrobno.html), it is considered an ineffective draw for tourism (Maja Simoneti interview). Thus the possibility of linking hotels (concierge desk information, better brochure, hotel sponsorship) and hostels (the well known Celica hostel for example, www.souhostel.com) with the Path makes sense as a start. The Wireless Ljubljana website would also encourage this sort of participation. As a second-phase option, tourist bicycles could be specially equipped with a handlebar-mounted computer device such as a PDA with GPS capability, also including a prerecorded museum-style "docent tour" guide and informational program. Most handheld devices are capable of reproducing sound files, which also do not take up vast amounts of storage in memory. Bicycles primarily for tourists are currently for rent in Ljubljana; many other European cities, London for example, have instituted sophisticated self-service systems for temporary use of bicycles. Even without bicycles, rentable handheld devices with the above program content would be possible for walking tours.

Option 2: recreation. This option has been amply talked about as obvious and important programming for open areas adjacent to the Path. The traditional walk around Ljubljana on March 9 is an example.

Option 3: programs for children have already been connected to the Path; however, several interviewees pointed to the necessity of upgrading and adding playgrounds, some of which exist but are poorly maintained due to questions of land ownership and who actually should perform this maintenance.
Option 4: community vegetable gardens. This is an established tradition in Ljubljana, and one finds many examples in various neighborhoods, including along some sections of the Path. The possibilities of expanding this simple initiative are obvious and would represent one example already in place of bottom-up initiatives that involve public participation.

City vegetable gardens in the Krakovskova district; in-town vegetable gardens (see also interview with Marjetica Potrč). A different approach to urban landscape design.

Option 5: emergence and the "unexpected outcomes" talked about by Cedric Price. This final option does not intend to specify activities as much as keeping the question open about how people could devise new activities and stimulate participation. The question remains as to whether this can serve as a model for "bottom-up" urbanism? Part of this issue is building on tradition going back to the construction of the Path through a massive volunteer effort, with young people coming from all over Yugoslavia to participate in this large-scale and idealistic project that contributed to the identity of the city and the country. Volunteerism and participation is the core of persistence of an urban feature such as the Path. The principle is to attract a diversity of users: residence, students, teachers, foreigners and artists, to name a few. Only through use will the Path be "put on the map" (especially the mental map).²⁹

Ideally, in transferring responsibility for the Path to independent sponsors as proposed in this chapter, while still maintaining the Green Ring Society as a supervisory organization, the Path will become open to unexpected, dynamic forms of participation that no master plan can possibly envision or program.

**AN EXPANDED URBAN LEXICON**

The following chart summarizes much of the content of the interventions of the preceding sections, specifically also juxtaposing the present Path with its potential future development. As such, this chart might also serve as a starting point or paradigm for thinking about the future of cities in general. The chart is a schematic that attempts to represent broad categories of urban interventions, not as a strict checklist but rather as a graphic notation of the relationship of the three layers as a metaphor and six hypothetical tools for conceiving and interpreting concrete responses to that metaphor.

²⁹ Kučan's doctoral study of local landscape iconography is notable for the absence of the Path in the perception of Slovenians, with the Ljubljana castle and churches on hills being among the most prominent images (Kučan, 1997).
A speculative, experimental "mindmapping" of the urban lexicon based on analysis of the Path and on the theory of three layers. Representing these ideas graphically is difficult, given the melding of the layers discussed in Ch. 2 and the fact that theory looks quite different when it is transplanted to actual situations that do not have strict boundaries Therefore, this chart is only an attempt to visualize and summarize, and only hints at a comprehensive tool for designers to begin to map out the future potentials of the city, and perhaps the discovery, preservation and repurposing of some of its forgotten or underappreciated features of identity. The intent is also to show the axes on which expansion of the urban lexicon can occur.
The vertical axis of this illustration is meant to be a continuum from the real to the virtual, and intentionally indicates hybrid areas between the three layers, considering the mixing and overlapping of layer content as first mentioned in Ch. 2. When the implications of any one intervention are charted, it becomes increasingly meaningless to assign that intervention to a category to the exclusion of the others. Interventions in the right-hand column refer generally to the projects proposed for the Path, in ascending order of virtuality and noticeably absent of very many first-layer proposals, which might include new signage or street furniture, but here beginning with an idea to create a nature learning path by improving and planting an existing segment of the present Path as a concrete element. The intention is to "push" the interventions upward into second- and third-layer categories in accordance with the notion of the reinvention of civic realism as civic virtuality, and the possibilities and advantages of introducing technological rather than architectural interventions, which has been one of the main themes of the present study. The role of the toolsets is to clarify the intent of any particular intervention, as well as to stress that there are in fact multiple toolsets, each with different but connected purposes. In the background is the extended, enhanced and intentionally disembodied figure of Leonardo de Vinci's human, first encountered here in Ch. 2 to visualize the three layers of the city. It returns here to connect the needs and capabilities of human beings in cities with an expanded range of understanding of urban open space.

AN AFTERWORD
The origin of this thesis was the observation that technology, especially technology of information and communication, has changed the way people perceive cities, and as a consequence a sort of "mental urbanism" has emerged. The study was meant to explore urban identity in this light, with the speculation that identity has been affected by a globalized notion of what a city should be and that this notion has been transmitted by the media, surely the Internet, and travel. The second chapter revealed that computers have changed the way people live and work, and that this has seemed to distance urban residents from the tangible architecture of the city as they migrate into highly specific virtual communities of their own invention, where personal networks on line have supplanted and to some extent replaced "real" communities. However, in view of much of the theory and research quoted, this phenomenon is just beginning and does not exclude the concrete space of the city per se, but transform it into a space of mediation of all kinds of experience, on the spectrum from face-to-face reality to a second autonomous life on line.

The difficulty with this issue is its breadth and constantly evolving character at large scale. Thus the theory presented in Ch. 2 is really a working metaphor, a means of talking about what are not simple issues to compartmentalize. The case study emerged from the theory as an interesting and unconventional "space" in which to further explore the theory, and finally to propose projects that might open the scope of possible future interventions, i.e. to expand the "urban lexicon", as it was named here.

The study focused on technological and social aspects of the city, and any further research must also delve into other major urban problems, most importantly the ecology of cities and
the frightening consequences of energy depletion and climate change, and the ways in which technology might be beneficially applied. The urban space as a collective effort is responsible for these issues and any development of cities ought to be prepared to address, incorporate and attempt to solve them.

Future research should also refine the theory, but more importantly focus in more detail on other case studies. Given its small size, Ljubljana is an interesting site for urban theory, but perhaps not a generic example applicable to large cities with much more pressing problems and more enticing potential. Obviously, more study should be made in the form of user input, regarding the nature and variety of personal interaction with the city, as a crucial supplement to theory and technical analysis. While such studies might confirm the detachment and translation of the city into the mental sphere, it would likely also reveal the basic attachment and commitment that many residents have to where they live. A good part of such studies should be directed toward young people, a group in enormous flux as regards urban experience and the general issue of identity.

As for the Path, it is uncertain whether any strategy can succeed. Historically, the development of the Path has been a series of failures, despite the initial and quite stunning realization of a memorial dream of a group of architects. It is wonderful that the Path exists and yet disappointing that it has to a large extent been ignored and remained until now a minor battle ground of politics. People say that nothing ever happens in Ljubljana, that urban schemes are beaten to death by criticism and lack of vision. And thus this thesis hopes to make a small contribution to pointing the way. Whether the Path will be another Thinkbelt that never happened or whether it can rise to meet some of its potential remains to be seen.

Extrapolating from the research presented here, and attempting to link the three urban layers into a general approach, the idea of "hyperplanning"\textsuperscript{30} emerges as a paradigm for the future. If this study has any meaning at all, it is to point to the importance of an expanded urban lexicon and an enlightened approach to applying that lexicon, not only as large-scale planning, but as a way of managing and understanding the complexity of urban planning itself and leaving the process open to multiple inputs and bottom-up initiatives with unexpected outcomes. Technology and a variety of perceptions about cities make "hyperplanning" possible, and the transformation of the needs and behaviors of people in cities make it necessary. The use of the Internet, not to mention how that use may affect people and urban spaces in the future, has certainly already transformed the way designers think and work.

If, for example, Geoffrey Jellicoe\textsuperscript{31} had created a virtual Water Garden, to parallel his real Water Garden in Hemel Hempstead, visitors would be able to trace the roots and branches of his ideas. They could hyperlink to biographical information, books, future projects, Carl Jung, symbolism, modern art, maps, and other places in the landscapes of man and civilisation. Readable landscapes interest the public and, since mobile internet devices will soon be common, I recommend landscape designers to get into the habit of creating websites of this type for the generation and

\textsuperscript{30}The term intends to capture the idea of the hyperdynamic layer, where all sorts of perceptual processes are celebrated and integrated.

\textsuperscript{31}Geoffrey Alan Jellicoe (1900–1996), English architect, town planner, landscape architect and garden designer.
explication of their landscape projects. Much could be done to popularize our art and science if
visitors could read landscapes with PDAs (Portable Digital Assistants). URLs should be engraved
in stone. Landscape design history might become a wildly popular subject if it could be researched
in situ. (Turner, 2001)

As for the identity of cities, it is clear that a new definition of civic realism really can emerge,
despite the perception that the conditions that led to the development of cities in the first
place (the open market, the agora, the church, the basic needs of people to eat and socialize)
have transformed into the need to move and into behavior that is more and more individually
isolated, largely under the paradoxical influences of technology (communication, information
and entertainment). As such, the second and third layers of the city have been activated and
can be used. Digital technology (personal digital assistants, personal computers, mobile
phones and the Internet) has consciously and unconsciously moved the needs and desires of
city dwellers to a much grander "interior space" than Nolli could ever have envisioned.

Finally, whether or not the city really has "three layers" or whether this image is useful at all
or just an intellectual excursion, or whether any steps forward in approaches to urban design
can really be taken, the concept has been an interesting thought experiment about the city.
The view from an airplane, the dynamism of 21st century cities, the "world" on the Internet,
and above all the mental maps in the minds of people who walk and bike and inhabit the
urban fabric have taken their place in the portrait of urban identity. For many theorists and
observers, urban design has failed to generate an interesting and valid enough gamut of city
possibilities, approaches and solutions, and yet these possibilities are what motivate us to
participate in the city, to take advantage of its offerings and hopefully also to contribute to it.
In the end, the simplest statement, and perhaps the most encouraging rallying point, as
referred to earlier in Chapter 2, is the motto of Festival Ljubljana: čuti, živi, ustvarjal: "feel, live,
create". It is a clear manifesto for urban life.

APPENDIX 1
Interviews

METHODOLOGY
The primary research methodology for the thesis consisted of interviews with thirteen Ljubljana architects and planners, or designers who were educated as architects but who later migrated into different creative fields. The interviews were conducted during the period from March 2006 to June 2007, generally at the residences or studios of the interviewees. All interviews were recorded on videotape and later transcribed and discretely edited for language (given that despite being fluent in English, the interviewees are not native speakers). The content presented here is essentially, then, taken directly from the video recording, with the exception of long digressions that depart substantially from the topic. Typically, each interview lasted two hours.

The architects and designers interviewed span several generations, as is clear from their statements. The changing nature of the city, students, the influence of Plečnik and his disciple Ravnikar, approaches to the future of the city, and the frustration of the architectural and urban design professions all come out in the texts.

The conversations evolved naturally and informally from three specific starting points or questions: each architect's educational background, reflections on the identity of the city of Ljubljana and opinions or strategies about the Path of Remembrance and Comradeship. The responses in the interviews represent valuable input for the thesis, along with a lively narrative about the city of Ljubljana seen through the eyes and candid comments of thirteen interesting personalities.

Left to right, top row: Karin Košak, Grega Košak, Joče Baršič, Saša Maechtig, Marija Jenko; middle row: Davorin Gazvoda, Urša Vrhunc, Tomaz Maechtig, Marjetica Potrč, Ana Kučan; bottom row: Barbara Goličnik, Matej Nikšič, Maja Simoneti (all photos by author)
What kinds of influences did you have when you were in architecture school?

As we began studying in 1980, the strongest influences came from the Venice Biennale and postmodernism. I have to say that our professors acted quite conservative at the beginning and there were students who were more open to this and this was an era in Ljubljana when Plečnik was already passé; there was no talking about him and we were also not under the influence of Edo Ravnikar, because he was not at the school anymore. It was an era in between or something like that…and postmodernism was an era when Plečnik was rediscovered again. Before 1980, Plečnik was out, way out. Plečnik was so eclectic for this international modernism of the professors that very few students were fond of him. His neoclassicist style was very strange to the modern generations of architects of the ’60s and ’70s who were much more influenced by American and Scandinavian architecture, which were very popular in Slovenia. It was not Michael Graves’ postmodernism that was influential here, more Aldo Rossi and others. A lot was also going on in Berlin at that time.

Who did you study with?

Koželj was for me the most influencing professor. I made my diploma work with him and also Braco Mušič. I think that Janez Koželj was surely the professor who gave us the biggest influence for a whole generation of students. What I gained from him and what I got from the university was the method of thinking…analyzing the situation and thinking of the alternatives you should give to a problem and evaluating different approaches and deciding for a direction. This method he taught was very useful for me in all other fields I was working in later. My opinion is that the different fields of design are actually similar in approach…what the method looks like. At a certain level you have to forget all the analysis and switch in your head to fantasy. At that moment the fantasy and analytic part and intuitive part should meet.

Town planning was an important field at the time, not urban design, meaning smaller scale…a part of the city or even more one building and its surroundings. It was the thinking that the house should be a part of surroundings, not a unique monument standing out….to build something in…context.

I also have to admit I was not his beloved student! I learned a lot from him but we could not speak like you and I do now. It was always in passing, and I was not following him enough for a good connection. I was not one of his favorites. The conversations were shorter than with other students, there were no good vibrations. No quarrels, but I can't say it was a connection. It's the wavelength…
SD: Were you thinking already you wouldn’t build buildings?
KK: Maybe. Because I never had the desire to make big buildings. I always preferred smaller scale where I can handle everything better. And where I’m not so involved with other people and so dependent on other people. Because I found out at the end of my studies that town planning is much more dependent on money and politics and things like that… it was not for me. I prefer the smaller scale where I can suggest the way things should be done.

SD: Why did you go to architecture school?
KK: I always wanted to be a designer, but there was no design school at that time or I would have gone. Architecture school was good because it’s broader in thinking than "design" design. I am working in a broad field now, which isn't good in these times of specialization maybe, but I don't see that much different between architecture, theatre design, textile design and even graphic design. Sometimes also different approaches from another field are new and fresh and good.

SD: What was your generation like?
KK: I think it’s a big difference between my generation and the younger ones. I can’t say when it happened but I feel it. I am not working as an architect, but I see that the generations already five or eight years younger are doing biometric architecture and round forms which are possible with the computer. We were one of the last generations studying without computers, and this changed the way of thinking very much. For my generation, it's difficult because the taste of the time changed in architecture. What was interesting in the mid-'80s was Deconstructivism. I liked Zaha Hadid very much with her designs, which weren’t even built yet. This was quite strong in my generation until maybe ’85 or ’86. After this I admit I haven’t followed architecture as much because I turned to theatre and set design.

SD: How did you get out of architecture and into theatre?
KK: When I was working on my diploma, and it was influenced by the La Villette competition (from OMA and Tschumi, which I liked very much). At the time I came in contact with Ljubljana urban planning and I found it was nothing for me, and I turned 180 degrees and went into theatre. I was working in set and costume design in several small theatres in Ljubljana…first small projects then more and more. Set and costume designers in Slovenia were architects and painters since there was no school of design. The textile school was just beginning. So this was quite natural. And textile design was very technical, but I only went to lessons in creative subjects, since I didn't really want another degree, so I visited lectures at the academy of theatre and film and the textile faculty. After I finished school I found a job in an architecture office, a "one-man-band" office, and at the beginning I gave a lot of suggestions, but they were not accepted. I thought, OK, it’s not my project, etc. but I don't agree that this is good, and after some weeks I realized it was not a good approach and I decided to quit.

SD: So you started with set design and you were quite satisfied. How did you get your ideas?
KK: It’s always a certain feeling which atmosphere should be suitable for drama or opera, also for the specific occasion. I am sure with another director I would not do the same set design. It’s a kind of interaction. It’s difficult to explain since set design is very intuitive. I liked very much architectural set design with quite a lot of building, but now I prefer more projections and things like that, playing with this new media. It’s also a question of the possibilities you have. In Ljubljana all the stages are small and a lot of building is not possible.
During the time I spent in Vienna, almost all my colleagues and friends were coming from theatre. But when I came back here I had a lot of friends who were architects. I wanted to study in Vienna at one of the best schools in Eastern Europe. I studied for a year there. And then I stayed. First I was assisting and quite soon I was working on my own projects in theatre and opera. I was doing costume design all the time, because if I can I do set and costume design together for me this is the best approach, and it is very good when it is done with one hand. Sometimes when they are done by different designers there is a competition between set and costume, and this should not happen.

Lighting is an essential part of theatre design. Without light, the set is dead. You can also create space with light. It's like painting on black canvas. Maybe lighting design is the most difficult of all these things because you can't touch it. It's so fluid and difficult to learn. It's difficult to try it out...you need all the luminaires and you can't do it all yourself. You need a lot of imagination. With this lighting design I am coming back to architecture. It's a kind of circle. In the last years I have more connection to architecture [lighting of Ljubljanski Grad (castle) and the river]. It's actually set design for the city, I would say. [looking at drawings] Here is a master plan for the city of Ljubljana, because there was never a master plan for lighting. What should be lit and in which way. These were the first studies of what to do in the old town city center. This developed from the project for New Year's illumination of the castle.

SD: Was this commissioned by the city?
KK: Yes. I first made the New Year's project (2000) and this followed just after that. Then, after illumination of Ljubljanski Grad, I suggested the development of it throughout the whole year so that certain color modes would be used for different occasions. Right white and blue, the colors of Slovenia, this one is for Easter, green is the color of Ljubljana. Part of this was the lighting of other buildings. I wanted with light to make promenades on the Ljubljanica River.

[KK describes the burning star project, made with wire (referring to the historical barbed wire) for the 60th anniversary of liberation of Ljubljana. This was supported by the mayor of the city, but it was too expensive. Other projects for projecting on the river and mega-graphics. And video projected on Tromostovje (Triple Bridge)...]

SD: I think you should be mayor of Ljubljana! There is an election coming....
KK: No, No, No! But I would like to be the chief set designer! You know I found out that light is a cheap and very influential technique to make a big difference in the city. I think there is no possibility on the town scale to make more. Because with lighting of a building you change the atmosphere. You can even change it to worse if you make it wrong or if you light the wrong thing. But I think it is well invested money. During the day you need a lot of money to make something visible, but at night you put lights and you can lead people from one place to another. You can recreate an atmosphere which is tender and inviting, or an atmosphere of coolness and "aggressivity" if you light too much...or it is dangerous if you don't light at all. I can remember when I was going to make photos on Petkovskovo Nabrežje...My mother said: "Karin, should I go with you? Maybe someone will attack you!" Because it was so dark...it has changed a bit, but this is still a badly lit part of the center of town.

I am interested in all this, how to make small things, points of interest, points of happening, mostly with architectural and design stuff, but also to find out places and points where programs should be developed. Not only cafés and drinking and eating, but I was suggesting how to make places which are also interesting for children and old people...how to make activities, the sociological part, which I
know very badly, but I think should be more taken into consideration. Small things… it's not always
the big projects which bring the people into the city… a mosaic of small things to be put together. I
was also very impressed by Charles Landry (The Creative City),1 who lectured in Ljubljana. I agree with
a lot of things he suggests.

SD: Why do any of this?

KK: You know, I am very happy when things happen. I can remember the first year when the bridges
where illuminated and some small things in the center of town were done. I was proud walking
around and feeling "this is my work which is done on this scale". This is very egocentric perhaps, but I
like a big audience! Because theatre is always… you have an audience of a thousand people or even
only several hundred who see a play and that's it. But working on this big scale in the center of the
city, it was great. I liked seeing the castle changing colors and I knew this is my work and I like this
very much. It's very egocentric, I admit it!!

And you know it's not frustrating for me if some things don't happen, because I still see that some
things are moving. It would be very frustrated if NOTHING happened.

I like Ljubljana very much. I like the city. I am very frequently in the city center. I also grew up in the
city center. And I always see problems and I always suggest solutions for these problems. I am
thinking so long that I find an idea, a solution. Tonight I am meeting with Arcadia [lighting company]
to figure out a better way to light the town hall and the dragons on the bridge. I am trying this year to
make things that last through the whole year, so that fewer things are put up and taken down, because
this costs a lot of money. I want them to stay longer and to be permanent but changeable.

SD: What's different about Ljubljana?

KK: The scale is very nice, and I like this situation of the town under the hill with the castle above and
the river. I feel a very good atmosphere and very good vibrations in this old town. Ljubljana has a
more human scale and something romantic and an interesting mixture of Mediterranean and Austrian.
I like the old Gothic structures, the Baroque facades, and I like Plečnik's interventions very much. I
am also glad that he was not able to everything he suggested! I think it's good for Ljubljana. What I
really like are the squares and bridges and the riverbanks.

SD: What about the POT?

KK: It was a great vision at that time. I was working on that competition in 1984 as a student with
Janez Koželj.

I think that maybe there should be some locations recognized as turning points and these could be
… developed… into meeting points, with content, with design and maybe all of them different. I
would probably think in the way of La Villette. Again, a structure which you have to make, a grid, a
system to function.

It's not worth it to Ljubljana to try to sell to tourists what they already have at home. There is our
communist history, which is interesting also. A friend of mine came to Ljubljana and said: "You know,
it gets nicer and nicer here every time, but I'm not sure I like it because it's getting to be like all the
other cities I know. It was so fresh before and that is what I liked."

1 see Landry in Appendix 3: References
POT was a very good political sign. I don't think we should be ashamed of our history. It was communist, but not really communist; we lived very well here and very free, in the '80s especially. But this is an interesting history which has potential, and it is a stupidity to be ashamed of it. Also the Tito era was very strong. And it's a brand! Tito's Yugoslavia is a brand, speaking in the terms of marketing. Also Ljubljana could be a brand. It has been developing for several years and lots of tourists have come to see it, and it could really develop as a destination for Christmas holidays. Like Landry says: "don't try to be good at all things, but put effort into the great things to make them special". And we should make it out of our tradition and history in a very modern way...in a very transformed way but still coming out of this place, which has Jason and the Argonauts as one of its myths...

This promotion of Slovenia has been made partially...a little bit here and a little bit there. And the flag of Slovenia is a joke! This is a scout flag...

Like theatre, the city has to develop its own design language, not an adaptation.

I must say I have never thought about the potential of POT, but going back on this idea of "follies" in La Villette. The solution was to superimpose stripes and every stripe was a thematic stripe, and they also made a grid of several points and this was a superposition of several systems. I would probably think in a similar way. Sport is also very important. Or like the House of Experiments [hands-on science museum for children], something with science and art. And changing these in a certain rhythm...

I think what POT needs are really "points"...nodes...it would be important that people could participate...like gathering to play chess on a small square...probably things like that. To meet, to sit...and also for different ages and different interests. It's a problem in Ljubljana, not enough things for children and teenagers and elderly people. You have cafés...but you also need places to read and hear classic music or something like that...

SD: Going back to the idea of superimposing and nodes...why?

KK: Bringing order into confusion...putting a system which is able to transform itself to make it fixed and flexible at the same time, I think. And I also found out that the people of Ljubljana know very little of their own history. Even me. I am interested but I still don't know a lot...and history is something that can make people proud. They like their town if they know more about it. I have seen some pictures of Tito, it's exotic and interesting, you know, him with Arafat and Idi Amin and Fidel Castro and the Queen of England... and it is part of the history. Also the communist era, with all the funny exotic things, maybe funny for the younger generation, but maybe for me not so funny... I think this idea of "Ljubljana stories" has big potential. What also fascinates me is to develop something very characteristic. We are working now with students on the story of Urška and the "podvodni mož" [underwater man]. Also "zmaj", the dragon, and the Argonauts...and the polehouse dwellers on the marsh... The Romeo and Juliet story, for example...a whole city lives on this idea! [Verona]

KK: I would like to put a laser between the castle and Rožnik [another hill in town]! I was also once thinking about putting a laser zigzagging just above the river with mirrors, but the most interesting thing would be with sound, or the connection of sound and light. And the sound and light should differ according to the occasion.
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MARCH 2006

GK: It is widespread, the so-called "generic city"… especially the outskirts of cities have become very much alike. On the other hand, the design is not harmonious. I made a proposal to the town of Ljubljana not to make a competition for bus stops but to make a comprehensive design for street furniture. But they didn't do it, and now the new bus stops are terrible. We did not succeed in post boxes, telephones, etc. to correlate them in design. Street furniture is a part of national identity. Two countries are famous: UK with telephone and post boxes. On the other side, the Dutch. But we failed to do that. There are good stands for selling chestnuts in the marketplace…[and that's all]

The situation in architecture was better in the '60s and '70s than today. The architects were also engaged in making posters, political ones and congresses…very good designs and very pluralistic. Now, design is all very familiar. All the faces of political candidates are the same, without character at all. Before we had political monism, but diversity in art. Now we have diversity in politics, but in the arts we have monism! The dangers of globalization.

I am a comprehensivist. Like Buckminster Fuller. Now it seems we try only for a global perception.

The followers of Plečnik were only copying except for Edvard Ravnikar. One part of his idea of closeness to classical order remained with Ravnikar, also with bringing different materials together. On the other side, Plečnik or Gaudi or Gehry are not the direction in which the mainstream should go, they are facing a cul de sac! They are very big artists!

SD: This globalization is a kind of comprehensive integration, but it's also commercial.
GK: There are limited ideas. A strong simplification to bring the life to the level of shopping.

SD: Is it possible to provide a more sophisticated level in urban design?
GK: I have hope, but I am not optimistic about the future. On the other side it seems to me that if we are looking at history, there are two polar opposites: emotional and the rational. And trends or mainstreams are always going from one to the other. Action always provokes reaction. Now the change goes from material things to the direction of software.

SD: The emotional part is leading into virtual reality because they don't even see materials and sense of place.
GK: Yes, if you are looking at the latest architecture magazines, you see fantasy that will never be built. In the past you only saw built projects in magazines. Now you see it is not so important to have something built.

On technology: Maximiliano Fuksas built a 400-meter-long steel and glass roof structure for the Fiera in Milano that could not be drawn in any conventional manner. It also depends on computer-aided construction.

SD: the POT is a special urban feature. It is so big and so simple, not really developed. Architects have to think what to do and what not to do. It's full of history and experience. It is fifty years old and it is splitting its meaning to the generations. Are young people conscious of it? In what way are they perceiving it? What is your recollection?

GK: Yugoslavia collapsed in April of 1941, invaded by Germans and Italians. Before this, on the 25th of March, Yugoslavia signed an alliance with Rome, Berlin and Tokyo…the Axis. But the people made a public strike in Belgrade and the government rescinded it. Without declaring war, Germany invaded Yugoslavia. My father was a professor of Slavic languages at university and was secretary of the resistance movement. In October 1942 he was shot as a hostage. The resistance started in April 41 with establishment of the OF [partisan resistance]. It was organizing people, not military actions. Slovenia was divided in three: Germans in the north. Southern part by Italians. The border of the two occupied territories was just 6 km north of Ljubljana in St. Vid. [near the present ring road]. The Italian part was called Provincia di Lubiana.

Resistance was very strong in Ljubljana, because there were so many intellectuals. In the agrarian part, the church was much stronger and encouraged collaboration with the invaders. Also the Catholic capital was in Italy. The Roman Catholic Church, strongest in Slovenia, collaborated with the Italians.

The fence was made by wire [points to photos in book]. All at once they closed Ljubljana and you needed a pass to go out. We had a milkman who brought us milk, but he couldn't even enter to bring milk. Only very "correct" people to the Italians got these passes. But there were underground partisan connections. The OF was based in Ljubljana, and left in late spring of '42.

There was also a fence at the German/Italian border in areas that were highly populated, and there were bunkers for controlling the border in the less populated areas.

There were five sectors in Ljubljana. Sector by sector they went checking people and imprisoned people in Metelkova [near the train station, now a youth hostel]. That is were my father was murdered. They also sent people to concentration camps in Gonars, Rab, Renici. Especially Rab…about 2000 Slovenians died there.

The Italians and Germans wanted to be strong in communication lines and bigger towns. In less populated areas there was not a regular Italian military presence. But forty thousand Italian troops were in the country, looking in the forests for members of the resistance movement, but some places were never found.

The fence around Ljubljana was to isolate the town from the countryside. To stop the transfer to the resistance movement.

I was born in ’32. I was nine when the war began. My father was executed when I was ten.
It was similar when the East Germans built the Berlin wall. The people did not have opportunity to
leave the town. There were no jobs outside and to leave with their families was impossible. People saw
what was happening, but the only choice was to join the partisan army in Krim [mountain west of
Ljubljana], Dolenjska [to the south] or Gorenjska [to the north]. The winter of 1941 was also one of
the hardest winters in the 20th century. It was impossible to survive in the countryside, so some people
came back to the city.

At the beginning, the Italians were rather polite, but when they didn't have support among the
population, they changed their manners. The first hostages were shot on 1 May 1942. The Germans
shot the first hostages in '41. Seven months earlier. The Yugoslav army collapsed in fourteen days and
capitulated on 20 April 1941. The king went to exile, first to Cairo and then to London.

The partisan resistance movement was highly socially oriented, not to make a revolution, but because
conditions for workers and peasants in old Yugoslavia were very hard. People were socialist in a
Western European manner. In '41 as the war began, the communist party had fewer than 2000
members. Afterwards, Stalin called on Europe to support Russia against the German invaders. Then
people joined the partisans since they trusted them more and thought life would be better. In
Slovenia, it was not only communists, but an association of sokoli, the athletic [gymnastic] association,
the Christian socialists.

The main conflict in Yugoslavia was also between Serbs and Croats. Serbs had a tradition of a free
state after they separated from the Turks. Croatia and Slovenia were part of Austro-Hungarian
monarchy until the end of WW1. Italy was neutral until 1915, but they wanted Dalmatia [Croatian
coast] and got a big part of western Slovenia at the same time, as part of a big expansion. Some of the
islands were also Italian.

SD: How was the Path determined?
GK: They went close to where the most inhabited areas ended. Sometimes it was illogical. They were
concerned about Golovec [hill in Ljubljana near the castle hill], since that is where it was easiest to
escape. It was not possible to get through the fence. There were bunkers and patrols along the fence,
and they also used explosive mines. It was not possible to cross it.

It was there until the end of the Italian occupation on 8 September 1943, leaving the collaboration
with Germans. The Germans kept the fence. After the summer of '42, it was hard for the resistance
since they had a lot of losses, a lot of people fled back to their villages. Italians and collaborators tried
to get hem to join the Belagarda (milizia volontaria anticommunista) [White Guard]. They established a
lot of fortifications in small villages around Ljubljana. The parishes in the villages had a lot of
influence.

Belagarda collaborators were executed by the Germans, and who was left went to the partisans. But
then the German Gestapo established the Domobranci [Home Guard], which became very strong.
But they shared the destiny of Germans and Italians in 1945. They left Slovenia for Austria and
surrendered to the British.

The number of people executed after the war without trial could reach 10-12 thousand people, those
fighting against the partisan resistance.
Just after the war, after liberation, life was hard. Some of the fortifications were taken down. It was organized as volunteer work. If you didn’t go you had to have very strong reasons to explain! To destroy the fence, it was locally organized by the local communities to bring away a part of history we didn't like. Participation was stronger than it is today.

SD: How did the idea of remembrance come about?
GK: It was a civic initiative of young architects. They questioned all kinds of ceremonies and this was an initiative of free thinking. They made the initiative in town planning to institute as recreation and as remembrance. It was a beautiful idea.

Some parts of the fence were overbuilt. And some of the Path is not where the original fence was, for practical reasons. It is a pity that there were some monuments that were destroyed. They were in a constructivist style [masts designed by Janez Kožel and students in competition of 1984]. In 1991, these were torn down by people who were on the "wrong side" during the war and they came to power and tore down the masts with the red stars.

Memorial obelisks were sponsored by factories with inscriptions. This was done over a period of time. Now on 9 May is the traditional walk around the city.

Janez Koželj was one of the most effective in the initiative… [they gathered] in room 25 in [Edvard] Ravnikar's studio – the room of the "B-stream" [special class of the most talented students]. I finished my studies in '59 in Ravnikar's studio. In the generation before. The B-stream was in '61….to make a comprehensive study of environmental design and visual design [Saša Maechtig was in this group]. This eventually led to establishment of the design department of the Academy of Art in 1984 by Maechtig and Peter Skalar.

[Note: the initiative to construct a memorial path has been variously attributed to Edvard Ravnikar himself, but in fact it was students in his atelier: Omersa, et al.]
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AUGUST 2006

JB: I started at school in architecture in 1974, and I graduated in 1980, so there was no B stream [Ravnikar's separate chosen talented students] anymore. I just heard about this. At that time there were just two important professors: Edo Mihevc and Edvard Ravnikar. This means two quite different types of how to think about architecture: Ravnikar was much more conceptual somehow. But at the same time, he had these connections with Plečnik, and Plečnik with Wagner, etc. I remember that Ravnikar always said: "This is what Plečnik said. And this was what was said by Wagner."

SD: How did Plečnik become so powerful?
JB: At my time, Plečnik was not so important. When I was in technical high school, Vurnik was much more important for us. We made jokes about Plečnik. Suddenly when I came to the architecture faculty in '74, postmodernism started. The diploma projects changed completely. In my generation a few people graduated with projects which were modernist, but most graduated with postmodernism. At that time Plečnik became more powerful. At the same time I always heard Ravnikar make small jokes about Plečnik. He was his student and knew about Plečnik better than most people…

SD: Ravnikar was a pipeline from Plečnik?
JB: Plečnik died in '57. Ravnikar was some kind of connector between…he moved from the Plečnik style to modernism, because when he finished school at Plečnik he went to work with Le Corbusier for a few months. He said Le Corbusier had two types of students: one type had to pay to be there, and the other type got paid. Ravnikar was paid.

There are a few people who I think were really my teachers; one is Ravnikar. Another is maybe aikido master Yoshida Saki. Ravnikar was my first teacher, who talked a lot about knowledge, conceptualism… you have to know, you have to find. He had really great knowledge. When we walked through Ljubljana he would stand in front of a house and he would say: "here is Michelangelo". It's a pity because I was too young to understand everything. In Cankarev Dom [Ljubljana's main cultural center, designed by Ravnikar's office] he also said there was a detail of Michelangelo. It took me years, but I finally found the drawing with the pattern he was talking about. He brought parts of Cezanne to Ljubljana, and Henry Moore.

SD: What was his teaching style like?
JB: He had just two lectures in one year. Really rare. When I was at school he had maybe one lecture per semester, but it was excellent. It was completely crazy and even now I can remember it. He had just maybe two slides. One was just a façade of a family house with windows, and we tried to find out with him what was behind these windows. It could be some kind of office or something. You can find out through the window if there was a dentist working there. Another slide was a field or a parking lot with tracks in the snow of the cars. The whole lecture was just about this. How to find out some kind of order without architecture...as if the cars found out themselves how to park!

He was quite an unusual man. He had three assistants at first: Bonča, Jože Koželj and Richter. But he broke with them. He didn't really work like a professor [teaching in studio]. He had an office outside the school, but at his office at school he just had books...a place for thinking.

Officially he was a professor there, but he had his outside studio for his own work, but we really worked with his second generation of assistants: Janez Koželj and Peter Gabričič. His really functional assistants. He had just these few lectures per year. At that time it was enough! But he was trying to find young students to work in this studio. From my generation three of us were invited to come work with him. I was in fourth year and I started to work outside in his studio on Cankarev Dom. To be close to him was really difficult. He didn't like to go to the market so his daughter did it for him. He didn't want to go to the bank. If you showed him you were a hard worker, that you would do anything for architecture, he slowly accepted you. Each Saturday I came to studio, I didn't have anything else to do, I was alone, and I was alone there. Everyone else went to ski or something...so he noticed me there. He came to my table and he started to talk. Suddenly he invited me to drink a beer with him. He was already quite old, and I think I was some kind of small connection to the real world! I told him what was going on at school, etc.

He was a mixture: he could be really rude, but at the same time shy. A really funny combination. We could walk in the street and a beautiful woman might walk by and he would say something like: "We've seen more beautiful women than that!" Once we went to school and he had an idea to show me something in his office in school, and we went upstairs and his old assistant Bonča was a few meters in front. He wearing a white coat and he knew who it was and he said: "Who is this butcher?"

He had just maybe a few friends. He was really nice to me. But when I went to the Academy of Fine Arts, he split completely. On the street I tried to say hello or something, but he would always turn away. He had this idea you were his friend, that you belonged to him. Plečnik had the same style.

SD: Did Ravnikar imitate him?
JB: At the time, they thought if you were an architect you had to belong to architecture. Plečnik said: "I don't want a family. My wife is architecture." Ravnikar was the same; he said: "I am too old to divorce from architecture".

SD: What about Cankarev Dom?
JB: The building is like a boat. The water level was so high. And so the ceilings are so low in some parts. But this was a political building...and Ravnikar had to go to this main office every week... The problem was that they wanted the building near the other political buildings around. I am not sure but I think there was a bomb shelter in the basement, because nearby was the Parliament. But I never saw this in our drawings!
Ravnikar had an idea that he would have just a small group of students and he would come with his books, because he had such a big library of architecture. He thought it was really important to read the first 100 books of architecture. He showed us all his books, starting with Vitruvius and Palladio, which he found in bookshops around Europe.

I think this was an idea from Wagner, who was always showing magazines to students. And Plečnik was a part of this group, too. Wagner was really a funny person. Wagner had magazines from England, so he probably knew about Morris. He showed things where he was not really specialized. This is funny: the way of teaching may be the same for a few hundred years. Shinkel, Semper, Wagner, Plečnik, Ravnikar.

**SD:** What was it like to be Yugoslavian architect?

**JB:** At that time, Ravnikar had students from Austria and China. No one came to anybody else. He had some kinds of connections. Once somebody told me the story that in the '70s he went to Venice with students and they drank in Piazza S. Marco and he recognized someone, and he sent a note over to him. My generation didn't have experience with people from abroad. When I was young I lived in Ljubljana and in my childhood we had games like "Partisans and Germans", and we all wanted to be Partisans. I was born in 1955 and when I was about six, someone came to me and I think he was Italian, and I was so surprised and afraid and I just ran away! We didn't have much experience to go abroad.

We were talking like those times were so bad, but I bought a lot of books in English and it was not so black and white. You can't say those times were bad and now is so much better.

I am lucky because I met Ravnikar. If I say who was my teacher, Ravnikar was my teacher…no one from the Academy of Fine Arts. Ravnikar spoke French, Italian, English. I think Plečnik only spoke German.

**SD:** Did he travel a lot?

**JB:** When he was old he just went to Graz to give some lectures. He was shy. Once they had an idea that they would make a documentary film for TV about him, but he said no. At the beginning of Cankarev Dom, he was on TV at a roundtable and when the camera came to him he would make faces. He didn't like this kind of thing.

**SD:** He had a sense of humor?

**JB:** He was a joker, too, of course. From this it could seem like he was childish, but he was a very careful observer. You can still find his old texts where he was referring to computers, not as computers, but as a "counting machine". This was written in '69, but it was not published. He said that Slovenia was too small to be a country, but a good size to be a town! He thought about a superfast railway to Maribor and Koper…you could have breakfast and read a newspaper and get from one side to the other. The forests of the country were like the parks in the town.

**SD:** Did Ravnikar have urban design ideas for Ljubljana?

**JB:** He was a professor for urbanism in our faculty and also for big public buildings. He was not really a teacher for this though. He didn't want to be with a big group of students. He liked to sit beside you and talk to you. If a project was about one building he would always start with a big area. He said you have to draw really fast, not think! He had knowledge from the past – styles and urbanism. If there
was a political building he knew it needed a lot of space around it, etc. But he was past and future in one person.

He used to wear women's socks. And I asked why. He said it was the simplest way, because you could wash them and you don't need to dry them because they are so thin. You could wash them and put them on your feet immediately. He had these pants and he would just staple them up. He had plastic bags instead of an umbrella.

He was unhappy about the two skyscrapers [Trg Republike], like the "Ljubljana doors", because he wanted them to be much higher.

Ravnikar was always part of high society – he married a woman from a quite important family in Ljubljana.

SD: What about Koželj and Gabrielečič?
JB: They were his assistants, but they didn't really have good contact with him. The students who worked with him had much better contact. He was a really difficult person, but suddenly he was not satisfied and he would just split. Koželj's generation was in a difficult situation because they didn't have any buildings to build. The idea at that time was to have a newspaper. They had this newspaper "AE", which belonged to this generation: Koželj, Vojtek Ravnikar, Jure Kobe. They wrote articles about architecture and this kind of thing. They decide that they would push one of them and they decide on Vojtek Ravnikar. He started outside Ljubljana, in Sežana. Slowly he became more powerful.

Later, I was not close to Ravnikar, but somehow he helped me to begin with sculpture. I told him I was making sculpture at home and he said you have to go to my friend Zdenko Kalin and knock on his door and say Ravnikar sent me! And I did that. Kalin accepted me and helped me with portraits. When I prepared the entrance exam, I was still working in Ravnikar's office. I was a freelancer and paid like a student and I didn't have any real possibility to be employed. There was also the possibility the office wouldn't have enough work. At the end, only his daughter was working in the office. She's a good person, really excellent.

I think that Ravnikar from my side has the same importance as Plečnik, but somehow he is not as famous. He didn't build as much as Plečnik. As a person, Ravnikar was stronger, because Plečnik was some kind of craftsman and Ravnikar was a conceptualist – even when he was old he was juicy and fresh!

After Plečnik he was the only one who had any idea about something ambitious. Now, we always have some kind of difficulties to do something more. Bigger. He always had some kind of provocation. When he was young he was a ballet dancer! When he went upstairs he always jumped from one step to another. And his voice. He always had a really young voice. Even when he was old, when he opened his mouth his voice was really young. It was surprising. I think that he is important, really. Maybe it is too soon after his death; on the other side, not enough people remember his way.

SD: Why did you go to fine arts. Was it for economic reasons?
My interest in architecture was architecture, but in architecture you have ten or twenty percent of architecture and eighty of something else. You have to be tough with people who give you money for this building. I am not this kind of person. You have to have some kind of image for something.
Ravnikar was really smart. He found a way that this ten percent could become eighty percent. He got other people to do what he didn’t want to do. You need some protection to be alone with your thoughts and knowledge, and mind. But he still had to go to the politicians. I am not this kind of person, to fight for ideas, to be rude. As a sculptor you still have something to do with space.

I saw fine arts like something really stupid. But when I was in the army for a year in Kosovo, I spent a few months on the border of Serbia and Bulgaria. I escaped from this life I was living in my head and I had time to think what to do. At that time I was married and my wife sent news from Slovenia and she said you will never find a job in architecture. She sent me newspapers and I read an article about sculpture evening school, and I always had an intention to do something with space in a more intimate way so I thought this might be interesting for me. When I got back, Ravnikar found me a job in the studio of his son [Edo Ravnikar], who did the renovation of Ljubljana Castle, but it was a lot of hard work with a small amount of money. He was even more strange than his father!

Ravnikar came each day to his son’s studio to get me to go have beer with him. He didn’t have much connection with his son. They didn’t really talk.

So when I came back from the army I started with this evening school. I stopped going to the studio…One friend let me work in his studio whenever I had time, so I decided to stop working in Ravnikar’s son’s office. My wife was also working in Ravnikar’s office…he liked to be surrounded by young women. He used to come to our apartment to have dinner. But that all stopped after I decided to try to find my own way. Then he would never even say hello to me.

Plečnik had a lot of German books on architecture, and he used to design by using tracing paper and changing the form on each sheet. Ravnikar used to draw in the same way. He used to make figural drawings…and so he wanted to be an artist too. Probably.

SD: What was your early sculpture like?
In this school, you had to start in a figurative way. You start with the face and you have to do the whole history of sculpture in a few years. I started to doubt…I had some idea that this is coming from architecture, of how to be useful. In the beginning, it was really tough. The school was much more academic than it is now.

I think another important person is this Japanese aikido teacher. And this is really funny: he spoke a lot about how bodies move. I slowly started to build my thoughts of what I wanted to do. A single line is not so important for me. It is natural to jump. Saki said the mind is jumping. So you can change a thought of something in the middle of a sentence. I just accept this.

I started to have exhibitions abroad. Here [in Ljubljana] they always have difficulties to decide by themselves so they have to find proof somewhere else. And you have to have some luck. I was invited to exhibitions in Germany and Austria. Then I was invited to represent Slovenia in the Venice Biennale. And so I started to be recognized here. I put boxes with small cabbages in a church. The whole idea was really simple. This was not a real exhibition place, and they didn’t allow changing anything. The whole church is so heavy and if you put everything in the light you see all these old walls, so I decided to leave the church in darkness. So I had these small lights 50 cm above the plants. We had to have water, too, so we had belts to help carry water bottles. And you could take away water for free…which was funny, because everything in Venice was so expensive.
I moved from one project to another really fast…[what follows is a discussion of other Barši projects and how he often made enemies as a kind of joker]

To be too serious, this means you will suffer, you know! Nothing is really SO important. Maybe the mistake of modernism is that they tried to find just one way. Just one solution which would be absolutely right. But this is not true. You can find a lot of different solutions, a lot of different results. And I think this is important. This is just one of the possibilities. Could be another way too. You have to change immediately! And be juicy and soft! [what the aikido master said] He was talking more about his mind.

SD: going back to Ljubljana as a city…
JB: When I was at architecture school they still had the idea that you could plan something. But now urban planning is not so important, and suddenly money means much more. So BTC [Ljubljana's huge shopping center] happened without really any planning. We became the capital city of Slovenia, but we have no idea what the idea of capital means. Maybe something more ambitious, not just fighting for little houses. The architects were so against this competition for foreign architects building something in Ljubljana.

SD: What did they think about Ljubljana in Belgrade?
CP: [Cvetka Požar answers]: …that this is where we made the money and Belgrade was where they used it!

JB: We didn't have much contact with the architecture schools in Zagreb or Belgrade. We were isolated the way we are now. We had a different language, and we had the idea that we were different. We still have jokes about Bosnians…Right now I really want to build contact with Zagreb. I like this idea to live in Ljubljana, but I really have connections with Graz, Trieste, Zagreb, because they are different from Ljubljana. It's a pity I don't have bigger knowledge about urbanism in Trieste, because you can find these buildings from the nineteenth century and it's so close, but you have no knowledge of these towns. [As Slovenians] somehow we are joking about Graz, but we are more Austrian than Austrians. This some kind of "closedness" of this society here I think.

SD: Should the POT be developed?
JB: Ljubljana was wired around in the Second World War. So this is something. Because we are questioning ourselves what is the identity of Slovenia or Ljubljana or something. So if you were wired in the war, this is a possibility! We don't have any competition in this – only Ljubljana had such a wire!

From my side, if the story has some kind of history it is more important, more interesting…and it doesn't matter if this doesn't mean anything to this generation. But someone who is very young who is walking in the future here might write a book about it. He has the possibility to find the history of this. So you have some kind of connection through time. This is nice. This is not formalistic. It is a sort of foundation. Not just an idea of one urban planner.

As kids, we were forced to go around once a year. But it was better to go there than to go to school. [some kids really hated it!] A lot of young people who do not agree with the right wing politicians here, this is some kind of protest to go around the POT.
SD: The diagonal masts were torn down by the right wing government for "maintenance", but they really just destroyed them. …

JB: To do this removal in a legal way was difficult. When Koželj made the masts [with the red stars], or with students in his class, it was legal.

SD: And now the new design based on the "mlaj" [traditional maypole]
I have something else in my mind. In Slovenia we always have a fight between the town and villages. Now the villages are coming in the town. The mlaj is coming from the village.

SD: What about thinking of the POT as a sort of open university?
JB: Excellent!! At Metelkova [former barracks near the train station made into hostels and youth cultural center; see also Gregor Košak interview] you can hear great lectures, retired people who are really old but really smart. I said why not make a mobile roof, to protect from the rain to make lectures outside anywhere. I sent them an email but it was never published and they didn't answer. Why not spread Metelkova, to be more open and fresh. I like this idea just to have a walk and at the same time you can see twenty people sitting and listening. Knowledge is much more important than building something.

You can send SMS around announcing lectures. In Philippines they brought down the government using SMS.

I was in a competition for a monument commissioned by Mobitel [mobile phone company]. I suggested to build a small empty base, but when you go near this base, you will hear bird songs, because the company has this image that they are sharing the sky with birds. And you could hear a lot of birds going over: WAAAAAAA!!!! I was not accepted of course, but this was really a monument! But using sound is really excellent.

No one really talks about POT at all. Maybe the history is still too strong. You know sometimes I am surprised that history is still so painful here. We are more than 50 years from WWII. But we still have the same fight. Not just in the old generation, but someone can be quite smart, but his family was on the opposite side [domobranci – collaborators] and they are still talking about it when they have dinner or lunch. POT is still close to these kinds of memories, so we can't use the possibilities of POT. Talking not about the history but more about what will be the future would be useful. This open university or events or getting lost on the path, this kind of thing… different kinds of things from monuments. The same is in contemporary art. We are not dealing with big formal things, but we are talking a lot about everyday life, the common people; this content of contemporary art is the same, I think.

In the past we worked with material, but I like this idea that we have this lack of social life, so how to make some possibilities for people so that they can do something together. In Ljubljana there was once a project that when you came to some building suddenly all the cell phones started to play some kind of music. This is possible. I think that Mobitel is this kind of company that may sponsor projects like this.

You know what is stupid about Ljubljana? We are connected more with the past than with the future, but to think about the future is more interesting. We have to think about the future, too.
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OCTOBER 2006

SD: When you were in architecture school, Edvard Ravnikar, your professor, was experimenting with the so-called B-stream [special track for the most advanced and promising students]. What was that like?

SM: The B-stream was great and I think it shaped my future career. Maybe not as I thought, because first of all it was a reformed, very modern education and it was harmonized in a way with Ravnikar's complex view of design. He considered design from big scale to small scale, from urban design to graphic design. He was a Renaissance man, very well educated and very experienced. In this time we got in touch with very interesting people. It was a part of the cultural patchwork of Central Europe from the Alps to the Mediterranean. The advantage was the spirit of Ravnikar and his circle – he had a very large circle of friends, intellectuals and supporters, and his students. At that time there were people who were already working outside, and of different ages, like his brother-in-law who had been working in Sweden and brought the Scandinavian spirit to Ljubljana – Murgle [residential settlement in the southern part of Ljubljana, where Maechtig lives] is a very good example of this influence. The circle also influenced ambitions of industry that wanted to export products, especially our textile and furniture manufacturers. They worked with these people in workshops introducing Scandinavian design and the role of the whole environment. There were many ideas for rapidly developing Slovenian industry… maybe they were ahead of their time and there were some problems.

I was privileged as a student to take part in these workshops. This was very uncommon, even now! I was an assistant on the one hand, and on the other I did tasks along with the others.

SD: When was this?

SM: In 1961, '62, '63, '64… Scandinavians used to come to Slovenia. Yugoslavia was a very interesting country at that time because of two political doctrines. One was self-management, which unfortunately failed because of imbalanced Yugoslavia, from the development point of view. When we talk about development, we have to know that Yugoslavia was really at many different stages: Kosovo was pre-industrial, Slovenia and Croatia were at the edge of post-industrial and Serbia was industrial. This was one of the reasons the experiment failed. For political reasons as well. People from the West liked to come and listen to these ideas. I still remember many people who were interested in design here, because it was a kind of node between West and East. Eastern colleagues also liked to come, because it was the only country they could come to! The people from behind the Iron Curtain were not able to travel like we were, so here was a very good meeting point. The second doctrine was the non-aligned movement, with the first godfathers like Nehru and Nasser. Nehru was a
great spirit, and important. This was also an interesting issue for the West because they didn't know where the development [of the third world] would go. Of course we know that development went to corruption and everything failed.

In the first half of the sixties was a very constructive and fruitful spirit in Slovenia. The country was the most advanced and the proper platform for this kind of discussion. And Ravnikar's circle used this environment and spiritual and intellectual substance in a very good way. In the end, we know that they were the forerunners, too fast for average development in Yugoslavia. And things failed. The B-stream as well. It was cut and the rivals [of Ravnikar] used politics to destroy it. Nevertheless, some of the students from the B-stream used the experience in a very good way, for themselves and also for the future, because the graduates of this generation are now spread around the university in different faculties: Lojze Drašler in landscape architecture, some people in the architecture faculty, people in the Academy of Television, etc., Peter Skalar in graphics, me in design, etc.

SD: Who were the rivals?
Edvard Mihevc was supported by politics and by party leaders. He was a good architect, but he was not a great mind, not a great thinker like Ravnikar. He was a great practitioner, but he was afraid of Ravnikar's intellectual power and his body of supporters who were completely independent. Ravnikar never pushed people down around himself. He accepted polemics, he accepted opposition and discussion. He was not interested in unification! He invited his former graduates to be assistants, to join the B-stream, plus there was an outer circle of supporters in architecture, plus others from other disciplines, like Anton Trstenjak, who was a psychologist and priest. There were specialists in skills, great historians and philosophers and scientists. He had a very large circle of people around him.

In the middle of my studies, the B-stream was washed out. And the majority of students joined Ravnikar's studio. The students with the most potential. In my generation there were about 80 students, and about 40 of them were in Ravnikar's studio!

SD: Ravnikar was not just a disciple of Plečnik?
SM: No, not at all. He was a combination. Of course, before the war in the mid-thirties, he couldn't escape the spirit of Plečnik, like many others who couldn't. At that time modernism was in and he went to Le Corbusier and he worked and studied there. He was there during the project in Algiers. The war started and Ravnikar packed his suitcase and returned to Ljubljana and joined the underground movement. He was never a communist or politician, but all the intellectuals were left-oriented.

In the first two years of our study, we received information about concepts of industrial design and about methodology. We had assistants, young architects like Braco Mušič, Gregor Košak, Svetozar Križaj. [Koželj came almost ten years later.] When the B-stream failed and we started third year, we started planning big projects, settlements, recreation centers, etc. and I had this idea of prefabrication and technology and industrial management…all of this was under my skin because I had this information since the beginning. So I came to see architecture as industrial design also. We took part in many competitions, big structures with prefabricated modules…around the time of Saïdie and Tange. We knew everything about what was going on. Braco Mušič won the competition for Ruski Car …and then Grega won the competition for Mercator headquarters [on Dunajska]. We as students always failed…we got mentions, but never won of course. In the meantime, Ravnikar invited me to come to his office to work on the project in Trg Revolucije ['64-'65, now Trg Republike]. I was a
draftsman in the best office in town. Or in Slovenia, we can say!! I was a draftsman, but Ravnikar always discussed things with me, like the big entrance to Ljubjanska Banka with a chandelier. I was sketching and sketching and trying to follow what he wanted. So I was drawing and thinking. Almost every day we discussed his ideas, and I was working with the chief architects in his office. It was a big office and the tasks were assigned to many collaborators and assistants.

**SD:** So you were obviously one of his favorite collaborators.

**SM:** Maybe I had potential. I was ambitious and loud! For a while I was his student assistant. I called him every week to remind him that he had a lecture every day. He told me to go to his room in the faculty where he had hundreds of slides and find material for his lecture.

**SD:** Did you know him personally? He was quite eccentric, wasn't he?

**SM:** He was. He liked to be around students, so many times we sat around in pubs, near Križanke, like Pod Skalce. We organized tours to different places in Slovenia and Venice. When we had guests like these Scandinavians, we went to Kostanjevica and I went in his car, his Volkswagen beetle. He knew my father because they were in prison together during the Italian occupation. When I asked if I could join the B-stream the first day, he asked if Karl was my father. My father had died when I was 16. He was also a friend of Zdenko Kalin [sculptor], and I was the boyfriend of Kalin's daughter Špela. It was nothing special because this whole generation of artists and architects all knew each other. Of course they didn't meet everyday or every year, but they had a very friendly attitude. So maybe this helped me become Ravnikar's favorite, like you said.

He had strange behavior, but I should not forget that I was also a school fellow of his son Edo. We were sitting together and we had a lot of fun together. We skied and worked together and went on trips in the summer after our first year. Edo had a little 2CV, and we traveled all around. So with all these things together, there must be a certain chemistry around. But Svetozar Križaj said to me, you should go outside to foreign countries and travel and learn. And we did it, right from the first year. And I never stopped traveling.

Ravnikar told Križaj and then Križaj told me that I was the only one who did something right away after the studies. I think he meant I used the knowledge I got from the B-stream and after in a very good way – I was the only one who "exploded"! Somehow he admired that. I took this message very seriously. I knew what Ravnikar's philosophy was, this multidisciplinary orientation. He was interested in everything: philosophy, psychology, engineering, all the sciences. On the other side, we followed and understood what was going on in the most advanced countries, like Archigram and the Metabolists. In '65 when we were still students, [Lojze] Drašler, [Janez] Suhadolc and me went to the UK to see the new Brutalist structures in Cumbernauld in Scotland and Sheffield.

And yet, we didn't stop studying. It was nice to be in the school, but Ravnikar started pushing us to graduate. I wanted to do a very big project. Very ambitious. But Ravnikar said, "do your diploma work as soon as possible". At that time [1966] I got a commission for an outdoor canopy for Café Evropa. It was a very advanced experimental idea. My mother was retired but she was asked to help the director of the kavarna Café Evropa, a strange woman whose parents owned the whole building.

Anyway, I got this commission. I was working at home, in the garage, let's say. I went to Ravnikar to show him what I was doing, but he didn't want to know. We went to drink a glass of wine at Pod Skalce, and I tried again but he didn't want to hear about it. And then I brought two big models to the diploma project presentation. One was a model of the space frame canopy structure made of straws.
joined with thread… and then he started to look at it. He was looking at it carefully and said it was a very interesting structure. And I got the best mark. He was impressed. But then he asked: can you really do this? And I said: Of course.

And it was built in 1968. I was in Ljubljana, because Špela had died in a car accident and I was in Novo Mesto in the army. Tomaz [Maechtig’s son] was 7 months old. Zdenko Kalin managed to get me transferred to army headquarters so I came to Ljubljana. In November the canopy was made in Šentvid and two huge cranes brought it to Ljubljana in the middle of the night and lifted it onto two columns. People came in the morning and thought a UFO had landed. The neighbors and critics hated it and made jokes. My mother cried. I told her not to think about it! I became famous from this.

There were many architects and good designers who touched new horizons, in the spirit of the times. Urška [Vrhunc] wrote about these times as one of the best periods in Slovenian architectural history. We were able to do crazy things like Evropa…and the kiosk, things like that. The next generation was much more conformist. They pushed architecture to a higher average standard, but not with energy and potential. Most of them are sitting in the school of architecture…and the school of design as well.

The message of the sixties is very important for the present and the future. You have to experiment, you have to set up new theories, you have to explain what you are doing and behind the explanation must be some philosophy, which is coming from multidisciplinary backgrounds and environments. You have to be open.

SD: This is a good background for talking about the city of Ljubljana. What was the city like when you were in school. Did Ravnikar have an image of the city?

SM: The center of the city didn’t change much. I am living within a fence my whole life. It’s awful, the feeling is very bad. If you see Bavarski Dvor, it’s a fence. Ajdovščina is not finished. Šumi will be finished after so many years. Mihevc and Ravnikar made some changes. Mihevc not in a very good way, like Tehnounion and Metelka and the buildings around the stock exchange. The real contribution to the city was Trg Republike [Ravnikar’s project]. It was a big garden of a monastery, a kind of park with a big wall around it.

SD: Did you travel often to other cities in Yugoslavia?

SM: I was traveling a lot through Yugoslavia because I was serving as a member of the board of the Yugoslav Federal Designers Society and we used to meet every year at least twice in different cities like Sarajevo, Zagreb, Belgrade, Novi Sad, etc. And yet when I had business I was also traveling a lot because I was trying to establish the market for the kiosk [K-67] in early and mid ’70s. I met mayors and urban planners and presented the kiosk and later the bus shelter. There was a big demand for small stands, and these small private businesses were allowed. We also had a project for recycling containers and exhibited in different towns, for example we had a big exhibition in Belgrade in the center of the city in a nice art gallery. For recycling containers! And in Dubrovnik. So I was familiar with the mentality, and most of the people I met were intellectuals and knowledgeable, and the discussions were very fruitful. In my philosophy I covered two sides of the same coin: urban design and industrial design, how a product is part of a system and developed and then used. I was always concerned about how the product was introduced into the city environment. So I made a lot of urban research, especially street furniture. Christopher Alexander and Kevin Lynch and all these guys… Alexander returned to the past, but he made it more sophisticated and made recipes for designing the environment without forgetting human behaviors.
SD: It was extremely multidisciplinary.

SM: What was missing was high technology and information technology which brought a new vision to the city. Alexander should learn from Venturi! But I still recommended _A Pattern Language_ to students. It explains something you know very well! It is a book that can be read by anyone. But before Alexander was Gordon Cullen. The way English architects draw the city environment influenced many of our architects. Like Lojze Drašler. And Janez Suhadolc, but Janez did it in a more creative way, a more creative expression of the environment. Drašler had great technique, but he didn't go beyond that.

I was traveling in Yugoslavia at the same time I was traveling all over the world. I was in the States for the first time in '71. In '72 Nepal and India. In '73 in Japan. And I always learned. It wasn't just tourism. If I went somewhere, I always made a plan of what to see before I left.

The rest of Yugoslavia looked at Ljubljana as a place where the more advanced architects lived, but we were also pressed down by the situation because of politics. The politicians intervened in every redevelopment of the city, like with the railway or infrastructure, and so we got these underground passages of the road instead of putting the railway underground. They destroyed a part of the city between the Post Office and Zvezda Park. There was a narrow street with a precious palace, but they tore it down because of a parade. It was the last parade with rolling tanks, but they needed this space. [1960]. I still remember the demonstration protesting this in 1959. They also took away the trams. The Republics had their own governments, but the big plans were controlled from Belgrade. They were trying to build the federal capital of Yugoslavia and realize Karadordević's idea of one state, one language. It was crazy. Fortunately, Tito was concerned about these trends and tried to harmonize all these big ambitions of the Serbs and stop them, but on the other side he played. He gave a little to this and a little to the other thing...he was controlling everything I think.

People were jealous about the location, which could never be changed. They said we were like the Swiss. And there was more spirit of the West, with Italy on one side and Austria on the other. Slovenia had economic power because it was more advanced and productive, and export was bigger, bringing in money. And most of the money ended up in Belgrade and only a little stayed here. Slovenia built 30 kilometers of highway before the break-away, and now after only 15 years we almost completed the whole network with no loans. So some money must have stayed. Serbs were thinking of everything through numbers, and so they had more respect for Croatia because it's bigger. Economies of scale. If you are small you are weak, etc. And Slovenia always suffered from small scale and through politics could be manipulated. Now, for the time being anyway, we are on our own. But economies of scale are coming into question again.

SD: It's called China!

SM: Sure. But Slovenia was considered advanced, and from the point of view of architecture did most in terms of residential settlements, like Murgle, Koseze, and small private houses. The big apartment areas were also built, but somehow they work because they are balanced with small scale here, and reached the highest level in comparison to Belgrade and Zagreb, where they built whole new towns with skyscrapers and big blocks, except for a few. But here the balance is better. And then the projects of kindergartens and schools where people contributed money to build them. It was a project for the whole country of Slovenia, with low-rise buildings.
And Cankarjev Dom and the highways were national projects. So was POT. Slovenians could organize themselves in this direction, and it's a kind of promising trend, and it happened before the break. Cankarjev Dom was paid for by every Slovenian citizen. It was financed through special taxes. We should continue in this direction. The railways are collapsing and need attention. We disregarded this, and now the rest of Europe is going much faster in this direction. Here, personal transportation is too much favored and has this very bad effect: the streets are full of cars.

**SD:** What's the future of the city?

**SM:** Ljubljana in ten years will change so much you won't recognize it any more. The city center as well. The area from the railway station along the railway lines will change. You will have a new skyline and image of the city. And transport will change. Private traffic in the city will have to be stopped. They have done this in other cities. There are such high taxes in New York and London that you can't afford to have your car in the city and use it. It will change. During Janković's term as new mayor, he will be forced to do something. It will be developers who push him...and foreign capital.

Fourteen days ago, I went by bike from Bežigrad towards Žale. There is a very large area which should be kept as a park, like Central Park in New York. There were crazy ideas to build in this place, but there were some wise people who stopped it and said "don't touch it".

**SD:** What is the future of planning?

**SM:** The people in urban planning offices in Ljubljana are low-level professionals with no vision with no courage and with no knowledge. Average, mediocre people. In the '60s you had a great director of urban planning, but he died too early. He was young and had a heart attack. Maybe things would have been different if he were still in the office. Then his followers corrupted the city planning. They divided the city into districts along the main roads, and these guys who are a little older than me completely failed. You have to have a vision, you have to see it. The "plastic" of the city.

**SD:** But is it possible to plan it at all?

**SM:** We'll see.

**SD:** How did Janez get so involved with the POT?

**SM:** I think it was the competition project. He was close to the politics. He was a member of the Communist party, and among the influential professionals in the past. Then you look at how they behave now and that they attach to politics all the time because they need support and privileges. That's my feeling. I have never been attached to any party, today or yesterday, but that's why I have many problems. You pay a lot for your independence. And I'm not a diplomat!

The problem of POT is that it is disconnected in certain parts and it’s difficult to make a circle. And the city administration should take this project more seriously and do whatever is possible to connect it. It's too complicated. Last time I tired to go around I got lost!

**SD:** Is the POT forgotten by the younger generation and what sort of potential is there for development or preservation? And what about its historical meaning?

**SM:** I don't think the historical meaning is important. It's important to protect the urban design elements. If you look at other parts of the city you see that it is not important to know the historical background. The Napoleon column for example. It's just what it is. Most people enjoy POT simply as a nice environment, not only for recreation but also as an attraction – the beauty of the view, etc. If
you take POT here [near Koseze] it's one of the nicest parts. You can use it for recreation or as a connection for pedestrians and bicycles. It's just an urban element which should be maintained, not because of history, but because it is physically a precious part of the city. And it's here. If you have such parts of the city you should maintain them and care about them. Simple fact!

SD: But it's richer with its history.
SM: Absolutely! It has a story, and all good architecture or part of the city has a story, and that's why this part of the city is precious because it has a story inside. This is an advantage. But on the other hand I look at this fact as something that needs to be maintained because it's so beautiful. If I go to Vegova Street, for example, I like to stroll along the street just to enjoy the view or chatting with a friend. It lifts you.

SD: Then why is it necessary to maintain the circle?
SM: Look, you are privileged because you live close to the area which is functional and nice [Koseze]. But why should you not go the other way? But it's disconnected. It should be nice to go through the more urban parts as well. It's not normal that you would take visiting foreigners in town by bike through Ljubljana's neighborhoods. Usually you would just show them fancy new buildings. But this way [and on POT] you see small-scale elements of Ljubljana's urban history, and it's fantastic.

SD: What is the role of technology in the city?
SM: When somebody calls you and you take out your mobile phone you fall into a kind of trance. You are in a different world and you don't see anything around you. You are talking to someone who might be a kilometer away or someplace like the States or Japan! But after that talk you land softly on your city ground again and you have different connections with the people around you. You just "click" from one situation to another. And you use technology to improve your advantages to be in the city. You can talk to the others when you are anywhere, in the forest, in the mountains or at home. But being in the city gives you the chances to physically connect to people, and I think we enjoy this advantage to be physically, mentally and virtually connected to people who are on your menu!

You invited me here, and we talked and talked to try to find a time to meet, because you wanted to see me. And everybody needs this physical connection. You can have friends all over the world and it can happen you don't meet them for ten years, but the next year you finally meet them and you enjoy this meeting. And suddenly new stories occur. And that's the advantage of these times. And technology helps very much.

I'm don't talk about consumer culture in a bad way. I don't have anything against big shopping centers; I think we need them. But we need life in the center of the city also. It's very easy to revitalize Ljubljana. Everybody says Ljubljana is so beautiful, but where? It's a question. In some places Ljubljana is a disaster and ugly, but in some places it is beautiful. In the old city it is beautiful, without question. The development over the past years goes towards the living museum, which is completely an urban planning failure. Why? Because they washed away the life and function of the city. There are no stores, no offices, no balance between living and working and entertainment. When the mix is more harmonized, life will return to Ljubljana. The mayors did not understand their role. For example they should open the shops on Saturday and Sunday in the center of the city. They should give privileges and tax reductions and any possible trick to bring business back to the center. If they stimulate life, the city will also become more secure: less damage, less misuse. It should work 24 hours a day, every day of the year. And then technology will come also to help all this operation.
Maybe the previous mayors were too much in politics and not enough living as real citizens. You have to grow up in the city to understand the things which are not in textbooks. Then people might say, "I will stay in the city instead of going to the cottage in the mountains."

**SD:** It's only the city itself that can mediate between these technologies and realities, the combination of physical and virtual.

**SM:** There's a problem that some parts of the city are not considered precious, and therefore not protected. For example, if we say a certain area should stay as a park because of the views of the Alps, or the farmland, etc., they should not be destroyed. But they destroyed a lot after the war because of fast development. Of course you don't have to keep views everywhere, but you have to plan. In Ljubljana you can feel this little bourgeois mentality also. The opera house is supposed to be renovated, by why don't they build a new opera house and leave the old one as it is? It's beautiful and it's not necessary to destroy this old Austrian gem. Why don't you take the chance to build a new opera house which could be built by our architects, or by Frank Gehry or Zaha Hadid? But we are always doing something small instead of making a courageous move to something better. That's why I'm embarrassed about Kolizej [site of an international competition for a high-rise building that was to have been built]. The biggest problem was not the tower. The biggest problem is the mentality. There are some people who want to keep the city down, to keep Ljubljana an uninteresting provincial city. When I was in New York recently, I was amazed by multiculturalism in the city. I didn't see any tension among people. Poor people, middle class, rich people, Arabs, Thais, Chinese, Blacks, American Indians. They live together. They take the subway, the walk on the street, they go to the market place on Union Square, they were completely mixed. There were jazz players and some organic food sellers. A fantastic mixture! It's a city of tomorrow, this mixture. It's a lesson to us. Of course, you couldn't copy it, but you can learn.

![Image of K67 kiosk designed by Maechtig in 1967](http://www.publicplan-architekten.de/k67/)

The K67 kiosk designed by Maechtig in 1967 (photo courtesy of Saša Maechtig). For more information, especially on the use of the kiosks in other countries in Europe, see [http://www.publicplan-architekten.de/k67/](http://www.publicplan-architekten.de/k67/)
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OCTOBER 2006

SD: Why did you want to go to architecture school?
MJ: This is a funny story… Sevnica [her hometown] is such a small town… I had a very good friend who was the best in everything. He was a wood carver and a poet and a painter, and he knew about everything. And he studied architecture too, and he really inspired me, so I went to architecture school too, and I realized this is great! I never regretted it, because I believe truly that architecture includes all the arts.

We made the first entrance exams, and I passed. It was also my first trip to Ljubljana from Sevnica. And I got some self-esteem and I thought yes, I can do many things. The studies were marvelous and I met some very good professors. I am an architect in my heart, even though I am not doing architecture now.

SD: How was the program organized?
MJ: Our school is the only one in Slovenia. Engineers were trained there, so we didn’t have the possibility of studying architecture in a more artistic way. So the faculty was more regarded as an engineering type of school. Not so creative. We also had contact with Berlin Technical University, not with the Academy. We had a lot of technical subjects, like mathematics and mechanics. Quite important, but this all passed somehow in the first two years. From year to year the number of subjects was increasing…all professional, from town planning to interiors.

In second year we chose a studio and stayed there until the end of the studies. I realized at the end of the fourth year that I really need to work more, so I postponed graduation for a year. We worked mostly on competitions in studio, with our mentor [Janez Koželj]. The first year was an introduction, and then you stay with a mentor. We chose Janez from the beginning…some friends told me he was the best! We had to fight to get in because there were many applicants. Actually, Koželj was just an assistant, not a professor yet. We were under another professor, Braco Mušić, an older man. The seminar was about town planning. The starting point. We never just designed single-family houses.

SD: So the starting point was the universe!
MJ: As much as it was possible in various circumstances. Big scale, definitely. For example for the second year we were really the beginners, going from table to table of the older students who were
doing really big projects. They were in Ravnikar’s seminar. Ravnikar was only at school occasionally. The projects began with him, but then Janez took over. At that time Janez was very young.

I remember in the second year we had to study Plečnik a lot! Then I realized that Plečnik made a city out of the village of Ljubljana. Janez showed us all the tools…what you can do with a row of trees, etc. using small elements to create some sort of atmosphere…like Vegova Street. And the pyramid [small monument designed by Plečnik across the road from the architecture school]…what you do when the road bends or you make a normal wall more important, like with remains from old times, or make a corner a little higher. For us this was learning the language of architecture, how the entrances would be formed, what the sequence is when you go throughout the city. Sequences are very important when you move through the city. I think it’s like a film, and architecture supports this.

At that time Janez was forming himself. This was in the early ’80s…I started in the seminar in 1982. He invented a new subject called the Architecture of the City. I remember his first lectures…he made an equation between the house and the city, and spaces in the city are like rooms in a house, only at another scale, but the public and private and social behavior, which can be developed out of your personal life somehow. But certainly he included the history of cities from Greece on to Modernism. We had a lack of historical subjects, so this was all introduced into the seminar by Janez. What I know I found there. At the beginning it was a lot of analysis in seminar, and then the third year we were doing a few competitions. One was the addition to the architecture school itself, which finally was won by another seminar, but we had our own proposal.

Janez gave us projects in neglected parts of the city: we observed the boundaries and entrances of those areas and made our own proposals. Either buildings or… We did a lot of perspective sketches and tried to make the project as real as possible. Mostly we worked at 1:200, sometimes 1:100, but never smaller. We studied a lot about typology also.

Then we got older and one of the big projects was POT. This was an outside competition. It was ’84 and it was still Yugoslavia. This was in my last year, as I told you, I took an extra year. I wanted to stay longer in the school. All the important subjects came in the fourth year, I was shocked! So I needed more time to absorb everything.

SD: Was this urban scale part of the philosophy of the school?
MJ: No, part of the studio. Other studios were different. You chose the seminar based on what specialization you wanted.

SD: Is there a kind of necessity on the part of Koželj, Mušič and Ravnikar, maybe coming from Plečnik to develop Ljubljana from a village into a city?
MJ: I agree. If I lived in Sevnica, where I come from, I would have this need to support the city with my knowledge. But my teachers were native Ljubljana people, so they had to know their own city and have it as good as possible. At the same time, the school was on site and it was quite easy to experience the city just by walking around.

SD: So it was probably in Koželj’s mind to deal with the urban scale and to teach in this way, and that it was not emphasized in the school.
MJ: I agree. Probably agree. Because we did not have this subject before, and it was very popular. The subject of architecture is so big, and I felt his way was the best way. Architecture is not only function,
it also has a meaning, and this meaning was described in the study. When you know how the city functions, it is much easier to put something new into it.

SD: We have to talk about the identity of Ljubljana... and Yugoslavia.
Mj: I was very young, and I was not aware of being in Yugoslavia. The professors talked about how it was in '68 when the students rebelled against the politicians. I think it was all over Europe, but also in Ljubljana.

We knew we were poor, but I was able to go abroad and I was so happy to be able to see all this beautiful architecture. Yugoslavia was not so very closed, never. It was possible to travel. Everyone knows Yugoslavia was the most open Eastern European country. And the standard was higher. It was a very complex country; if you go from north to south you see the whole variety. A lot of older people are nostalgic about Yugoslavia, because younger people don't see the connection any more. Students of architecture in Yugoslavia had an association that had conferences in different cities, completely organized by students. I saw the school of architecture in Belgrade... it was such a wonderful building with a huge hall with several staircases going up and down, like Piranesi! They also had lectures on modern architecture. It was easy on the night train, but it's 600 kilometers away.

I was studying exactly at the time punk was popular in Ljubljana, and this awakening came again. I understand punk very well, I must say! Punk is punk, but it was much more political. It's not a polite kind of singing! I felt good because it was so honest, saying what was forbidden to say. It was nationalistic, but they said the first words about Slovenia. But this is another story...

SD: Were police involved?
Mj: I know that many concerts were cancelled because of what they were singing about.

SD: That was an anti-Yugoslavia protest?
No, but we wanted more democratic things, and a voting system. We were also really busy with studies, and I was so very naïve. I remember when we were doing this POT competition and we wanted to make a big accent in nature as a big metal construction. It was planned as an ancient monument, a big column that people put up with a very high tree with a circle around the top. This is for marriages. [mli]. This was for Christian celebrations and I like the form a lot. It was like a big floating tree crown, not terrestrial but "sub-terrestrial" [extra-terrestrial!] Like a UFO! And it's part of our ethnology. That's what we thought... we didn't want any religious connection, just an abstract form something really high that floats in the air as accents in this walking area. And we were told it was too religious. But we were really so happy with this idea, since it was a part of Slovene culture. But the traditional way was rejected and it ended up being transformed in a more Constructivist way, the modernism which is always at the heart of architecture! It was like Tatlin's construction made of sticks; to my point of a view a nice structure was formed, and painted red, a little like Tschumi's constructions in Parc de la Villette, but the silhouette at a certain point was a five pointed star. And later those monuments were taken down. [Communist symbolism] When we were studying, this Tschumi project was much discussed and this red was modern at that time. This suited the idea of our towers to be all red.

SD: Where were these put?
Mj: They were put where the Path crossed big streets. It marked crossings. There was one on Celovska, almost at the ring highway. On the left side where the blocks are. I think it was meant to be
in pairs, like a gateway, but they didn't finish this idea completely so only one came. [There was a pair on Trzaska, at the zero point and where the Italians came from during the invasion.] And when we got our independence the new government immediately demolished them.

SD: What about the old stone markers?
MJ: The old monuments were where people were killed…they were graves.

SD: And Ravnikar designed these?
MJ: Indeed. This was very political, since the people who were killed were patriots. This remembrance was important to be kept, and the state encouraged it. Walking around the city always meant a lot to people. Later they added the 88 trees, one for each year of Tito's life. [Tito died in 1984]

We were always eager to join the competition for the POT. Karin [Košak], my colleague, joined this competition on her own. She was independent enough as a student to apply on her own. But we needed the help of our professor. This idea of landscape planning was really new for us. It was not really town planning, so we studied the landscape. We had a lot of compositions done with trees. As I said, I see architecture as a sequence of frames, and also here you need this sequence and that's how it was formed. What is the accent…how you enter, what happens when it curves… We also thought about various surfaces: plants, grass, trees, what kind of trees, but in a city planning way. Certainly we studied English and French gardens.

I worked with Janez on the signs. He was directing me. We talked a lot about how we don't need arrows, and that there could be other forms. So the sign is like a small part of the path. He invented the name POT, because before it was called PST [Pot Spominov in Tovarištva]. No one else proposed anything like this. It was so easy to write POT everywhere, it's almost like a sign itself. The sign is a landscape, the silhouette of the forest. And the plan view is there at the same time. [the horizontal band at the bottom]. I like this ambiguity of plan and section, the profile and the ground plan. And the letters are like people that walk on the path. At the same time the sign is enclosed by the shapes. The ground on the bottom helps the composition. And the proportion gives direction. We talked so much how big the sign would be.

The idea was how to demonstrate a path. The path is a line, something longitudinal…it's a road or a street, something with definition on both sides. The simplest symbol of a road is two parallel lines, and then this other symbol of the countryside was added: It's a path in the countryside. The typography was also really simple, just circles and straight lines. You also see the red star in the middle of the "O". We also did the graphics for several kinds of maps, showing where your position was.

The other students were working on landscape architecture. It was his idea to put bigger monuments on the path, because this was not in the program. We made a whole hierarchy of architecture elements, from surfaces and signs to more three dimensional and visible elements. That's how we came to these big monuments. Without these monuments the hierarchy is broken and you don't have the accents that would be needed. His idea was also emblems embedded in pavement. This was actually made by the same factory that made manhole covers. They were proposed to be all over, but only ended up in the urban parts. The idea was to pave the whole path, but there was not enough money to do it. We had a whole list of points to be elaborated, only some of which were part of the program. We specified trees, walls, benches, signs, monuments… to keep a sort of character.
SD: What do you like about Ljubljana now?
MJ: I see a lot of changes in Ljubljana. It's becoming more fancy, with more noble materials. I miss some shops and things that were more primitive before. Now everything is blossoming. Tourists are also changing the city. But the city is also developing too slowly to my point of view. We quarrel too much, and a lot of good ideas are stopped and not put forward. They say it's the Slovene nature! Nothing is good enough! I remember that Marko Mušič won the competition for the railway station and we thought WOW what a huge project and so up to date. And that was 20 years ago. Now I saw in the paper that construction is going to start… but a new competition was set, and I think a foreigner won the competition.

SD: And what about the future of the POT
MJ: It will never be forgotten. It has somehow merged much with the city, but it has been neglected. Maybe sometimes it's better to be neglected than to put something ugly. But I miss those gateways a lot, I must say. And the signs should be put back properly. This wouldn't be such a big investment to fix it properly. I think POT is loved by people. It's inhabited! Whole families go around…

Marija Jenko was a student on the team that designed the signposts for the Path in 1984 (photo by author).

Notes from Marija Jenko, emailed a few day after the interview:
About my decision for architecture: Architecture personifies the ritual of life and gives the meaning to the space. We had a big castle and a church fully decorated with picturesque frescoes in Sevnica and a very beautiful market place in the old part of the town, but certainly nothing encouraged me more than my friend’s best example and support... and a scholarship I was given by a local factory.

About the Faculty of Architecture: I would never say the study wasn't creative. We received all the creative tools and the classical architectural subjects simultaneously with the technical, more engineering and basic studies. I only wanted to say that we don't have here in Slovenia many schools for architecture like in Austria, in Vienna for example. I always thought that we were privileged, because we got artistic and technical subjects within one study. The school was formed by Plečnik, who I regard as very talented, creative and innovative also in technical point of view. The study of architectural meaning itself was always the priority. When we started to study, professor Ravnikar only came to school "ex catedra" occasionally to give some very special evening lectures that were always fully attended by everybody, no matter which year the student would be.

About Ravnikar's columns - monuments: It was said that they were put only for the partisans, I don't know, but I believe that they are there as a remembrance. They are architectural monuments. They personify the standing human body.
SD: The professions of architecture and industrial design have gotten to a desperate point, but what about landscape architecture? It seems there is big potential for a new way to see the world.

DG: What bothers me is when architects get into landscape. I teach a small course in the architecture faculty and what is hard to get them to understand is that there is a general misunderstanding of what landscape is. When you have "hardcore", classically trained architects, the main task of their job is to build new architecture, so when they see a space they see buildings there. In our case, we see the space. In our case it's the object of studies in our profession, all natural processes, including design and "fancy" design. When we see the space, you consider what is needed, the famous Steinitz framework. At the end you decide whether you need to change it or not. Architects are changing the space all the time, that's their job. When I talk to architect colleagues or students, they always talk about architecture, they never talk about landscape.

In our language we have pokrajina, for an administrative region: then krajna is like a republic or zone, a military zone. The other word is krajina, an abstract term which was never used here as a synonym for space, but what would be there for architects and other spatial professional. Students must write an essay, they always talk about space as Nature with a capital N. They always talked about the natural landscape, but if you want to talk about it, nothing is really natural now on Earth.

In a more operative way, we can talk about remnants of natural space, or natural process, because that's another story. If you look outside, people are maintaining nature, so it is really a cultural landscape. Here they don't do clear cutting, we have more sophisticated and sustainable forestry, they do selective cutting, but in order to get timber out you need a quite dense network of forest roads! So that's an impact. It's all more or less not natural, The modern landscape architecture is about that. So planning has come into the game. The profession is developing and that's interesting. In old times, architects would do everything, or Michelangelo would do everything. Landscape architecture is getting more mature, and getting specializations, like environmental planning and protective design and landscape techniques. This is good and bad because you are losing a wide range of how to deal with space, but on the other hand you get specialists who are well educated in specific topics.

SD: My perception is that the architects and landscape architects never talk to each other. When I went to school there was no interaction whatsoever.
DG: And it's getting worse! I'll give you a simple example. The architecture school in Venice decided to open a landscape department. And they invited architects from Ljubljana and Vienna to ask them what to teach. But they never asked landscape architects about their ideas! And the legislation about planning and the situation in school, architects are playing too rough, but there is too much emphasis on development. Like Lipica [where the famous Lipizzaner horses are bred], they got a special change in the law to be able to develop hotels.

SD: Too bad, because given the potential for development of Slovenia a good strategy for green areas could be a great case study in identity.

DG: There are two points of view on identity. One is the perception of fellow Europeans about how they see Slovenia. You could ask them, or check commercial advertising like the one on CNN and the slogans: green oasis, oxygen forestry…. Yes, it's green: when you look at the percentage of national territory covered with forest, in the last 20 years it went up by 12 or 14 percent. When I was a student the coverage was about 50 percent. Now it's over 60 percent. It's abandoned cultural landscape of course. Fields meadows and pastures, etc. It's growing because there no use to grow food any more. Why would you grow apples if you get them for half price from Slovakia or Germany? So the forest is growing back. Maybe that's good for Europe and they recognize us as a green country, with bears, which we export to France, etc., but when you look at this space here, we are losing identity. Because identity in this case, in a hilly, forested country like this, you don't get identity through landscape elements. In terms of natural landscape its only forest; you get lost and don't see anything. It's actually the pattern of the cultural landscape that gives identity, plus of course architecture in terms of white churches on top of all the hills, etc.

When you look at paintings, the most outstanding period was Impressionism – when you see paintings of meadows, it was the cultural landscape they were painting. They just copied it to the canvas…and we are losing that. The kozolec [traditional Slovenian hayrack] is a disappearing cultural structure because nobody is feeding cows with hay anymore. What do they need it for… they're feeding them with dead fish!

Landscape for tourism is a better reason, not food production anymore. In a country like this you can't really do anything. You can't compare these fields to the square kilometers of good soil and flat areas in Hungary or East Germany. You have vernacular architecture and you have the typical Slovene house. And say you want to build a new house, regardless of who is the owner, this British guy in Prekmurje [eastern part of Slovenia] maybe, and they want to build typical local house. Like in Kras [karst area in the west], the best house renovations are by Ljubljana people who are buying weekend houses. Outsiders are actually preserving the architecture more than the locals. Because the locals need places for tractors and big trucks, and they're ruining the typical architecture.

Let's say you don't do that and you can build what you want – it's just a question of technology. But when it comes to landscape, it's not that easy. Sure, you have plants that you can import from somewhere else, but you cannot really be too exotic because they will die after a few days or winter will kill them. So when you get to the landscape you are much more dependent on local conditions, climate, soil conditions, habitats, biotopes, and you can make mistakes. We introduced several species of plants now growing here, and they are killing our local plants.

I was laughing a few years ago: One local architect said we should bring the Mediterranean character back to Ljubljana! I said, "when did Ljubljana have a Mediterranean character?" Of course there is this
Venetian Baroque because there was a group of Jews that moved from Italy to Ljubljana [12th c.] and they had their own part of this city, but it was a German city more or less. Whenever local authorities wanted to get rid of Germans they hired Italian architects!

I don't see a Mediterranean character. His proposal was to plant *cupressus sempervirens* on Nazorjeva Street – real cypress trees [which grow only on the Slovenian coast]. We were laughing, we said, "Sure, let's plant them! We'll plant them in May and by December they'll all be frozen." So that's the Mediterranean character and it's all BS…

So the landscape takes care of this kind of stuff. When it gets to identity, if you do nothing in landscape in terms of plant species, etc., Mother Nature takes care of that. But if the forest grows back, then of course we are losing a kind of identity that is formed through the cultural landscape. The situation in the landscape is the result of all the complex social, cultural, economic, traditional, food production, and Maria Theresa started with this, how you inherit the land, etc. So the land was actually already falling apart because you had really small fields. When you had agricultural reform and socialism and there was this land maximum, we didn't have big farms. On the other hand, we had big state-owned complexes, but again never as big as Hungary and East Germany. So all this ended in "micro-parcelization" of the Slovenian landscape, which gives you a typical pattern, not only seen from the air but you see it when you look outside. You see this typical colorful pattern of different fields with different owners: one guy has wheat and one guy has corn and another guy has pumpkins, all in the same area, and you get this colorful pattern. And it is supported with this rather difficult topography for food production, the slopes, etc. but this is changing – you had a lot of beautiful areas and they are simply covered by forests now. We did research and there is a list of 87 outstanding typical cultural landscapes including villages, done some fifteen years ago in our department. We should repeat that, because some of them are lost. Forests grew over or new buildings came in, the economy is better…

The Path was a similar result of all these conditions coming together, at the right time in the right space. The topography of Ljubljana, the castle hill, Golovec on one side and on the other side, Šišenski Hrib, Rožnik, they are coming together and the river is squeezed between them. Then you have flat areas and old Roman roads in important directions. And you get this star shape of Ljubljana. Italians when they occupied had a problem where to put the barbed wire. They had to surround the city but the city was not just like a *castrum* from Roman times. The highway ring is more or less in the same corridor. And the Path is crossing all these different typical landscapes. Even the urban areas are different in terms of pattern. It was a good combination of existing landscape and occupation, and later with the competition and the Path was built, it was a kind of natural process…what else can you do? You don't have to invent a new Path, it's there. And when you connect it you get this very heterogeneous situation with all this…it's changing all the time. It's even different in a few sections because it depends which way you go, because you get completely different views. [this thesis maps the Path clockwise!] I don't see it as a huge problem. But what is interesting is that when you stand in one point you may see Alps on one side and marsh on the other, so it's about looking for the best spots on the Path, so when you look around 360 degrees you get really interesting views.

Koželj, when he did the competition and later the project, everything was part of the project, existing bunkers, military structures, and you don't see them anymore, even the eleven masts for the eleven entrances to the city that the Italians had made.
After the war, working collectives raised these stone monuments, the ones with the barbed wire image. 102 were put along the path, more or less spontaneously, but the authorities supported that. After the competition, the stones were left in the space and some old structures, but these eleven entrances did not exist any more because they were entrances into the built fabric and it was ripped apart 20 years after the war. So Koželj marked them with these metal masts, red painted Russian constructivistic… they were nice… I liked them, and if you asked me it was one of his best projects. This was in '84 with the competition. They started to construct the Path first, but these masts were interesting…and they were cut down. Other statues are still around. I have a problem with ALL political options, but if you look at this iconoclastic process, if you want to destroy monuments, you probably first attack all the "angry guys" [statues of communists], but they cut the metal masts down! One still exists in Šiška [note: only the base remains], but they just mounted signs on it, Mercator [supermarket] and other signs, because it was a very convenient metal structure.

The Peglezen ("Flatiron") building by Plečnik, the mlaj-inspired "second generation" Path marker and the Mercator supermarket sign, that Gazvoda suspects was converted from a former mast (photos by author).

When we finally decided to rebuild them, Koželj redesigned them, but there is actually only one in Bežigrad which is a combination of Plečnik’s mast (at Peglezen), which is blue, red and white, in our flag colors, and added his own metal constructivism. He designed all the entrances in a different way. I think it’s very good and goes well with the story of the Path. Always in the space but changing all the time as well, but keeping identity, and the identity can be changed, and that's a good part of identity. They never built them but the project was never officially abandoned either.

Koželj designed a set of resting places [e.g. remains of a bunker near the biotechnical faculty] with benches and even pergolas, and other designers considered the Path a good starting point for open space design, Now, with changes of ownership, many were abandoned. Maintenance is the biggest problem. After reprivatizing, it was never clear who should pay for maintenance.

SD: Is the Path really a monument?
DG: When I was a kid (a pioneer, we had these blue caps…we were ten years old and we had a lot of fun), it was required to march along the path on May 9, Victory Day. I was from Novo Mesto and they would put us on buses and we would drive here and march. Then with the new regime we got capitalism back, all the stories from 1991, they cut the budget for maintenance and everything. Then there was a club, the Friends of the Path, and started to do things… but what was interesting is that people would still march. They would walk dogs and ride bikes as a recreational path, but on May 9 more people than usual would be on the Path. Now we again have this official pohod, and kids are collecting points, etc. for doing it; in socialism you had to do it, but now schools have scheduled the march for recreation. Športni Dan. The kids have no idea about the history of the path. No clue. And
even the history books are rewritten now. They just see it as a park. It's not important any more why the path was built, it's only important that it's here and that it's used.

SD: Does it matter to walk the whole Path? Does it matter if it's continuous?

DG: I think Koželj's decision was good, that he did not insist on a simplistic way to design the Path. In different areas it was good to have a different design. Are those metal plates visible enough? They had roadwork, for example, and never bothered to put the signs back. After '91 people would remove or destroy the signs. In certain areas you get lost. Continuity is only really important on May 9. It's really about certain sections that are more beautiful than others. We should do… we did that in studio… students immediately saw that there are a lot of visitors who come, they walk dogs, and there is no place to park. We need entrances to the path, because nobody is really starting the walk in the city fabric… then there's no problem. But they drive from urbanized areas to other parts of the Path. On weekends they park on the meadow and on the Path, etc. We should get some projects to build parking! We need that, because on nice weekends, you find cars in the forest! And everything would come from there. We can use the Path to expand the landscape areas in areas that are good for that… part of the urban green system. The Path is part of the green system, and it provides a good physical connection.

SD: Shouldn't there be nodes for orientation? What goes on in the mind of people forming images of the Path?

DG: Once you're on it, it's important that it's a circle. Especially in May. But it is a cultural monument, like it or not, and I think why not… I like it.

Tržaska [Trieste Road] is the zero point because it was the Italian direction and the Italians moved in from that way. From the structural point of view of the green system it's good to have it as a connecting element. It's good that it is a monument so it's protected…and that's a good argument to keep bad development away from it. Each monument also has a so-called impact zone; physical damage is easy, but they actually judge every single project in the preservation office. So it's protected, but now we should just extend it. When we talk about the urban green system, the Path is important not only as a Path but as part of a system.

Another problem is there is not enough access by bus. Wherever the bus routes cross the Path, there are stops, but these are not the entrance points. People come by car. People who live inside the Path or outside the Path park in green areas and enter the Path. It is a good problem because we can use this to expand. For decades the entrance to the Path was in Mostec [site of a former factory, near the Koseški Bajer pond], where there was plenty of place to park. But now you have the new neighborhood, which cut out all these users. The neighborhood is now a problem for visitors and the visitors are a problem for the neighborhood.

SD: People want to attach themselves to neighborhoods. It seems to be an element of persistence, to use your terminology. Is the Path persistent?

DG: Sure. The Path is crowning evidence of what persistent landscape is. It remains in the same form regardless of the reason for its origin. We lost the reasons, but it is still in the same condition and it is even used in a different way now. It's not that it's protected, but that people are using it.

One debate, not a big debate, is whether to provide a separate bike lane. It's wide enough and the gravel is not good for bikes. The problem is that you have pedestrians and dogs and children. On
Sunday you have dogs wandering around and kids and very crazy yuppies with these fancy fluorescent outfits and expensive bikes, running like hell next to it! But it's used, it's really used. It's crowded.

**SD:** Is the Path persistent in the industrial areas, too?

**DG:** That's a good question. With the mast [on Dunajska, see middle picture above] it is, but that was forced, so does it fit the definition of persistence? If you use civic realism as part of the definition, in Bežigrad there is nothing like that. But it's more of a physical problem, because it's lost or not defined in terms of how it's designed. You're right, what's the story of the Path in these urbanized areas? What's the story of the path in these urban flanks? In the green areas it's clear.

I think the good solution, which was already offered, was that were are open space elements added to the Path and the whole area designed as such [Koseze, Dravle, Jarše]. Unfortunately, after the change in structure of ownership of the apartments these spaces were abandoned. The other part is that in these big neighborhoods, now with social, safety and security problems, people are not using these spaces any more in the way they might have 30 years ago. Another problem, which is typical for Slovenia, is that the structure of inhabitants is not changing; they are just getting old. It's not like if you have kids you move to another neighborhood. The old spaces for kids were really used; they were crowded, pearls on the necklace of the green path! Now the kids are adults, they moved out and the parents are still there. They're afraid to go out. Or, three year olds, 10 to 15 years ago, are now 16 and they make trouble outside. It's a very typical situation in Slovenia. People are not moving, but their needs and requirements are changing, and we're losing some specific structures of open space because they're not needed any more. Some areas you have a children's playground and it's abandoned because there are not enough kids in the neighborhood to use it. Or kids grew up and they are yuppies now, still living with mamas at home, but they have big pit bulls and the same playground is used as a dog's toilet. Like Trnovo. The location is expensive and who is moving in? The real estate market is not reacting to the aging population.

The solution for persistence is use on a daily basis by people who really need it. The problem is that these people don't need it any more. And in the end it's lost.

**SD:** What about perception as an element of persistence?

**DG:** If we build signs it should help, if not for local people than for tourists. The bridges [on the Path] have the same function [see examples in Appendix 2].

**SD:** Can you keep memory alive in the name of persistence and can it be an educational resource? Mobitel would be a very interesting sponsor, for example, to somehow transmit information to people via mobile phones. Another technology might be focused sound.

**DG:** When you mention this, the first sequences of the Path where you should attack this is where the Path is already lost, more or less. Regardless of the solution, should it be implemented for the whole Path? Probably not. Because in sections like the one here you can see it, marked with the line of trees. You can clearly see it. There's a guy walking there in a blue jacket! [looks out the window] That's the Path. There it is. From here it is obvious…it's cultural landscape. But in the urban areas there are a lot of problems. Personally, I would rather see this kind of technology in the urbanized area.

Remember the polemics about the Srečko Kosovel [avant-garde poet] monument, the digital one in Tivoli? There was this group of artists who wanted to build a digital screen 3 meters by four meters, on which his Integrale would roll by. There was a debate about whether this would fit in Tivoli. I have
no problem with a monument like this, I actually think it's a good idea, but if you ask me, this is typical urban technology. I don't see its place in Tivoli. Maybe in this case I'm too conservative. Maybe on the edge or as the entry or connecting point between the urbanized technological traffic, crowds, etc. and the green area. And it's too "cheap" in terms that it plays on just one effect: contrast with the green and "boom!", the red light. It doesn't fit into the open space. It hits you right between the eyes. How you do it is important.

SD: I would make an interpretation of persistence as "cues", subtle reinforcement of existence. Unconscious reminders…

DG: The path and the entrances I mentioned before…now with technology…you have the Path and there is an important question: how do you do the shortcuts? If you ask me, it came to me that for this kind of purpose this technology would be excellent. You move into the city from the Path and you don't want to walk the whole thing, and it would be interesting to see all the ways you could cross the circle from one point to another. [makes some sketches of "laser beams" across a circle.]

I don't see any potential in connecting the Path to the center. What is good is the connections across the Path; that has more potential, especially for abandoned areas. The center is already developed. Let's move them here [these abandoned areas]. Can we use the Path for that?

Civic realism is funny. It always works in Barcelona, but you get all kinds of bullshit built in Barcelona, but it all works because of the traditional Mediterranean thing. The problem is that architects go there and see these examples of open space design where people gather and they copy this somewhere else in areas where you don't have the same tradition of use or open space or public or civic space. Who does that in Scandinavia?? Sure, it's the climate, but it's also the national character. They react completely differently. Our architects are copying this and students are poisoned with that, they just see the structure and they see people there and say "this is great, let's do it". And you do it in Ljubljana and nobody would use it.

Civic realism, or persistence, is of course defined by the local people, the citizens. Rowe is actually talking about very bourgeois kind of civic life in the city, which in Slovenia is not really the case. There was this roundtable in Ljubljana where there were two ethnologists. One said Tivoli is a city park with tradition and now you see all these "other" people doing creepy, crappy things. He is always wearing a bow tie, very old-fashioned guy and he wants to preserve Tivoli and it should be very civic in terms of retrogardistic blah blah BS! And I was just about to say that Bosnians will be in Tivoli, not you. They
live in a terrible neighborhood and they need green open space. Your concept is dead, and not because of socialism, but everyday life. And the other one, a lady probably from one of the old families of Ljubljana, said there should really be more flowers in Tivoli. Come on. These two were representative of maybe 0.5 percent of the Ljubljana population and that's not civic realism, OK? We may not like civic realism; these guys would definitely not like it.

SD: How do the younger generation fit into the idea of persistence?
I have no idea! And I am saying this as the parent of three boys. Seventeen- and eighteen-year-old kids, do they go and walk in the park with their girlfriends? Do they use this open space? No, they go to cafés, probably somewhere else… The Plečnik staircase Spica [along the river]: I'm always kidding architectural students that they're not going there often enough to say their mantra to Papa Plečnik!
But in the evening it's dangerous to go there. When civic realism turns into very negative even criminal things, etc. it becomes a good question. Even the restrictive laws we just got that say that kids under 16 can't be in pubs after 10 pm won't drive kids from the center into parks. When I was a student [in the '80s], pubs were either so ugly or there weren’t many of them, and when you wanted to walk with your girlfriend somewhere the only place to do it was in a park. Now for parks it's changing. Then it was that there was no other place to go. Now with the Internet and virtual space, sometimes I kick my boys out of the apartment and unplug the computer. How to react to this I have no idea.

SD: Cyberspace is substituting for physical space. One could also say that the conventional ideas of urban design are very romantic?
DG: Yes, definitely. Until last year I would never lecture about landscapes I had not experienced. When I use examples I always use places I have been because I can say more about the space. But now there are too many new things going and I don't have time to see them all, so that's a problem. It's still better for us that you actually experience the space, but that's for us. I am not sure if that's the case for kids who are six years old now. And the Internet is an escape. And if that's an escape, why would we design open space?

Sketch of structure of the present thesis by Gazvoda: the three ovals at the left represent the three layers or space, infrastructure and relationships. The Path grows out of the theory as a case study of an urban space with elements of the three layers present. The conclusion of the research is cast as a sort of outline project and series of proposals (September 2007).
TOMAŽ MAECHTIG AND URŠA VRHUNC
ARCHITECTS (MVA ARHITEKTI, LJUBLJANA)
OCTOBER 2006

SD: What is the identity of Slovenia as you see it?
UV: Identity is this big word here, you know. It has always been very important and even more important now because we want to be differentiated from other countries in this big new home called Europe, but on the other hand this cliché about it is very wrong. When we were coming back from the States [both UV and TM took advanced degrees in California] I found out that you don't necessarily need to nourish this particularity about Slovenia or where you come from. It's the climate, the geography, it's enough. Building a house in California you cannot build the same house here. We have hard winters, different living habits and that's all enough for this differentiation. It already becomes specific in this way, if I'm talking about architecture.

SD: So it's something you can feel in the background.
UV: You don't need to study Plečnik or Roman architecture, because I think it's all built into Ravnikar's architecture already, and if you know the geographics and politics and social standards of the moment, you are pretty much geared up.

The most important thing for every creator is to be experimental, to try things out. It's not really the question of identity that is so important to us. We don't sit at the desk and stare into the computer and think, well, "identity". We're not dealing with it.

If you are a good artist or architect, if you are conscious of what's going on, you don't really bother with this kind of question. But maybe the others who come later after you and who aren't so creative, they might go back to Plečnik. But I don't think we're really dealing with identity so much. Creative people don't really deal with identity.

SD: Do you feel some pressure that you're not being Slovenian enough?
UV: Yes, of course, every day. But the worst thing we experience is indifference, to not be too creative, to stay on the safe side, to repeat the stereotypes and not move forward. This is what clients really want. They want something they have seen elsewhere or they know from the past. They don't want you to think it over, locally, your way, any way. They're most satisfied if they get a box from the architect. And you don't speak about openings, you speak about windows and doors.

SD: So you're not discussing "plankton" [a metaphor UV used in an article the year before] too much!
UV: Oh, no! We are keeping it too ourselves! Plankton is an extreme, but saying opening is too much. We have the front door, we have the back door, we have the window. It's always this double game. In the back of your mind you know what you want, but then you have to somehow sell it. It's really a problem. Maybe now it's getting better because the clients are becoming our age, so we talk more the same language. But there was really a big discrepancy ten years ago.

SD: How did taking a masters degree in the states change your attitude?
UV: You're always asking the wrong question! It's not the masters degree, it was just going to the States.

TM: The ideas are around...you can get ideas from magazines and go to congresses, but it's the different culture [that's important].

[TM shows a Photoshop rendering of Ljubljana in 2016, full of construction cranes in the skyline...and also some more trees.]

SD: What did you expect in the States?
UV: You make this plan. We started one year earlier to plan the trip, to get the money, to get accepted in schools, all that. And once you're there it's something else. You're totally focused. But it wasn't about the school. We wanted to go someplace really far enough away not to be able to come back too soon. It was this big choice between NY and LA. We chose LA because it seemed less predictable. NY is a package...you know what you are going to get. It has a very strong and closed identity. LA seemed more open and progressive, plus Silicon Valley and studios and this iconography.

SD: Would you have stayed longer?
UV: It was possible, but we thought it would take us longer. Socially you're not connected, you don't have future clients, and just going to work for somebody else didn't seem like the right decision for us. We always wanted to do it, and when we earned enough money to do it, we just did it.

SD: Were there people who criticized you for going?
UV: It's a cultural shock both ways. It's getting more popular to go away for a masters. It's not as special any more. They have these exchanges, but students here don't choose America that much.

SD: How are the younger generation thinking?
UV: It's a totally different generation. There's a big gap from our generation. We were still studying without computers and without the web. It was really sometimes hard to get information. You had to invest energy. You had to travel to Vienna to get good books or go to the Biennale. And it was somehow hermetically closed.

TM: But it's the same today. You can't get the greatest or most interesting books and magazines here. And the library was not so good, but it's getting better.

UV: In our generation we really had to be alert somehow. And young people now I feel are much more passive. There is a good lecture maybe going on in Cankarjev Dom...and they wouldn't come! Or at school. They have it handed to them on a plate. I think it's specific to the Eastern countries that changed their economic system, I'm not sure why, but I think it's somehow typical.
**SD:** Are the students scared?
**TM:** No, they're not scared and that's the problem.

**UV:** They should be. It's like Ljubljana as a whole. It's behaving too leisurely and it cannot afford it. Like this beauty queen that doesn't need to move too quickly. We cast the city center in bronze and we're not touching it! There's no programmatic changes.

**SD:** You mean that real model?
**UV:** The real model absolutely! That's sick!

**SD:** It's completely symbolizes...
**TM:** …the state of mind!

**UV:** [It's like] we are happy with how it is!! We are not putting new programs in the city center, we're not rebuilding anything, we're not building skyscrapers, we preserve it, and that's backwards!

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Model of Ljubljana in the city center, "memorializing" its image in bronze (photo by author)

**SD:** So if students aren't scared what do they think?
**UV:** That's the problem, I don't think they are thinking really. It's like the Slovenian language… we tend to speak many languages, because we are small and we need to speak foreign languages, and everyone speaks two or three and that's normal. To me it would also be normal to fight for your knowledge. It's the same thing but it doesn't work.

You asked what's the difference in generations…and that's it. When we were studying, we had to fight for it. So we are different, and I think more successful, too. And the professors are part of the problem. There was this urge to look beyond what I heard at school because I felt there had to be something else. And I was right. But I have the feeling the students don't feel that way now. They go on exchanges for fun, not to learn.

**TM:** They party much more than we did. They drink much more!
**SD:** When did you graduate from architecture school?

**UV:** 1997. We were both Janez Koželj's students. He was really a great professor.

**SD:** How did earn such a reputation?

**TM:** He knows how to teach people.

**UV:** He makes you think. And he develops a different attitude and approach to each student. If you are person who needs to cry first, he'll make you cry. If you are a person who needs to talk a lot, he'll talk a lot. He really has a good sense how to treat you.

Janez is great because he gives everything he knows away. He doesn't keep secrets. He reads a lot and you get the digested version, but still he likes to talk a lot. He likes respect a lot, and this is all great if you are a student. He was one of the first people who stayed inside the institution. He never left. He kept his career going in school, even though he also practiced some later. He's not so young anymore, but he's always changing his ideas and developing.

**TM:** He likes strategies more than design.

**UV:** And he really depends on theory. He always starts with the globe and maybe he ends with the bathroom!

**SD:** Did he have specific proposals for Ljubljana?

**TM:** I think a lot and all the time. I think he was doing Ljubljana 2000, the master plan for Ljubljana. And other things...research on grey zones (abandoned areas).

**SD:** Now the city is where you work...

**UV:** I think because we went to the States we are much more relaxed than we used to be. With Janez everything was so serious. I think in America you get this attitude, you become more relaxed about everything, the way you design the way you look at things. They way we look at Ljubljana is more like it's a city with potential: it's a good site, it has good neighbors, good nature that surrounds it, it's not too polluted, there are plenty of opportunities to build it.

**SD:** Here projects get stopped, and things that could happen never happen. And the days where urban designers conceive whole cities are over.

**UV:** Absolutely over. I think a good idea is that you look at it as a city where you cannot plan all these neighborhoods any more. But maybe you can imagine it as planting a new seed in one spot and it grows. You make one building and it's a magnet for another investor and the whole thing develops. You cannot say we will prevent BTC, or make a huge campus in Bežigrad. You should imagine it otherwise. Although there should be some big strategies...

**TM:** Just to have a frame...

**UV:** ...just to put a frame to know where to put these seeds and how the traffic develops and what to do with it. More than to look for reserved areas for buildings, you should look for reserved areas for open spaces...to look at it the other way around. I think this could be a kind of strategy. But you have to know what to plant. Is it a salad or something else...and what's going to grow? You could plant corn and then get grasshoppers!!
SD: Who will plant these seeds? Maybe shouldn't be planners…
UV: But not private investors either! If you imagine government money to build the first building, this could already be an attractor for private investors, and that's a good joint venture, I think. You have to risk it somehow, you cannot always be on the safe side as the government.

SD: What seeds would you plant?
UV: I hate these additions we do all the time. The Opera is not big enough so it is getting an extension. The Drama is getting an extension. The National Gallery another extension. Why wouldn't you build a new opera house and leave the smaller one alone? Paris has two. I hear the Ravnikar twin towers are going to get new upper floors. The new NUK, the national library, and it's getting nowhere in fifteen years. It's the city of extensions. And the same is happening with single-family houses. Where are the new schools going to happen? If you look at Ljubljana it's a star-shaped city…and the simplest thing is to just extend one finger. And the factories like Tobačna and Union shouldn't be in the city center…perfect for new schools…. These are stupid decisions and they are irreversible.

SD: You wrote about the "moderate optimists" and the "projectives"… even architects in your generation are conservative and not feeling confident, or are they just jealous?
UV: Both. And maybe the ones with more courage are not considered serious enough to build a big project, and the others are just moderate. The new hope is the new investors. We'll see how it develops.

Two things happened with our generation. We had to learn computers and we have to [fight to] get these nonexistent rights. But I don't know about the moderates, who are repeating the old principles. I don't have anything against them, they're just not interesting!

SD: So if you don't make changes in the schools where can you do it? And if you don't do this in Slovenia where can you do it? This could be a laboratory for experimentation…
UV: Even if we made a new school, let's say our generation or the SixPackers [a group of six young design offices], I don't know what to do with these young people, with these unmotivated people. I don't know how to motivate them. Except if they pay [tuition].

We sound really old! But it's really scary; you're working on a project and you get two or three students in, you invite them and you expect they are full of crazy ideas, full of energy and enthusiasm but then you get some corpses. It's a general problem. Whether they are architects or designers or fashion designers, it's all the same. They would have the opportunity to do anything, but you ask them "have you read this article or been to Biennale or seen this film or heard this music?"…and nothing! It's dead bodies…

SD: What's the situation in the architecture school in Ljubljana now?
UV: I think it has to die first…you have to kill yourself on your own, and this school is killing itself because it's not smart enough to regenerate. It's not in its favor to do so, but it seems it has to be that way so there will be a necessity to build it anew. Even if they invited someone really fresh and new, progressive, in the society that exists now in the architecture school, this person would die. In that situation you become the same. It eats you. You cannot fight against the flow.

SD: If there would a new dean…like Janez Koželi?
UV: It wouldn't help. Koželj is a theorist and he doesn't want to be exposed. He likes to be in the background and to give suggestions, but he's not the person who has to pay the bills at the end. That's not his game. If he heard this he would be very angry that I called him a theorist. He would very much like to be a practitioner, which he's not. He's a very good teacher, but depending a lot on theory. You cannot be everything. But then we're never very happy with what we are!

SD: Do you have any sense of Yugoslavia? What did that mean in your life?
UV: Of course. We weren't so young…we were already at university. It's not something that I cannot recall. I am totally conscious of how it was before.

TM: I didn't see such a difference then. Now if you look back it's different, because of the economic system. But day-to-day life was the same.

UV: It depended on the family, what family you were born in. Our families were not typical working class families…they were all architects, his parents and mine. The lifestyle was good…we traveled and had vacations.

TM: More than now!

UV: It was normal that our parents took us to the seaside. We had two cars. I had shoes from Italy. It was not a problem. It was not an Iron Curtain. What I remember clearly is that if you said you were from Yugoslavia, you were always respected – it was a positive fact in the eyes of foreigners. Tito was great. Great people. You felt comfortable with that. Saying you are from Slovenia sounds worse, because nobody knows it and it's so small. It really sounds much worse!

SD: Some people hold a very strong feeling, if not nostalgia about Yugoslavia…it's complicated.
UV: You came to school every morning wearing the same blue shirt that all pionirki wore at the time and a red scarf.

TM: We didn't have that!

UV: Another school. We did. The teacher came in and Tito's picture was in a frame and she said "Za domovina", and we said "S Titom naprej" and we were allowed to sit down and the school began. That's how it was, that was my everyday. And since my mother was a fashion designer I didn't have the same blue shirt so I had problems with it all the time. I felt really uncomfortable with that since everyone else had this Jutranka (one of the factories that made this shirt). Funny times! It was a good spirit. At that time I remember we were traveling in Germany once and we went to the marketplace and I thought "Wow! I want our apples to look like that too." They were all the same red. Everything was so polished. But now when you have these Dutch tomatoes… You pay more now for what you had at that time for free.

SD: Did you travel through Yugoslavia?
UV: No. That's funny!

TM: Just to the seaside.

UV: We were always saying that you can see that anytime. Let's go to Italy!!
SD: Let's talk about POT. Where does it fit in the lives of people?

UV: This is something that could only happen in socialism. We are not a fortress and we don't have a city wall to preserve, so we found another way to mark the city.

It's a demanding project. It's not so easy to organize this amount of land. And to put that much money in a project anymore. You need a big initiative, a big political idea, you need brigades to come build it. It's this whole spirit that is lacking now. It's quite unique because of its size. Let's look at Berlin. The wall is completely disappearing and it will not be there anymore.

TM: The POT will stay.

UV: It's alive.

TM: Young people don't care [about the history]. They just use it.

UV: I don't think it is so important why something happens. To me it is more important if it has the potential to develop into something else. I think POT has the potential but no one is thinking about it this way. It could be many things. It would nice where it crosses the city or goes through the urban environment that it would change into a radically natural environment, and other parts maybe urbanize a little bit...do the opposite of what it is or where it is. It was built for the citizens of the city – that's the great thing about it. You know, very rarely does politics make something for the people. They spend money on everything else but not for the benefit or the luxury of the inhabitants. It wasn't meant that way, maybe, but it turned out that way.

SD: Do you go there?

UV: When I was living in Koseze I was using it a lot. I wouldn't go there for a walk. If you need the connection, why not? I don't go around...but I don't run anyway!

SD: So it's for the people who live near it?

UV: People walk dogs, they bike.

TM: There's an event every year [Pohoda]... I think it costs a lot of money to maintain it because it's so huge.

SD: Does it have to be a complete circle?

UV: Yes.

TM: Every part has a different design...and character. It's site specific. Narrow, wide... It should stay as it is, just maintain it.

UV: We are all so eager to take the monuments of the past down, but we don't put up new ones. The same happened on POT. But nothing replaced the monuments. There is a potential to say that a part from point A to B is a forma viva for student work at the end of the semester, and another section for land art. And then we come to the urban part of the city and let's make an Amazon forest there or something! So you invent these different situations and different characters.

TM: But it's already there! Why should you do it? You can make these things in other parts of the city.
UV: Yes, but you know how many people walk there and you know how many people you will address. The POT "wants" to be all the same character, but it cannot be the same, so it ends up different.

SD: There are these great moments where different things are going on, that are very unexpected, and you get certain views or the Path gets lost. If you’re sensitive you can appreciate the small differences.

UV: They just paved some POT and people came – make it better and even more people will come.

TM: But why should you add things?

UV: To make it better. Why not! Stick a little seed somewhere!

I don’t know anyone who would be amazed it except you! We were born here and it was there forever, just like another street or the castle on the hill. You never really gave it another thought. You know the background, these black and white photographs, the constructivist structures, but it doesn’t really mean anything. You don’t really question it. It’s like Santa Monica [Los Angeles] to you!

SD: Tell me about SixPack. It’s not so common for architects to get together this way.

UV: Actually, it is common. You don’t necessarily belong to the same pool or the same "breed", but there are certain advantages if you’re organized in one group. When Slovenia became part of the European Union, everyone was asking "What is it with this Slovenia? Who are they?" They were not only asking about the old heritage of the country but also what’s going on now. So we packaged ourselves in advance, so whoever asked, there was an answer. We wanted to make a distinction to everything else…to make it clear what we stand for and how we differed. The motto was that we were the generation of architects who studied abroad and came back.

TM: It was a proposal of the Ministry of Foreign Affairs, and we applied. Actually Špela [Špela Videčnik, Ofis Arhitekti, another firm in SixPack] applied.

UV: There was some money for an art or architecture exhibition. Špela didn’t want to market her office only, or maybe got the hint or something, but somehow to make it more as a group. And then you go through the list of who’s alive and who knows who and who likes who and find a reason how we fit together…and it came down to six offices. It was a one-time package, but then it turned out we became friends.

SD: And supported each other.

UV: That too. With the society as small as it is, you get together, you apply for the same tender, you fight for the same client, you are not always on the same side, obviously, but you feel like colleagues and you wouldn’t play a dirty game. That’s how we operate.

SD: We were talking about a break after your generation, and the passive students of the current generation, but there’s also a break before you.

UV: Architecture in one period in Slovenia in the ’60s and ’70s was doing really, really well, and there were some really great architects of that time…Ravnikar among them…one of our favorites is Mihelič…but after them there was this generation of postmodernists, well not really postmodernism but critical regionalism. These architects I don’t think were experimenting that much. I would wish to think that the "projectives" that we are part of are more connected to those of the ’60s and ’70s,
because we really want to experiment and be a part of the larger picture, not so much local... local in terms of where you are geographically and the conditions you have to work in, but not in the sense of architecture. So this was a big gap. We are actually continuing what was in the past, but just skipping one generation. I would rather think of it that way. We are continuing this good seed that once existed, that was aware of what was going on in the functionalist architecture world outside of Yugoslavia and bringing them here and making them local. That's why this architecture is so good... it's experimental and it makes sense in terms of European architecture. And that's what we are trying to do here now.

Postmodernism was a dead end... it didn't lead anywhere. It's almost like today, if you package things without content. It's all around us too, again. But they were using their heads. They were really educated and they knew what was going on. They were studying abroad. Plečnik, Ravnikar. It was there characteristic that they went out of Yugoslavia and came back. Same story....
MARJETICA POTRČ
ARCHITECT, CONCEPTUAL ARTIST
DECEMBER 2006

SD: The first thing I noticed about you was an incredible openness. You don't like boundaries. And this is somehow characteristic of your side as an artist. But it's wrong to assume what an artist is, and you are between art and architecture. What is this combination?

MP: It's my destiny. That's it. It's very simple. When I started to melt architecture and art at the beginning of my career it was sort of a weird thing to do, but now it is very common, so I am actually very lucky to lock on to the contemporary ways of doing things. It's welcome that you actually cross the border of disciplines.

SD: So many people here left architecture and went on to something else.

MP: You can never come to any solution about why people decide to do things. I think culturally that Slovenia is a very interesting territory, a border region between northern and Mediterranean areas and between two cultures that are quite different: Protestant and Catholic. Even today in Slovenia we have a Catholic holiday, which means that I always considered that Protestants had more insight into the structure and Catholics more into image. Of course, this is very superficial. I believe there is some truth in the interest of Slovenians in architecture. You mentioned Jože Baršič [see interview], and I could say Apolonija Šušteršič, Polonca Lovšin and others who are melting the disciplines, and I believe it is coming from some energy that is very much here, whether this is Protestantism or something else. I heard once from Janez Koželj that this is a very small place. There are not a lot of people and you need to do everything. You become this mad machine. It's not possible to specialize in Slovenia in something, like in America. Here you have to do everything. I'm an architect, but not a real architect.

SD: From what I understand, this multidisciplinary attitude came from Ravnikar.

MP: Sure, I was one of his students, but at a very late stage. I was a year after Baršič, I think.

SD: Can you talk about Ravnikar?

MP: I don't know him at all! He was just a figure. I loved to listen to his lectures, but we never had any contact really, personally. I consider him a very important person. But this was thirty years ago, and I remember it was fantastic!

SD: I read in one article about you that you were called a "Slovenian-born" artist and architect, rather than a Slovenian artist and architect. What connection do you feel to this country?
MP: It's interesting because you come from America and you pose a question that a typical American would pose! Where do you come from? Of course we always come from someplace, and in America it seems good to introduce a person from a country where he or she comes from. There is some heritage we have, and of course I am a Slovenian, but how much does it matter, because we are also people of the Earth, and we can chose other locations we build after the location we are born with.

SD: But a relatively small number of people experience the freedom of disconnecting from their place of birth.

MP: I do think that people move all the time. Being locked to one place is an ideology that comes from the bourgeoisie of the eighteenth century. Today we move a lot. And the idea of ownership of land that was launched as an ideology, that you would control the land and take care of the land, and this becomes an asset for you and also an asset for the state. So ownership of land is a very contested issue today. So to think we are locked in one place is not true…it’s an ideology that was put on us.

SD: Here you feel the presence of the border with people moving from the capital to the provinces and back. Especially students on weekends! This country is like an organism.

MP: I don’t know, I am actually not interested in that. We live in a world constructed on national identity, but we must not forget that this was a nineteenth century project. Today's European Union is way ahead in something which is not about ethnic identity any more, but about something totally different. I do respect very much the EU expansion, and since it expands it also reconfigures territories on the inside. There is a focus on regionalism in Europe, which if you follow regionalism you come to localism and that's very interesting because it connects worldwide. I have been to South America where we were thinking about localism in Latin America…

SD: Shall we talk about Ljubljana?

MP: I was not so much interested in Ljubljana and ex-Yugoslavia for quite a long time. But due to my friendship with an architect and artist like myself, Kyong Park, we initiated the idea that it's very important to look at the Western Balkans, as the region is called today. We started a project called Europe Lost and Found. We started to think that the Western Balkans, including Ljubljana, are moving faster than the European Union and when you're here you are actually ahead of the European Union! Of course, I am now thinking in general terms. Ljubljana is very different from Skopje, or Sarajevo or Tirana. But in fact here the structures of modernism collapsed very fast, and the states had to be reborn very fast. We shouldn't forget that modernism was a model for both the Western Balkans and what we call Western Europe, or the European Union. So we started with the idea to be very simple and to trek the Western Balkans on foot. You have to go there yourself and discover the cities with your own mind.

We thought that fragmentation, or you can call it Balkanization, was a plus for the future. When Yugoslavia fell apart, it was a kind of scandal, the fragmentation of unity. It was terrible because you think of unity as being something good, and you always question the fragments. Thinking about Ljubljana, when you come here it looks like a very mellow place, like a very nice place, maybe you can consider it a boring place, but I think it's quite amazing. It's wonderful! And it also showcases these ideas from the Western Balkans very much. It has four fragments that are important for the future and that mark what Ljubljana is today: One is BTC [shopping center], the other is Krakovo urban village [small houses] and there are two squats…Metelkova [former barracks and prison] and Rog [former bicycle factory].

SD: How do they function?
MP: They are like cities within the city. And that is sort of amazing from the beginning, for such as small city as Ljubljana. BTC is one of the biggest, if not the biggest, shopping malls in Europe, and when you consider how small Ljubljana is, it's amazing. And they achieved it in fifteen years, starting from scratch in a totally gray zone, building in places that were left empty. But today they actually give back to the city. Not only have they amassed this amazing economy, but they also planted trees from the mall to the center. There are some amazing numbers, like the volume of the mall is the same as the city center. They are building things step by step, but they also want to attract the university and residential areas. What was inspiring for me was they helped make a connection between the shopping center and the city center.

SD: Is it too romantic an idea to think that BTC is destroying the old city center?

MP: The city center brought it on itself. We should be lucky to have BTC to tell you the truth. I wholeheartedly support their development.

When I was studying architecture, we thought it was important to have more parking space in the city center. Guess what: thirty years later it's still the same. It's like the city is sleeping. I don't believe it will become a wasteland like the center of Detroit, anyway. The city does it's best to sell this romantic image. We'll see what they do next. You have to understand that I am not in Ljubljana a lot, so I don't follow who is in power. I am only here two months per year...

SD: How do infrastructure and mobility affect the city?

MP: Infrastructure, more than architecture, will be the most important thing in the future. I never thought about it so much in connection with Ljubljana. I have thought about it in connection with Tirana. The mayor was very wise to connect the informal parts of the city with the formal parts as soon as possible. He was very clever to do it the right way. One the other hand, if you think about Slovenia, which is actually quite well connected, this is good for Slovenia. I just came to Slovenia from Sweden, and it took us a day and a half to drive here, so Slovenia itself was only one little part of our journey. Slovenia is a really small place, and I always consider this as a plus, because as an individual living in Slovenia, you always work internationally, you always know you are a part of the world, you are a small particle dealing with the world. I would say it's very good we have highways. There is another thing that I think is quite funny, which is about self-sustainability. Janez once told me that more than half the households in Slovenia are not connected to the sewage system, which means they have their own systems on site. Our land jumped from the pre-industrial to post-industrial era and successfully. Not only developing infrastructure, but that's a plus...considering sewage. Why not!

SD: It seems to me that there is a big supply of existing buildings in Ljubljana, where ownership is still not so clear, that could be utilized by people in a more organic way, more "bottom-up" than "top-down"...

MP: I mentioned four enclaves in Ljubljana that proclaim themselves as cities within the city. One of them is BTC, which is almost bigger than the city [center] of Ljubljana. I don't know if I mentioned that they plan to connect BTC to the city center by boat. So actually they are really giving back to the city. Anyway, there is another enclave, which is Krakovo, a village in the very center of Ljubljana, just behind the school of architecture. [one of the oldest sections of the city, adjacent to the trace of the Roman wall that surrounded the city in ancient times. There are still many vegetable gardens next to very small houses, giving the area a rural character within the city.] It is a village in the center which is no doubt there today because planning failed Ljubljana at some point, and people figured out that it is a prime location for upscale, upper middle class living. It became a territory inside the city with the highest real estate prices, but they are all somehow planning to be self-sustainable, not only by
defining a part of the city but also taking care of their own water resources. It is just a plan, but I thought it was sort of wonderful. Ljubljana always seems like a boring place, but actually, like all the Western Balkans, it's really a hotbed of ideas. You just have to come in with a mind that has another flavor, "out-of-the-box", so to speak. This urban villa is a typical example of what has happened to the European idea of modernist architecture. Modernism always thought about democracy as being something which is multicultural and a social state, and this has totally collapsed in the Western Balkans, including Slovenia. What has emerged are two very strong architectural typologies which are actually some kind of a standard…a dramatic shrinkage from an idea of a residential unit in the '80s, which maybe meant 10,000, people, but now it means 2,000. This is the urban village. And what I am talking about today and this location in Krakovo, the urban villa, is even smaller shrinkage, around 10 to 20 families. Of course, I want to point out there is no remorse about modernist architecture and what it was supposed to look like on the outside. You can say postmodernist, but it became a personal style, and advertising board of the people who live there. And it's very clear in this villa on the edge of Krakovo. And Krakovo itself is a phenomenon…

SD: How do you empower people to function in the city?
MP: Ljubljana seems like a boring city but in fact it is not, because of the people who live here not because of the image it conveys, a very romantic image…

SD: In the center only, though! What else would you show to someone who comes to visit here?
MP: It's actually quite beautiful. Outside the city center is what I associate with Ljubljana, and this is like a blob, something which is not formal in any way. Total chaos. Because planning has failed. But I don't think this is for the worse. There is quite a bit of research on the gray areas in Ljubljana, not from the urban institute necessarily. I am very proud to be a Ljubljana citizen, because there has been an upsurge of civil initiatives. People can be and are very articulate here. What I am thinking about is the two squats in Ljubljana. Metelkova is a highly successful squat. They have been able to do whatever they wanted, in negotiations with the city. The other is Tovarna Rog. They are thinking about how to go from the ownership of space to the sharing of space.

I am not against urban planning, but I am also not a part of it, because I personally don't want to be involved in this top-down planning. But in a way I have experienced these successful bottom-up initiatives, organic, not planned. The city of Ljubljana itself tells you this. The squats that are supposed to be something strange are doing really well, and what is more fantastic for me, they claim the culture for the city. The people know that it's very important for the culture to grow.

SD: What have you been attracted to in other cities?
MP: I am basically now interested in rural areas, not in cities. This is why I am passionate about Krakovo. I am also working a lot in Latin America. I was talking about the Lost Highways expeditions through the cities of ex-Yugoslavia this summer: when we were discussing the cities there we did not compare the Western Balkans with the European Union, we compared the Western Balkans with Latin America. The edges of the European Union, the cultural borders, are much more clearly experimenting with what the future is than the European continent itself, which is also very experimental because it is growing all the time and restructuring within its territory all the time. But it is a much slower territory because it doesn't need to crash. When you are invaded you crash, which means that you actually construct your identity anew, in a new way and very fast and on different terms. In a way this safeness of Europe is also drawing it back…it's a slow continent, no doubt about it!
So if you are asking me about what is inspirational for me, I am not thinking about it in terms of cities but in terms of regions. And Latin America is very inspirational for me. I also wanted to talk about Barefoot College in India. There are so many more inspiring locations that are not in the European Union that can function as role models for European Union citizens.

SD: And what about POT?
MP: I think it's one of the most successful projects in the last 20 or 30 years of Slovenian history. It's very beautiful because it's not like an object. I was never sure what to do with it because it fulfills all the requirements of a monument: it venerates, it educates and it's beautiful by itself. But its strength comes from the fact that it is actually a path. You walk on it. There is no object – you are involved in walking around it. And walking is always your own world.

I think it is very important that the memory is kept ongoing. Coming back to your first question about whether I am a Slovenian, of course I am a Slovenian. But I am not necessarily a Slovenian who would showcase symbols of Slovenia. But my parents are Slovenians and they are writers, so I was brought up with a huge wealth of knowledge and beauty in my childhood that is of course within me as I work. So I do believe that the Path is a very beautiful contribution to the city because it opens the ways we think of our own past and it's open to the future. And it is beautiful there is no object. It was actually an era that was somehow locked in objects, and I do believe we are past objects today, so what they have done with the Path is bringing us to the future, hopefully.

SD: Should it be changed or developed, and is it important that it's a complete circle?
MP: I don't think it's important that it is a complete circle, but what is important that in your mind it is a complete circle, a circle of occupation.

We know these circles very well...they come even when you don't want them and lock on our minds. It was Ljubljana '42, but then it's also the Berlin Wall or the West Bank or the wall between Mexico and the US. We do live with walls, my house, like I built my family in a circle. So what are walls? I think it's good to think about it. How the big city walls of European cities were transformed into rings, like in Vienna. It was recycling the walls into the new ideology or infrastructure. So I do like the Path around Ljubljana, which is just a path, a personal path, with personal histories. Personal history versus imposed history.

My generation, we know about it. But do the younger generations know about it? I know they are using it. There are always people on it. So this is actually the most beautiful thing that can happen. Because of the markers in the pavement [in some sections] people are also more aware of it. I'm not sure, but I do believe it is an unpretentious way of talking about history, about something that actually talks about boundaries. And Slovenia is very much a border state, if you want. It's so small that it's actually a border itself, just a border between north and the Mediterranean or East and West. It has always been a border territory.

I am thinking about Berlin. When the wall fell down, it was basically removed, and now people are starting to fight back for the memory of it. And there are just a few parts that still have the physical wall, and in other parts they put markers so you can see where it was. I think that's important.
Of course we don't live in modernism. Modernism was just a construction to be able to build the world from zero. Especially in Europe, we live in a world where we build one thing on top of another. [gestures "layers" one on top of another]. When you live in Ljubljana, that's the beauty of it.

Marjetica enthusiastically explaining the layering of the European city (photo by author).
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DECEMBER 2006

SD: You studied landscape architecture from the beginning?
AK: I came to this school to study landscape architecture, and then for the masters I studied urban design at Harvard. The thesis was on landscape, but it was actually half a sociological study. And then I got a doctorate back here.

If I look back know, I always liked to draw. I thought I should study pottery in Vienna. I worked even before I was a college student, I worked in the state restoration office at the agency for cultural preservation, and I liked it a lot, but the only place to study was in Rome. So everything was away. Then accidentally I came across the information about the Faculty of Landscape Architecture. It seemed like an option because when I was a child my father took me to the hills around Pohov Gradec [outside Ljubljana] and the herbarium, etc. and I thought maybe I could combine my affiliation with nature and drawing and art history, so I just entered without a clue what it was going to be!

I felt at home, and now I'm quite excited about what I do, although Slovenian society right now is absolutely not open to what we could offer as professionals. Against all expectations, it is less open than it was in the eighties or seventies. Society was more keen and understood more about the contributions of this profession than today.

SD: That's surprising. There should be more than openness, but real support for landscape preservation, design, etc. as a point of national pride.
AK: People like to live in a nice area, but they are not prepared to give anything to get it. It will change. The private sector already started to invest in gardens, because they like to live in a good environment and it's also a form of representation. Now I am waiting for the public sector to get appropriate recognition, so that state investment and municipal investment will support public landscape. This is lacking. Now all the energy of investors is just focused on buildings and they don't even see the landscape.

I was at the biennale this spring in Barcelona and the production there is so enormous. But we have nothing to show — maybe one square meter in Jesenice or something — that we could show. There's no production. There's a lot of force in planning, but even this is changing. In the new legislation they are starting to wipe out the landscape categories, which is bad overall for spatial development.
According to my thesis, we have such a strong conception of the duties of Slovenia that we don't see how much they change before our eyes. I finished the study in 1995 and I have been following the changes. The younger people are, the less they follow the traditional patterns, and yet it's so persistent. It's still the same picture in the heads of people.

SD: How do you come to adopt the country as your own?  
AK: In the school curriculum, students visit important places that are more or less associated with Prešeren, and Cankar a bit less, men and women from history. We used to visit the partisan places, but now they are not so popular. So it's the history and of course the places. There is the idea to present Slovenia to children in primary school with all the cultural differences within the country. But how you get subdued by this constructed conception is also from history books, poetry and literature, from tourist propaganda, and all the commercials. It's floating all over and perpetuating. There was advertising when Generali Insurance entered the market – there was a cute hand-drawn TV commercial. The first you saw was Triglav with snow on top and the kozolec, the hayrack. Then a suitcase and the little lion which is the logo of Generali. It was about taking the symbols which are homey and generally accepted, and making them friendly. Next year they came with a powerful commercial with a lion jumping out of the sea. And we repeat these images all the time. We bring these images to the market and others take these images as something truthful.

SD: Does the size of the country have something to do with it, the close presence of the borders?  
AK: If you go the castle tower you see them! Through history Slovenia had to define its identity before their territorial state boundaries were defined. They were defined in 1991, actually. And they are still not defined, actually, if you look at the Croatian debate. Instead of territorial definition, I think it was this landscape type that replaced it. It's not unique to Slovenia; the British have one, the English landscape. And in the States you can find this border landscape, this wild landscape which is the epitome of being an American. In Slovenia it seems that it is just lying at hand, so we have to investigate it.

SD: What about this idea of identity?  
AK: In terms of landscape, whenever you want to plan a change in landscape you are confronted by the question of what the future of this change will be. When I was reading about it in the literature, I felt uncomfortable, because landscapes are changing all the time, so what could their identity be. It is better to use the term "identification with". Too many times landscape identity is considered something fixed, at a specific moment in time. It's an ever-evolving relationship between humans and the space they live in and transform with their action. And their action is based on their concept of the space, so it's quite a complicated thing. That's why it was an interesting question for me. I was in the middle of the concept of the new establishment or refreshment of identity in the early nineties, because I was sure the concept of national identity was obsolete. But it's still coming to the fore.

In the Middle Ages, national identities didn't exist at all. It's a nineteenth century concept. Religious identities were important: it was much more important whether you were a Catholic or a Protestant. But then with the rise of nations it became important. Many European states are still based on this concept, although they arerationally trying to overcome it, but that's when they were formed. There's a study from the seventies by Felicitas Lenz-Romeis, who is a sociologist who methodically revealed that the identity of a city is not the physical structure itself, it's what this structure or phenomena mean to people. Unconsciously, the physical space is just the basis for any identity, and then of course there are many identities that coexist, vertically and horizontally. The problem occurs
when you try to capture only one single identity and isolate it. When you try to foster national identity in times when it is threatened or only seems to be threatened, when you take one element from this complex relationship, then it's probably bound to be ideological in one way or another. Since now the EU is actually forming, not yet completely formed, I think we will get to these questions sooner or later – whether establishing a European identity, which will also be a construct, or trying to overcome or celebrate persistent national identities.

SD: So what you identify with is different from what your identity is. Then the question is how interested people are in this.

AK: I think that this kind of study seems so "out of space", talking about national identity in connection with spatial realities or problems, but then you see the same process on regional or local or urban levels. To define a city boundary it's quite a task today.

SD: I noticed that Ljubljana itself is an icon of Slovenia in your study.

AK: The fact is that it is the capital. In the States the capital city is not necessarily the largest or richest or most interesting city. The connection is not that obvious. But Ljubljana is everything. But take Bled, for example, which is a very interesting configuration itself: lake, island, church, rock, castle, mountains…it's picturesque, and it's logical that a space so interesting would attract meanings, any meanings, but it's not enough to be picturesque to enter this national concept. There are many reasons why a certain place is allowed to enter, but it's problematic because any ideological identity tends toward uniformity and it is just going over space like an elephant in a china shop, so you get areas that are black and not included at all. This influences how we act in space… as if these areas are not important nationally or even locally. Maybe they are important to local people but even they do not see them as important because they do not fit the celebrated image. So it's a problem in landscape planning if we are not well aware that this kind of spatial conception exists. Planners have to act within, because we can overcome it with the same means of communication! You actually create a picture, so if you can use them wisely and inform people enough, the concept might change. But it's always dangerous to tackle these processes!

SD: What do you think about the idea of redesigning the Slovenian flag?

AK: It's difficult to say. The flag is not a symbol I am used to reading. The one we have is not an interesting one. It was a nice quick attempt to combine some symbols, but visually there's no excitement and it's not recognizable enough. I don't mind its similarities to Slovakian or Russian or French flags, but as an object it's too weak. There were many interesting proposals for the new one: some were naïve, some were just too sophisticated, some were crazy.

This study I went through proved that there are some elements or features that exist in the Slovenian territory that have been invested with meaning, and it is something that you can't completely throw away. People do identify themselves with these features. Mountains, for example, are a good medium for identification. And certainly there is the Adriatic, and there are others. It is important to give these elements a contemporary formal layout. The formal layout does not have to be traditional, but it's worth considering some traditional elements somehow. But I'm also sure that the flag needs to be more than just some elements of the landscape.

Designers were not satisfied with the original flag and spurred on the competition for a new one, but nothing came out of the competition, unfortunately. I think that we do not need to change the flag:
we need to change how we act, to promote our hidden potential and to get recognized by our abilities, and then the flag will be recognized or we can change it then. Too much energy is invested in this…

SD: And what about the POT, another example of "hidden" potential. I think you categorized POT as a mosaic.

AK: POT itself may not be a mosaic; it's a very distinguished and readable spatial structure. It's very simple: it has a path and a double allée and that's it. But when you follow it, it takes you through a mosaic which is our city. The spaces unfold when you follow the path. And that's what fascinates me. It fascinates me how it came into being. It has a memorial history. It's a memorial landscape and still is, and I would never like this memorial quality to be erased. I think it's a part of its beauty. Also, if I look at it as a landscape architect, thinking of urban landscape systems in a contemporary way with all this ecological and sociological knowledge, it's a perfect element: it's a corridor that connects areas that usually do not get connected, apart from ring roads. It's almost like the Ring in Vienna, which is also a memorial landscape because it was an empty space around the city walls that protected Vienna from Turks. It's older, so it's more calm.

In citizens' everyday experience, they use the POT, at least in certain portions, since it's a long way all around. It's so nice to have this remnant of a manifestation on May 9; it's a day we should celebrate as a victory over Fascism and Nazism. It forces you to go around, and you get to experience this space around Ljubljana. In spatial terms it's so simple. It's also so large and complex. It's a very defining element in Ljubljana, with a lot of intermediate connections with what is to the right and to the left, toward the center and to the outskirts. It's not the same with the ring road, which is not at all emotionally charged.

The Path also needs space around it, to give it visibility… especially since some of the neighborhoods it passes through, these green wedges, risk being filled up. The original urban plan of Ljubljana capitalized on the hilly configuration and marshland and exaggerated the already developed star shape of Ljubljana with an urban planning concept. That's how Dunajska and Celovška Cesta were built, but Tržaška didn't get it in time, and it will probably be transformed differently. The area from Koseze to our school is one of these big green wedges that come from Pohov Gradec. I agree this area should be developed, since agricultural land has no more value here, but with some respect to the space around the Path, because it carries a piece of more recent history.

SD: Some people feel it's enough to simply work with the physical reality that's there.

AK: I think you can see it as such. And I'm pretty sure it's valuable. Contemporary urban theories have incorporated landscapes as cities' constituent parts. They have incorporated care for ecological networks. You can look at the situation from this completely contemporary or futuristic perspective. If you let it be in the future, the Path will certainly act as a very attractive and very comfortable, accessible recreational area which happens to be linear and happens to be a circle. But without history it's a bit poorer. I think it's good that we get rid of the ideological message. I think it adds a certain patina and I love it as such. I love it as it is and I love it because of its history. I think it's a great idea that instead of building a monument, you know...in the seventies, which were an "iron age" in Yugoslavia, people were clever enough to build a public landscape, although they had ideological manifestations every May, it was only once a year and all other days in the year it was a public landscape…already in the seventies! It was a very clever idea again, when Koželj won this competition and he was in charge when Tito died, that this "88 trees" [scheme] to commemorate Tito's death was incorporated in the Path. They're not visible, they do not have monumental value, but they have memorial value.
SD: As soon as you discover that "what you see is not the whole story", this unobvious thing, there's no limit to the depth you can go.

AK: That's it! That's interesting. Otherwise, it's too simplified. It's not necessary that everything is just thrown at you, you know. If you want to discover, you can discover. All these things you see or know, like that the "star" towers [the Constructivist monuments with the red Yugoslav star] were cut down, just adds to the value. I don't think we need to go back, but…

The first government after the change, the first municipal government, actually wanted to erase the POT as a spatial structure. That was crazy! The ideological symbols, that's fine, let's get rid of them, but the landscape element itself? But Koželj participated in organizing a civil society association to take care of the POT and managed to complete its maintenance.

SD: Is it important that the POT is a continuous circle? People always say yes, but in fact few people really use it that way.

AK: If we can keep the whole circle then I think we should. Even though on a daily basis most people don't use the whole thing, it's worth preserving the whole thing because when you decide to follow it, it takes you through places you wouldn't otherwise go. This unfolding of the unknown that is suddenly presented to you, and when you only do it occasionally, you see the change. These areas are right now experiencing big changes from industrial into commercial or from fields to urbanized areas, so it’s worth preserving the whole structure.

I once wanted to write an article, I have a sketch that I never finished, about the Red Trail [Freedom Trail] in Boston. I followed the trail, I got this little booklet. It's an interesting one…footprints painted on the pavement. I lived in Boston for two years, but when I followed the trail I discovered "another" Boston, and I think it's the same with the POT in Ljubljana, and besides, here we have a spatial structure, not only footprints. It's there, and it's really presentable.

SD: When you say the POT should be developed, what do you mean?

AK: I don't mean the development of the POT itself, but the areas adjacent to it. There are plans already going on in some areas to completely cover some sites. The area for the POT is only 20 meters wide. It seems enough, but it's not. Maybe when it goes in areas like BS3 and Šiška among these big tall apartment buildings, but when you put it through a low-rise shopping center, I don't know. In already urbanized areas, there's nothing we can do, but where there is still flatland we could explore the possibility of leaving more open space. For example, instead of having open space within a neighborhood, maybe it should be on the periphery and adjacent to the POT. That's how we could avoid spending more money, and differently configure the space. These areas will get built up; now you have space but later you will just be left with a belt, which is really the physical identity of the POT, but it's not the whole. I think some space should be preserved. Like the part between BS3 and Žale, this is an area that should have space, not only a belt. [This area has beautiful views].

SD: What about Davor Gazvoda's idea of persistence?

AK: I think there are ideas to get sponsors to plant trees around the POT, and so "adopting" a portion of POT by this action, and I think it would be possible. A landscape cannot be persistent by itself. Legislation and maintenance are needed to make it persistent. The best guarantee for its future longevity is the way people use it. Obviously they are not willing to give it away so easily. And they will take care, so sooner or later the municipality will recognize it and I think they have already started to participate in maintenance again. Certainly with time the memory will get more loose. We will have
the facts, but they will not be as alive as they still are. Like with any historical landscape, how much change do you actually allow? How many new additions, how many more fountains, how many more benches and playgrounds? I would prefer to have it simple, because when it's simple in programmatic terms it's more open, so it actually allows you more even though it does not seem to offer you a lot. But you can do a lot without being preassigned. There's more freedom.

If we manage to save some of the adjacent areas from being entirely built up, you could introduce new programs for new recreation and needs that will only emerge in the future, you could locate them there, and the POT could serve as a means of access to them. That's the whole history. The whole space is changing around it. This would be one of the future directions to look for. It's an intriguing landscape. When I was a child, we went there, we had to go to these manifestations, but it was fun! I know it was ideologically charged, but we held hands all around Ljubljana! [see photo in Ch. 3] That can also been seen as a humanist impression.

**SD:** Around the whole POT?

**AK:** It probably was. It's a great idea that today is probably not possible to do, but it was once done. It was also a time of oppression along with optimistic ideas. People believed that the world could be changed. If you know its history, it adds value to it. Of course in terms of design I think it's fine as it is, of course with slow adaptation to contemporary needs and technological requirements.

When I was thinking about the POT, I found this similarity with the Trail in Boston, and later the mark that was left in space by the Berlin wall, but with different meaning. The area is so huge here, you cannot build an entire park belt, but there is this idea of marking the line, sometime as a park, but sometimes with these little elements in the pavement. But POT is unique as such an unpretentious spatial structure. We are so used to it, you know, that we have to be reminded sometimes of its spatial meaning.

When I came back from the States in 1993, there were visitors who came for congresses and symposia who wanted to see the POT, not the castle and not Piran, but the POT. Of course, they also wanted to see the castle and Piran, and Bled!

**SD:** Do you think the POT should be promoted to tourists?

**AK:** Well, I don't know. Probably it could be more promoted than it is. I don't really know what tourists would have there, unless they are looking for recreation or they are interested in how Ljubljana works, because it's not a real tourist attraction. But it may become one. Of course, it's interesting because of the history.

I was in Munich. It was my first time to walk through the English Garden, which was the first park in Europe built specifically for the public. It was full of naked people, and I said: Wow! It's great! And then I talked to my colleagues and they said it was an old thing, a remnant from '68 in the heart of Bavaria. There were young people, but also old people who were young in '68, lying on the grass and sunbathing naked. They were free enough to do it in a public park, not in an assigned area on a nudist beach. I think it's great. That's how people actually adopt or appropriate a certain space without getting into conflict with other groups who may not share the same attitude. Obviously there's a kind of agreement in the English Garden, which is an icon of the English landscape, an icon of the public park. At the end of the eighteenth century and beginning of the nineteenth century, the public park was completely differently understood from how it is now. I think POT could, in this sense, become a
tourist attraction, not as bold as the castle or any other, but it's definitely forming the identity of Ljubljana, even though it is not so loudly promoted or acknowledged.

SD: I wonder how foreigners and locals read landscapes.
AK: It would be an interesting study. For a foreigner, for example, if he gets the information that he can run or walk on a certain path, and has to zigzag in a completely irrational way, just as the Italians did it [laid it out], then it's a question. It's not an average path in a park. Sooner or later, one would ask why it's zigzagging this way and would maybe look for its history. Maybe not, but probably the question would get raised.

SD: I read a paper recently about "landscape theory", talking about what happens when city people buy houses in the countryside and renovate them.
AK: They add value to the property, but actually change identity. The problem is sometimes that for the conservationist, or conservative point of view, any change of identity is perilous. But it is not so! Our own identity is changing all the time. I am critical of this fixed idea of one image, of one nation, of one state.
BARBARA GOLIČNIK AND MATEJ NIKŠIČ
URBAN PLANNERS (URBAN PLANNING INSTITUTE OF THE REPUBLIC OF SLOVENIA)
APRIL 2007

SD: Urban Design...what are your areas of research and what is the Institute doing?
MN: I would expose the gap between urban planning and architecture. I'm an architect by background. In ex-Yugoslavia in the last 10 or 15 years, urban design as a discipline appeared to overcome the gap between detailed design, which was mostly separate buildings, and the urban scale, which dealt with the whole landscape. No one was taking care of "places". But the role of urban design is still challenged.

BG: I think it's a very interesting discipline, which is still not understood by politicians and others. We all at the Institute, which is an academic research institute dealing with the phenomenon of urban design, have this great understanding what it should be, but in reality its very hard to achieve these ideas, combining different views of sociology and economics to morphology and features like structures which architecture and landscape architecture were always in interested in. Nowadays, the biggest problem is with developers because they came with their own ideas, and municipalities are not prepared for their ideas. They don't know how to evaluate their ideas and they're scared, and finally they just say "do what you want...your plot is here and its available". This is the biggest problem we are facing. The old documents are not up to date, and for our society they are just too old. The ideas of life have changed and this is difficult to tackle. It's difficult to make it operational. People want fresh ideas, but they are not patient with the time it takes. When you face these property ownership difficulties, it's not well organized. There are no instruments for how to proceed.

SD: Some problems are the same everywhere.
BG: There's no tradition of urban design in Slovenia, and the politicians and other non-professionals who are in a position to make decisions don't know what to expect from urban design, and it's difficult to talk about it. We have different expectations from each other.

SD: Do you find yourself in any identity crisis sometimes?
BG: All the time!

SD: As professionals in the field you must feel frustrated and wonder what the role of this profession really is.
MN: I think it comes from the change of the whole context in this country. Before, things were planned from the top down, so you got some guidelines from the political top, and you had this system of social planning. It was close to the five-year plans that were set up in Russia. Nowadays, conditions are changed. The profession is facing new conditions. One problem is that different
professions can't negotiate and discuss topics together. Everybody has their own way to do things and there is no cooperation. I think the role of urban design is really cooperation and priorities.

BG: It's probably true in other places, but it's really this lack of cooperation between different disciplines. Like in Ljubljana, they usually say there is a problem with new development areas...like housing and car parks, and it's not looked at from other points of view. So they try to focus on the problem and solve it, but it's often overlooked that we could solve other problems at the same time, linked together, so there's always an option how to deal with the problem in a more complex way, but then only one way is chosen and you feel the lack of communication.

SD: We were talking about the split between city planning and urban design. City planners are doing research and calculations. Is there really ever an implementation of urban design? Investors want to make money. And I see articles talking about the end of urban design. Even your institute has stopped making proposals and is doing purer research...

BG: From my perspective, my research has been bottom up, from the point of view of users. If we can apply both approaches, this might give us a chance. If you confront these two ideas it can help you clarify what exactly we can do. At the end of the day, urban design must suit people who live in the city. It think it's OK to do research and calculations, but at the same time it's important to check these general approaches. Otherwise, we can just create ineffective environments. I ask myself what the limit of the scale of urban design is. For me, urban design is everything everywhere! When you talk about an environment, you have to talk about the identity of this environment. It is about urban landscape design, because it's in the city! In Slovene, I like to use the term mestna krajina...urban landscape.

MN: I think the role of urban design is still very important, this classical term, because if you had only good architects it would work fine because they would think of the wider context, but unfortunately the majority of them don't. If you have urban designers, it's a good step in this direction...they will have to think of this wider context. And for the city planners who deal with numbers and traffic flows it goes back into the details. So this middle stage is very important. Everybody talks about the crisis of urban design, I know, but I think it's not such a big crisis. It's evolving and changing.

BG: I can understand building ideas or theories of urban design. I'm a landscape architect, so I always started with context. But now I have been involved with studies of public spaces for so many years that I believe this is the core of the feature of cities, the function of cities, and then I will apply other ideas over it. Other designers would start from different starting points. I would always look at what is there today and then for the first layer I would think of how to make an effective network of public spaces.

SD: Do you know how to do it?

BG: We have a model which we developed for the strategy of the municipality of Ljubljana, but we don't know if they will do it. If nobody tries it we will never know if it works or not!

SD: The city is a kind of laboratory and sometimes the experiments don't succeed. But can you imagine a strategy for an ideal Ljubljana? What would such a vision be?

BG: I can imagine, but not completely. I can imagine it with public spaces, but not everything about the height of buildings, etc. Then my imagination stops. I would have to work on it. It's too complex. This is only the structural morphology point of view. We are not talking about functions and activities, traffic...
MN: I think if people start to use some spaces, even if they're not designed as what we think public space should look like, that's a very good motivation. I enjoy when I walk through Ljubljana seeing people spending time outside, but they don't have enough of the basic infrastructure.

SD: What places do you appreciate?

MN: In the mental mapping I did for the city, people appreciated the main spaces: Prešeren Square, Kongresni Trg and Tivoli Park...these were most present in the mental map of citizens and also visitors. The linear space of the embankments of the Ljubljanica was the most used. But these were created in the last ten years. Redesigned in the '90s. Cars used to drive by the river. You can see it in the plans done by the Institute in the '60s. It was repaved and trees were planted. There was a big discussion: why do you have to have this paving if there are no cars? They were making the area for pedestrians!

BG: I don't like the idea that the areas along the river are successful places. I think there should be more different uses there. If we do more renewal, it shouldn't just be more bars and cafés. It's not enough. You should stimulate other things as well. I really have a problem to say which is my favorite or which works well. I think we don't have one! In Tivoli there is a lack of a program. There is one playground where everyone wants to go and one café where everyone wants to go. And they get overcrowded and it's not pleasant anymore. So there's this castle there and another museum on the other side, but nothing going on next to it. There is a core, but it should generate other activities. You can find people playing on the lawn and that gets better from year to year. But what is lacking is small kiosks or point programs, where you could get a newspaper or borrow a book or get a drink. It's historic, so it's protected, but there is no connection to the city. I like the connections up the hill and to Rožna Dolina and Šiška, but not to the center. It's very bad somehow.

MN: What's true for Tivoli is true for the city. There are "dots" of so-called public spaces but no network, no connections.

BG: You don't have "belongingness" to a layer of events and activities that people usually do in public spaces. Ljubljana has good potential but it's not well developed. The network is not done and the hierarchy of places is not defined: what is important on the local level and what's important on a city level and how these should be connected.

SD: The idea of public space has been used very conservatively. The idea of a space defined by nice façades, etc. But the city is so much more dynamic than that...linear experiences are "real" public experiences...the city life in motion. Where do you go to kiss someone for the first time? Or to hide rather than be seen? It's dynamic...Otherwise, you might as well sit at home.

MN: We had a nice discussion with students of landscape architecture. I was asking them about the meaning of public space today, and many of them were talking about rhythm and what's happening. This aspect is important to them.

BG: This is what is so important when we talk about urban design. This old-fashioned manner that planning is about drawing a grid or system of open and built areas...therefore it is so difficult to discuss things because the people who work for municipalities think this old way is urban design. It is difficult to think of it as dynamic and that we have to respond to these dynamics and that you cannot draw a static image of it. They want you to draw in a certain scale and in two dimensions. But we are
talking about four dimensions. Time is very important. And they should at least ask for sequences, or something else…and we should be able to show them. I think that’s the point of urban design.

MN: Actually we ended up thinking that the public space focuses on the physical aspect too much.

SD: *The public mind is really somewhere else. The public is making another "city" of modes and connections…in their collective minds.*

BG: I think when you are living in your "extra" world it is more likely to live in it comfortably and effectively when the physical environment supports it…so no cars, maybe more greenery. I don’t know how to define this idea. When I am texting while I’m walking, but I only do it when I’m in a pedestrian-safe area, because I would like to survive my walk through the city! So if the physical environment supports your "e-world"… how much noise or disturbance can you have so you can still live in these two worlds. For me, it’s at least a luxury that I have more rights to cross the streets than the cars. But you have to negotiate! I am beginning to think that I am in a better position than the car or bus and that it will wait!

SD: *And so does the bus!*
MN: But the traffic also brings some dynamics!

BG: The biggest disaster in the center is Slovenska [Ljubljana's "main street"], for pedestrians. We are squeezed between buses and façades. There’s no place to walk, and too many buses. And now that they want to renovate all the buildings it’s even more of a disaster.

SD: *How do you activate public participation?*

BG: We are Slovenes. Slovenes are very difficult, to do something for the common good, to go and say what they think, to participate and go on the street and say, listen, we want to have a better neighborhood. This is what we don’t do. It's as simple as that. We have to learn that. People have to be educated in this way, be exposed to these meetings and see the results of this participation. But usually the situation is that there is money for a few meetings and there is no money for more research or the real project, and people lose faith in professionals and the mayor, etc. And this is a magic circle and you never escape. Maybe we need to become a bit older as a society to get used to the fact that you cannot changes things from day to day and that it takes time. It also means that if something takes time, that you have to give your time also. The younger generation has this pressure of time in daily life and there is no time for anything else.

MN: I think in our society this participation was much better in the past, through different public actions, but it was lost.

SD: *Like POT, which was built by volunteers.*

BG: Because it was in the minds of people that this was for all of us. Now it is important how am I different and better than you are. People are not ready to join in something common.

MN: They don’t see how it’s in their interest.

BG: They just say that everything we had in the past was bad. I think this will have to pass and then people will have to understand from scratch that this participation is actually good.
SD: I have my own romantic notion of what collective participation was like, what Yugoslavia was like.
BG: I was very happy when there was socialism.

MN: It was probably best in the seventies and early eighties and then started to decline.

BG: I was a kid then and I had a very nice childhood. My parents weren't in the party. They were educated and they got jobs. They were promoted well and they were recognized as good. I come from the countryside and there was a small primary school, but we had many opportunities. We had music, sports and there was everything for everyone, if you wanted it.

SD: So that social model might be a model for participation in the city, for both physical and mental work.
BG: This is a good model but you can't apply it today...because of the matter of property. Before it didn't matter, but now, for example, if there is a block of flats and my unit is smaller than yours, why should I put in the same amount of money into the common basket...

MN: ...or effort...

BG: ...if I have less. This is what limits things today.

SD: Is it jealousy or envy?
BG: I don't know if I would call it jealousy. I think it is more: "I'll just take care of myself. Why should I take care of you at the same time, even if it's good for me?" Before, this was not a problem. And so the system was able to go on and on.

SD: So selfishness?
BG: Maybe that's it.

MN: I think it also went on out of fear. "Will I survive if I don't follow the system, if I don't play this game." So everybody played this game, and the game went on.

SD: The role of politics and especially the mayor is very important isn't it?
BG: Did you see the exhibition of Plečnik? In those days Plečnik and another guy came to the mayor and they decided what to do with Ljubljana. Today, many different developers come to the mayor and they decide to do, so nowadays there is not just one vision, but a lot of visions. Before, because there was just Plečnik and he was a dreamer and they were listening to him, he had the chance to develop the city to a certain degree, but now there are too many Plečniks.

SD: But not of his quality.
MN: Unfortunately. If they were it would be great!

SD: Now to the identity of the city....there is a difference between the Lynchian image of the city and the more Venturian city as an image. Has the idea of an image changed the identity of the city?
BG: I don't have this problem with image. I think [the city] has to express the spirit of the times somehow. So if designers believe this is it now, this is it. When Plečnik was there, it was what he believed. But what I miss is a lack of thinking how to make neighborhoods work, especially in new neighborhoods, the connection of buildings and the outdoor environment is not well done. I don't really have a problem with the [image of] architecture itself. To quote the writer Andej Skubic,
buildings nowadays either look like hospitals or prisons…and this is probably what general people think about. I’m not saying that we need Alpine style in the middle of the city, not at all, but…

MN: For example, this project here, where you live, did not take advantage of the site at all. Like views of the pond.

SD: It’s true, the circulation here all points to the supermarket… There was a nice statement by Branzi who said that the city does not stop at the facades of buildings. The interaction with nature, light, etc., not only the ground floor interiors. Like Noll’s plan of Rome…

MN: Identity is important, because that’s how people attach themselves to the city, but not from the marketing point of view.

BG: I think there are many dimensions to identity. It’s not just this physical image.

MN: The advantages for marketing are the images.

BG: It’s brainwashing. I haven't thought about it so deeply, but I am aware that identity is more than image. This is one of the things that pushed me to my own study, because I wanted to escape this idea that the designer is just creating a nice image. So I believe there are different dimensions which overlap. And for whom? What is the sharable level of identity? Maybe I identify with something that you don't at all. I don't have an answer.

SD: The small scale and its consequences, down to the money [at least the former tolar], seem to be part of the "implied identity" of the city.

BG: I don't know if I agree. It’s true, I have no tolars in my pocket, but I don't feel less Slovene because of that, or less from Ljubljana. Before, because you could just use your money in your country, you couldn't really compare these additional values because it was obvious that you just use it here. I remember when I was abroad and when people asked about being a Slovene, of course, this is true, if I had my money with me I showed it as well. We really did this great thing that we put artists and one architect and some scientists on our money, so it was really easy for me to communicate our culture through the money. But it was just to help others understand where we are and who some Slovene people were.

SD: As a kid you don't have this money in your pocket, but you already know the important figures who are on the money. These small gestures [like money] I like very much and in a way the city is full of it, or should be.

MN: But this is really the national identity and very broad, and doesn't really have an urban character, since the national identity is more rural. So I can't really connect it.

SD: But the concerns of these implied issues IS focused in the city. The capital rules the provinces, the stock exchange is here, the globalization is here, the transactions are here.

BG: From this top down perspective that idea works, but from bottom up it doesn't.

SD: So the question becomes: what does a bottom up city look like?

BG: Maybe I'm already poisoned by my studies, but bottom up really means people. Users. This is the only dimension which is really, really bottom up on the first level; there are other dimensions but they are already linked to people. Either they are perceptions and understandings, or needs, like where do
we want to go and how do we get there. I think of it from the users perspective. It's difficult to see it any other way.

MN: When you mention the bottom-up city, my imagination jumps to these "allotment areas", these small areas with barracks where people from ex-Yugoslavia came and stayed for their whole lives.

BG: This is something nobody wants to believe, these city planners, they think these areas don't exist. I remember when we organized a conference and Matej was asked to go around and photograph the living reality of Ljubljana, and he proposed to show these areas as well and our boss said "No. This is not what Ljubljana is about!"

SD: All these bits have to be included. And that brings us to POT. It is such a strange element but it has so much potential to address these kinds of issues. It's heritage is bottom up.

BG: It was politically motivated, but the realization was bottom up.

SD: But it was people in all different neighborhoods who acted to tear down the fence and the bunkers, and it's first proposal for use was for athletics. This might have been politically motivated. So should POT keep its historical identity, or should it just be taken as it is physically and then move in a new direction.

MN: How can you move in any direction if you are not aware of the historical roots? I think this is just an "image" that this is a green circle. To me, it is not at all: it is streets and then some rows of trees. I live in Šiška and use the POT to go from Šiška to Bežigrad, and this part is not green at all.

SD: So is it OK for the POT stay just as it is?

MN: I think it's not OK, because if you take POT as a path for recreation, you would at least expect some [drinking] water there, and there's none at all, just benches and shade. It's a very simple intervention, but it would improve this element of the city. In the urban areas, these are streets, but it's just pavement and no activity.

BG: The POT has to be identified better in these areas. What to do and how to do it should be different from in the open green spaces.

MN: POT should just be upgraded in a very subtle way.

BG: I'm OK if it has different identities in different locations, or if it causes different feelings. You don't need to feel the same along the whole way. You feel something here and something else in another part. But it still has to be one unit.

SD: But this may not so much be identity, but legibility. Its identity now comes from historical knowledge and partly the signage. Another part is identity of use. Finally, the row of trees.

BG: For me, I remember when I was in primary school we always got this invitation to do the big walk around the POT, but I never did it. Later, when I came to Ljubljana to study, I got involved with the POT more or less as a recreational area. From this point of view, should it get changed, yes, just in order to enable better recreation. There are fewer and fewer people who are still aware of this origin of the POT. How to express this today is a very good question.

MN: There are still several bunkers remaining.
**SD:** One is just the preserved and landscaped circular foundation.

**BG:** I saw people bowling there and I thought it was just created for this! I was thinking about what to do and how to go forward. I didn't even know about these bunkers. And I didn't have any special feelings for it. I thought maybe they just started something that was never finished.

**MN:** As a child I found these really ugly and very offensive. I never thought of them as a positive thing.

**BG:** I would now be able to share this knowledge with my kids, because you just explained it to me and I never studied it in detail. But there are so many people living here who are not from Ljubljana and they are not involved with POT at all, except walking along it. So my question is, if this was left there as a remains of a bunker and I didn't get it, it was there telling me something but I didn’t get it, I am disappointed. If something is there and you don’t get it, why is it there?

**SD:** It was disappointing because it was not communicating, and there is a pleasure in understanding when you see something you don’t understand.

**BG:** If there is something there that is important, then it has to get your attention so you can understand what it means and why it is there. I got the message from the stone pillars, for example.

**SD:** That kind of pillar has a very established iconic identity as a memorial, as an obelisk. POT also has an identity as a linear park, which is fundamentally different experience from a normal city park and a typology of which there are more and more examples [NY Highline, for example, or the 700-year anniversary path in Luzern, which is jointly maintained by the Swiss cantons]. I was thinking of applying some of these ideas to POT, as a bottom-up environment that could be managed bottom up, by different faculties of the university or other institutions. The other thing was a new name: "Wireless Ljubljana", as a play on the original name of a wire around Ljubljana and on the system of wireless communication.

**MN:** Dealing with POT as a way of establishing radial connections of the same quality, to the center, would also be important. Like the Ring Road. That’s why it doesn’t work now [because of the lack of these connections].

**SD:** Does the POT have to be a continuous circle?

**BG:** Yes.

**MN:** I like the idea of involving the university faculties, but POT itself doesn't really have to change its identity. We shouldn’t deal with this, but how to make these radial connections to enhance the "operation" of the POT. I can’t imagine how to improve it without dealing with these connections.

**SD:** Should it be promoted to tourists?

**MN:** It’s a unique feature, so tourists should know about it…but if there were hoards of people…

**BG:** It's too big for that! Other parts [than the currently popular parts like Koseze] should be promoted and improved, but they should stay kind of rough. We don't need to polish them and make them nice. It is its quality that it has different sections and different things to experience along it. On the other hand, like with cultural and natural heritage, it has to be upgraded and up to date and go along with the current spirit of the society somehow. This idea of involving the university is one idea, and also combining with local people is very good, but I doubt it could work out. How would they get involved? If you invite the school of architecture, they would put boxes along it. If you involve
sociology, they would be happy to discuss things with people there! But what actions or events are possible?

SD: It should be very gentle in any case. And here technology could be used. There is so much emphasis now in Europe [Lisbon Strategy] on Information Society, and this could be a way to use communication technology to connect to POT. It's a social space, too, a deconstructed and unowned parcel, and this could encourage the preservation of its variety.
BG: I am still thinking…when you are so close to idea but you don't know exactly what to do…. I really like this wireless idea, I like this phrase. It says the truth about POT: there is no wire or fence anymore, and on the other hand wireless technology is all around us. You don't have to think that there were 50 years in between. The words say it all.

SD: The ordinary conventional urban lexicon fails here.
BG: Yes it does.

MN: I think this would change the identity of the POT as a place to relax. If there were cameras and screens, it might not be very good. I think the identity of POT has to stay the same. It doesn't just have to be the narrow path… it could expand into other open areas.
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JUNE 2007

SD: I would like to talk about this thing called identity, and the Path, and the point of view of a landscape designer.
MS: About the Path, we were developing these ideas after we finished the book or the report [see Krajnc, Simoneti et al. in Appendix 3]. We have a new mayor and he wanted to hear about it because our vice mayor Janez Koželj is the "guardian" of the project. And they quickly agreed that it has to be developed. There are parts where you just can't find the way because it disappears, and there are parts which are really bad and don't deserve to be called an urban or memorial pathway. We were competing for the European city of culture and we included this idea in this project. We tried to sell the simple idea of a pathway that is really safe, so that you can walk or ride a bike and see nature and some interesting parts, and socially interesting. It would be an investment that would pay back normally. It is not a park like in the center, but there are so many daily visits. And the mayor bought it.

Then we proposed to arrange another circle path beside the Ljubljanica, which would start in the barje [marsh] at Spica and go around the old part of town one side and back on the other side. With no cars. We also proposed a new museum at the end of this path at Stepanje Vas, which is pretty far. And this could be an inner bypass to the POT. And two outer bypasses. One to the Sava River that would also include a separate horse-riding path. And the other would be in the barje area. This would be a natural preservation path, unlike the more urban one in the town. But we weren't chosen for this city of culture project, so we are trying to develop some of those ideas in a new city plan which is going on and should be ready in October. This plan also includes zoning for really small parts of the city.

SD: What's the possibility of something happening?
MS: I should mention that the mayor put the Path in his package as a project that he is supporting very much, and he named me to be this person to gather together everybody who is working on it and propose something. We are now hoping to get structural funds from the EU and combine it with private funds. It's on his priority list 2. And that's the only way. And to actually activate businesses by the side of the POT because most of the worst parts are near businesses which are not oriented to it. They ignore it, and this is really bad. On the other hand, I think that this idea that we are reading it as an identity issue is not present in the public. People are not aware of it. More or less the professional public would say it's important for the identity of the town, but the normal user wouldn't put it in the top five or ten. It depends if you ask people in the parts of the city where the POT is really nice, everybody would define it [as important]. But if you say it's for the identity of the whole city they would say "no, it's the castle, its Tivoli". People are unaware of it…this unaware use.
SD: Many people remember the history of it, whereas young people don't really know it and just go there.

MS: It's not the history. As far as I believe, it has more to do with the fact that no one in this part of the world, not just Ljubljana, no one has an idea how important open green space is. This just happened to people here. They weren't involved when it was planned, they weren't asked if they wanted more green or if they wanted to give more money so the green space would be managed and wouldn't disappear. If I compare it to Britain or other countries, this is something that holds us back and we can't develop the potential. Now people in the last ten years are getting more aware about their own open space, for their everyday use. Nowadays after ten or more years of privatization of apartment houses we have the idea that you have to manage the building and where to park cars, but the open space is left aside. There is this unfinished story: the city first said it isn't dealing with it these parts of the city anymore, and it was left to people to deal with apartment houses and open space. And in five years almost every playground was ruined because nobody took care and everyone thought: "it's not ours". The neighborhoods should be taken into account as a whole, and not privatized from house to house... everything should be common, because it's the only way to deal with all the functions you have to deal with in the city. But now there are all these spaces that are not decided. And all the ownership of these areas is completely a problem.

After five years, the city took over the playgrounds, because it was dangerous not to, but the greenery was still left. There is this mental structure hanging above this, and so these things are going really slow in comparison to other parts of the EU, of course the western part mainly. The eastern part has no memory of this. There is no experience in this area. There is a bond [with the green spaces], people like to go out with their kids, etc., but people are still unaware of what it takes to take care of open space. So new apartments are built with much less open space, because people are just looking at their own apartments.

I'm not blaming the developers. They are only the result of the society that is pushing them. To have a structure of open-minded development, first you need such a society, a demanding society, from the political side and from the user side, and then the developer will come.

SD: This is an educational process.

MS: Yes! It's a passive education as experience and also formal. I'm working on a European project on spatial awareness, to push this a little further in this central and eastern part, where it's actually a mess! The society is not prepared well enough to deal with the issues. There is no equality in Europe on this; there are huge differences. And it goes to this historical memory and passive experience. Every person has to go through the transition. Five years ago people didn't understand anything [how to do anything on their own]. And now people are just starting to look around and realize the situation is not good.

SD: Is there the possibility for any kind of new thinking to apply to the POT? Many people have just said to take the POT as it is, without historical baggage. Some have even said not to do anything.

MS: I strongly believe we should put as many layers [!] on it as possible. The Tourist Board is planning to put all kinds of program on it. What we want to do next year during the Slovenian presidency of the EU is to do events, some music and exhibitions around the POT on May 9. Of course we have to rebuild the parts which are bad, and connect parts which are not connected well and put back some signs. It's an active space with many potentials. We have a serious problem because everything that's happening is happening between Tivoli and Ljubljanski Grad. It's less than a kilometer! On the Ljublanica it's between the bridge near the architecture school [Zoisova] to Tromostovje [Triple...
Bridge. Even Zmajski Most [Dragon Bridge] is too far! So nothing new is happening in the town actually. What we need is to put some programs that can be bearable on POT. It's open and it can be loud, a lot of people can gather there. You can come by bus, and then walk a little bit if you don't want to walk the whole way. So many opportunities…

SD: Why do anything?
MS: I strongly believe that there is this thing that was planned and built, and if you only put a little money in it so it won't collapse, it is as if you have done nothing. This idea is strong because it is used. The memory layer would collapse and only focus on the parts that are really accessible. But if you make it alive, you would do many things at once. You would equip it, you would open all the possibilities for people to use it in many ways, you would put it on the map touristically, and you would make some interesting things for the identity of the town. I think you have to develop the identity.

I believe you should change the identity of the town: you have the river, and two areas of the city (not five wedges following the main streets…this has disappeared already!), one that is urbanized and one which is very natural: there is the barje [marsh] and then these two hills [Rožnik and Castle Hill] and that's it! The two hills and the river are the most sustainable parts, because they speak to me, or to the guy from Japan who would come, and they are parts of identity. And the POT is the one planned structure that could be a supplement, something that we consciously arranged.

SD: We have a responsibility to be active in the city. And you don't get resources by magic! These resources make a kind of identity, and leaving things as they are seems bad. The city is how we do the projects we couldn't do alone…
MS: I couldn't agree more! I think this is a part of life we have never taken on. You have read that we are not urban people at all, which is true, and people are not aware of why we are living together. Outside the very center, it's not urban at all. It's a village. And everybody just cares about themselves.

As for the younger generation, they are really very conservative in their ideas, and their statements and relation to the space or other people…and they are not urban. They can travel and they are totally free compared to how we grew up, but there is no result yet. Something is holding them back. I believe it's the educational system, every year for ten months half a day! It's speaking very strongly to them and it's the only serious thing they have in life, because the parents don't really care. And school is not giving them anything. It's very undemocratic and traditional, teacher to student and teacher to parent…it's much worse than it was. And it's not only primary school… it's also the university. The professors are not there for these young people in the way they should be… pushing the students to be active and understand why they are there and what their mission is. You have to have a mission…it's not about the money (especially for architecture and landscape architecture). Otherwise, you should go out… otherwise you'll be miserable.

SD: Everyone's afraid.
MS: Of what?! I'm well known for saying what I think! You can train yourself to do it really well and not get punished for it. I don't say things rudely, because I want to survive, too! You can always say: "These are open problems. We should deal with these questions. We should put some money into it. We should promote the importance of open space, we should involve businessmen…” Propose!

SD: One strategy for the Path could be horticultural, responding to nature and seasonal color, all the way to land art.
MS: Of course. The POT does not have so much potential in the spatial dimension, but there are dedicated spaces [adjacent to it] to be connected, and spaces that come together with other uses… and those spaces that are not well designed have potential for that idea. Planting, the look and the smell, would be really good. You also have these parts in town [next to the POT] that are more like parks, especially near schools. And you can develop things for older kids, like skate parks and gathering places. You have these places where people are always there, even at night. And there are already some plans to put up lights so that it's safe. If there were lights from Vič to Koseze, it would be great. This part is massively used. It connects two urban parts, especially for people who don't live in the center… the second generation of people coming to live in Ljubljana. In the '60s, everyone wanted to be in the center, and there was little development in Šiška and Vič. Now in Koseze it's already third and fourth generations.

SD: More about the Path. I had an idea about the name, reacting to the history, which I find interesting. How about "Wireless Ljubljana"… it has some meaning in terms of Wi-Fi technology as well as terms of breaking the wires of history.
MS: Hmmmm…I like it!

SD: So what exactly is the Path? Taking the idea of forest learning path farther, could the Path be an open university, especially as a way of encouraging knowledge and bottom-up participation?
MS: The Green Ring Society is still active… with about 1,500 members. And they have been able to prevent the worst! Any new idea would need their involvement. They also know that it is time for them to change. These are people who are really attached to this thing and don't know how to involve younger people with new ideas. When we were doing this research, we told them we would develop it, make a website, etc. They resisted and again there was nothing from it.

SD: If you were the boss, what would you do?
MS: Short term, I would gather all these people together and make them understand that they should step back a little and promote the idea of POT in the town on many levels and very widely with the help of the Tourist Association and start involving some schools and firms. This would be a good idea, like you say, to involve the university. I would systematically call in all owners who have land alongside the Path and invite the mayor to talk to them and find out how to manage these parts of the Path and improve these in-between parts, and what they would like to do. In a way, I would like to have this strong idea about what to do with POT as a part of the town, but I would also like to open the space to people who are already active, like this Society. I would put up a website, I would try to involve younger people, I would do some design competitions, to put back the signs that Koželj developed, also the red stars on pillars were really crazy! I would put them back! I would never just leave it as it is. I strongly believe this Second World War thing shouldn't be pushed away like it is. My father was in a concentration camp and my mother was here… why can't I be proud of it [our history]? Why? I think that's a problem people have in Slovenia because we cannot be proud of it. It's really stupid – people have to be proud of some things. OK, we can be proud of nature or our economic success, but then again 2 million people in such a small place… there are these small "proudnesses" and you should build them! You would never be nationalistic or say that everybody should say a prayer, but then again it is here, let's put it there, I would like to be there. It's a memorial. I like this idea about being boundless or wireless because what we are saying is that this is not the border anymore… today it's actually connecting parts of the city. There are people who are using it that way.
What we would like to do now is this exhibition we proposed. [see end of Chapter 3]. There is this one problem because of this Zeleni Prstan [Green Ring Society] and the Tourist Office, and no one wants to say they want to do it together. There must be a goal…we have this Path and we need a new brochure, because the mayor would like to have something nice in hand to give out when he meets people from the rest of Europe. The red and green brochure they have now is not proper for this. There are strong obstacles, I think; in the beginning everybody was happy, but when people have to step back a little, they just don't want to hear anything anymore. I don't have a lot of time to deal with it. They have to change their attitude… and they won't.

SD: Do you think Koželj is going to succeed?
MS: He has a problem. He's an architect, which is really a huge problem! He can be satisfied with individual projects. We need a heterogeneous, but also compact vision – a framework that these projects fit into. I would call it a development strategy. Now it's a patchwork. Even the ideas which are nice are not structured, so the ordinary citizen cannot even understand them. The projects have to be described with principles, like how to manage the environment, how to design space in the city, how to organize zoning. With a framework, you can tell people why you are doing things. But now you can't. Now there's just a pile of ideas. He's really a good person, but in the long term I'm afraid he might burn out.
APPENDIX 2
Atlas of the Path of Remembrance and Comradeship
Ljubljana

This is a complete atlas of photographs of the Path of Remembrance and Comradeship in Ljubljana, taken in a clockwise direction and presented in sequence. The photographs were taken over a period of four days in the summer of 2006. The aerial photographs indicate the trace of the Path in the particular section identified, keyed to the standard city map. Each aerial photograph shows a section approximately one kilometer square.

Individual photographs are not keyed directly to the aerial photographs; however, since they are arranged in sequence, the intention is to give an "animated" walk along the entirety of the Path, to capture the look and feel of the changing environments of different sections as well as the commonalities. (All photos by author, 2006)
Key map of Ljubljana (western section) showing location of segment maps. [Note the starting point (Km 0) at Tržaška marked with a black circle]
Key map of Ljubljana (eastern section) showing location of segment maps.
Map M26 / Section C10: (starting point) from Tržaška (the "Km 0" starting point of the Path) north past a small cemetery and on to Vrhovci. The Path "originates" here, at one of Ljubljana's main streets, the road to Trieste, i.e. the direction taken by the invading Italian troops in 1941/42. The Path crosses under railroad tracks and traverses combined residential/commercial environments.
At the end of this section, the Path crosses a small meadow and one of the signature bridges that occur in the western part of the Path. After crossing a residential street, the Path ascends a stone stair.
Map M18 / Section C9: from Vrhovci north through combined residential areas and open green and agricultural space. The Path here begins one of the most beautiful sections, well used by cyclists and pedestrians.
Beginning with Km 1, the Path traverses large open green spaces. Shown here are one memorial stone at a small resting area, as well as the reconstructed foundation of a destroyed military bunker, one of several on the Path that have been constructed this way as a form of remembrance.
Map M18 / Section C8: in this section the Path leaves the low-density residential area to the south and continues to the north through agricultural land and forest to the east. The lush greenery and generous open space in this section makes it one of the most attractive areas along the Path.
Photos from Km 2 and Km 3. This section has two signature bridges over streams and several rest areas with memorial markers. Here the typical cross section and scale of the Path is clearly visible: the tree allée with gravel path surface.
Map M18 / Section C7: through forest and agricultural land into a residential settlement the Koseze, turning towards the northeast. A section of the ring highway is visible at the upper left.
Several interesting features are visible in this section: the traditional kozolec - hayrack (at the top of the page and on the previous page) in the field, as well as another bridge over a stream, and the Koseze Pond. The Path enters a residential area at this point and is defined only by signs as it melds into the ordinary street grid.
Map M10 / Section C6: the northwest section of the Path, showing its turn to the northeast, roughly following the ring highway. In this section, the Path traverses two residential areas: relatively large detached single-family houses (lower right) and a development of apartment blocks (right). The Path itself is defined only by signage, as it is contiguous with streets, sidewalk and other paved areas.
A stairway leads up from a paved parking area adjacent to this apartment complex at which point the Path resumes its standard definition as a walkway lined with trees. Here the walkway is paved, not gravel.
Map M10 / Section D6: from Koseze to Celovška, one of the main streets in Ljubljana, passing through mainly residential areas, comprising mid-rise and high-rise apartment blocks.
This residential area is well landscaped with trees, and includes an elementary school, small market and café. At Km 6, a section of "88 trees" begins, as a special commemoration of the death of Tito.
Arriving at Celovška, a major urban intersection, the Path begins a transition from the residential/commercial area of Šiška to the industrial/commercial area of Bežigrad. Pictured here in a paved open area adjacent to Celovška, on the east side of the street, is one of the first main memorial markers of the Path, dating from 1959.
Map M11 / Section E5: in Bežigrad, a primarily industrial area. The aerial photo shows the large discontinuity in the Path as it jogs along Goriška to Litostrojska, then passing by the large Litostroj Steel Works on the right and finally turning to the east. The Path is only partly defined in this section with trees where it runs along the highway (left), then simply following the street and sidewalk, where it is marked with signs and some imbedded pavement markers on Litostrojska, and finally returning to a landscaped path.
This section at the intersection of Goriška and Litostrojska near the railroad tracks features the only fully preserved and fully restored military bunker, one of 69 that once ringed the city during the Italian and German occupation. This bunker is integrated into a wall structure and small open plaza. A map of the path is on the main wall. The Path passes behind this bunker.
Map M11 / Section F5: a mixed use area in Bežigrad, combining industrial and open green spaces. At the point the Path turns to the south along Verovškova, where it is well landscape with trees and defined; however, it begins to lose its identity as it reenters the industrial area and turns to the east, where signs do not adequately mark the direction to follow.
Here at Km 9, the Path follows Verovškova in an industrial area but is well marked with another commemorative segment of “88 trees” and a memorial stone in front of a factory, at which point it disappears into a purely industrial zone along city streets.
Map M11 / Section F6: this section passes through Bežigrad, with a detour around industrial buildings where the Path is not clearly marked; after several turns, it enters a residential area and continues to the east at Km 10.
Map M12 / Section G6: from the main street Dunajska to Žale cemetery, through a mixed use commercial/mid-rise and high-rise residential zone, then into the open agricultural land to the east.

The single example of the "second generation" Path monument in the mlaj (maypole) style (see Chapter 3 for history of the design) at the northwest corner Dunajska in a very small corner park.
The Km 11 marker occurs in the middle of green space which is part of a large residential development. At Vojkova is the only original unrenovated military bunker from the occupation. The Path continues into open agricultural land, across Vojkova, to the east, in another segment of “88 trees”, again taking on the characteristic configuration of the Path, with a gravel surface.
Map M12 / Section H6: open agricultural land with landscape and mountain views, leading through Žale cemetery.
This section of the Path offers magnificent views of the landscape, then passing through the center of the cemetery. Note the mounded memorial Gramozna Jama, signifying the site of a mass execution, as well as the portal sculpture of elevated trees.
Zale cemetery, with views of one section of burial ground in the distance, the crematorium and the Path exiting to the east; a memorial stone stands near the eastern fence of the cemetery.
Map M13 / Section I6: mixed use residential/commercial, passing through a mid-rise apartment complex. The Path follows the general configuration of the ring highway in this segment.
This segment passes through a residential area, terminating with Km 14 at Šmartinska, a wide boulevard that passes near the BTC shopping center.
Map M13 / Section J7: passing behind the BTC shopping center, the Path continues southeast through a nondescript stretch and then east, following the highway and crossing Stajerska, at the beginning of a long straight section, the distinguishing and well landscaped feature of this segment.
The perfectly straight section of the Path continuing east from the crossing at Štajerska is one of the most beautiful sections, passing parallel to the highway but completely shielded from it by virtue of a level change (the Path descends here), and then adjacent to a large army base around Km 16.
Map M22 / Section K7: in this section, in the far northeast quadrant, the Path continues its straight course past the army base, which is shown clearly in this aerial photo, after which it turns south and passes through a featureless landscape near the highway that is entirely devoid of trees, finally crossing over the highway, temporarily outside the Ljubljana city limits.
The Path completely changes its character in this section, changing from a lush straight 2-km-long segment into a totally unlandscaped section that relates directly to the highway, crossing outside its boundary.
Map M22 / Section K8: this section meanders south, staying entirely outside (i.e. east) of the highway, passing through a residential/commercial area.

Graffiti below one of the highway overpasses and the transition into a residential neighborhood.
A unique segment of the Path in passing through a village environment, detached from the city and outside the ring highway. Despite a section of "88 trees", the Path is not easy to follow in this part due to a lack of clear signage.
Map M22 / Section K9: as the Path continues southward parallel to the cable stay bridge over the highway, it crosses back under the bridge to the west and continues across a large open meadow, finally turning south again through a small residential area and through agricultural land (left side of photo).

Mysteriously, the Path comes to an opening in a wall and descends into a secluded green section.
In one of its most interesting stretches, the Path approaches the side of the highway bridge, then descends to cross beneath it along the river at Km 19, after which it emerges into a beautiful meadow on the other side.
By the time the Path has reached Km 20, it has regained its more typical features and landscaping.
In the final leg of this long and complex section, the Path heads towards Fužine Castle and onward across a bridge over the Ljublanica River, which it has followed partly in this segment, to meadow land, with a view of Golovec Hill in the distance.
Map M30 / Section J10: from south of Fužine across agricultural land to the foot of Golovec Hill, where the Path starts a rather steep ascent into the forest.
Map M30 / Section J11: the Path ascends to the summit of Golovec and follows a ridge towards the southwest.
Map M29 / Section I11: continuing due west, the Path continues to follow the ridge of Golovec and then begins to descend at Km 24 into a small ravine.
Map M29 / Section H11: the Path continues to descend around a tight curve at Km 25 to a major intersection at Dolenjska, leaving behind its traversal of Golovec and the forest to retake its more typical urban character.
This long section takes the Path through residential areas and open green space past Km 26.
Map M28 / Section G11: here the Path moves from a residential into open agricultural land and into a very scenic section.

Partial reconstruction of the foundation of a military bunker, here used as a large planter. Note also the beginning of another section of “88 trees in memory of comrade Tito”.
The section near Km 27 is very picturesque, due to the character of birch trees, the iconic wooden bridge over a small stream, another reconstructed bunker foundation used as a play area, and magnificent views.
Continuing through agricultural land to a small settlement of houses and another stretch of "88 trees".
Map M28 / Section F11: from agricultural land along the Ljubljanica River, the Path then makes a detour to cross the bridge at Hladnikova, after which it resumes a southwest direction through a residential area to the large intersection at Barjanska, at the easternmost end of the Murgle settlement.
This long section comprises characteristic sections of the Path, interrupted by the bridge at Hladnikova, which offers excellent views of the Ljubljanica in a very idyllic setting, especially given that this is within the city and yet has a decidedly rural feel.
Major intersection of the Path at Barjanska, where it is necessary to cross the boulevard to the beginning of a long section that passes west through the housing development of Murgle.
Map M27 / Section E11: traversal through the residential settlement of Murgle, terminating in the west in an industrial area (left).
Map M26 / Section D10-11: from Murgle through an industrial area that includes several factories and the main Ljubljana post office, continuing under a highway off-ramp overpass.
Map M26 / Section C10: the "end" of the Path, just past Km 32, and thus a return to the starting point at Tržaška.
APPENDIX 3

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Steve Diskin was awarded a BA, magna cum laude, in Visual Studies (Architectural Sciences) in 1970, and a Masters in Architecture in 1974 from Harvard University. He joined Kenzo Tange + URTEC in Tokyo, where he participated in many international architectural projects. His career expanded into industrial design with the production of his HELIX clock by Kirsch-Hamilton Associates in Cambridge, MA (now in the permanent collection of the National Design Museum at the Cooper-Hewitt in New York), which uses the rotational and linear characteristics of the helix for a dramatic departure in time-telling. This led to the establishment of his design and manufacturing company, Tik-Tek Engineering, in Los Angeles. He was invited into the Kovacs Design Group in New York in 1982, and his lamp series “Parallels” was later produced by Kovacs Lighting.

Steve Diskin was Executive Vice President of MEGA/ERG, a small, select team of designers of office furniture and accessories. He directed the efforts of the group in the design and prototyping of more than 25 projects, large and small, in the area of office furniture and accessory devices. In 1988 he authored the Microsystem modular furniture and space enclosure system. Mr. Diskin was featured in the New York Times in 1983, in the Los Angeles Times in 1985, and again with MEGA/ERG in 1988.

In addition to his professional work, from 1989 to 2002, Steve Diskin was a professor in Advanced Product Design and Environmental Design, as well as founder and co-coordinator of the Masters Program in Industrial Design from 1998-2002, at Art Center College of Design in Pasadena, CA, where he was voted “Great Teacher” thirteen times. His work at Art Center has been the subject of articles in the Los Angeles Times, Los Angeles Business Journal, Progressive Architecture and Popular Science. He has previously been on the faculty of Harvard University in the summer Professional Development Program (1995-2001) and has lectured at the Academy of Fine Arts in Warsaw, Istanbul Technical University, Acer Computer in Taiwan, Institute for Industrial Design in Oslo, LEGO in Denmark, New Balance in Massachusetts, IMD International in Lausanne and HFKZ in Zurich, as well as other universities and academies of design in Europe.

Steve Diskin is co-author of Los Angeles at 25 MPH, a photographic excursion through LA’s residential architecture. He also studied towards an advanced degree in film at Art Center, concentrating on digital video and documentary. His multi-media videos “Africa on My Mind”, “Four Friends: How Designers Think They Work” and “For Forty Years I Have Tried to Understand the Moon” won critical acclaim at the Industrial Designers Society Conferences in Detroit, 1994, Santa Fe, 1995, and Orlando, 1996. He received an Art Center Digital Artist Grant in 2000.

Steve Diskin was Visiting Professor at the Academy of Art, Architecture and Design (VSUP) in Prague for the 2004/2005 academic year. Prior to that, he held a similar visiting position for two years at the University of Ljubljana, Slovenia, in the Academy of Fine Art and Design (ALU) and was simultaneously guest professor in the Department of Textiles, Faculty of Natural Sciences and Engineering, for the spring semester 2003.

Steve recently contributed articles to several Slovenia publications: Ambient (interior design), Adria Airways In-Flight Magazine, and the Saturday Supplement of the daily newspaper Dolo. His recent publications include Strune od Zemlje do Lune (What a Totally Crazy Orchestral!), a book about musical instruments for children, of which he was author/illustrator, published in 2004 by Vale/Novak in Ljubljana, and A Few Small Details, an edition of essays on design, published privately in Ljubljana in 2005.