Resilience in an Urban Social Space: A Case Study of Wenceslas Square

THESIS

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By

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Abstract

Eastern Europe experienced a significant disruption of economic and political systems as communism collapsed in late 1989. This thesis examines how these rapid political and economic changes were manifested socially in public places, in their use, meaning and perception, and how these changes encourage or diminish resilience in an urban social space. The thesis also addresses an issue made particularly salient during the economic and political disruption seen globally since 2008: how design can influence the resilience of a social space.

The subject of this case study is Wenceslas Square in Prague, Czech Republic, a space in the center of the city with an important history and meaning for the nation. It is also a place where the rapid inflow of Western capital can be clearly observed, and the effect of this flow on people, economics and bio-environment can be documented. The changing relationships in the square are examined within the context of the political and economic events that produced these new spaces. The thesis focuses on the social changes that have occurred, while recognizing related economic and environmental changes in the square. The 2005 design proposal for the square is reviewed; field observation, residents’ perceptions and contemporary theories of urban space, place, sustainability and resilience will inform the assessment of the social resilience of the square. At the thesis’ core is an interrogation of the effect of disruption on the form, use and perception of public spaces; the principles of resilience and their application in the analysis and design of urban social space are discussed.

Using Wenceslas Square as the subject, this thesis articulates the insights that may be gained by examining the issues arising in urban social spaces as a response to disruption. Western notions of sustainable design have diffused slowly eastward during the past 20 years; Prague is an example of a city where the appeal of seemingly unlimited investment from the West eclipsed the need for more comprehensive consideration of the longer term resilience of that investment. Cities farther east in the
former Soviet bloc, the next frontier for Western investment, may be in a better position to balance the seduction of cash with the sanity of the need for social resilience. Cities in the United States subject to the disruptive effect of the housing crisis are presented the opportunity to incorporate new public spaces into the urban fabric. These cities may learn from Prague’s missed opportunities to create a diverse, resilient city with the first wave of foreign investment. This thesis highlights those lessons, and considers how changing attitudes towards social, economic and bio-environmental concerns may be considered in design of new public spaces.
Dedication

This document is dedicated to my family, my Prague ex-pat family and to Svenmark for encouraging me to live abroad.
Acknowledgments

I would like to thank my committee for their feedback and guidance throughout the writing of this thesis.
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Hypothesis

Disruption changes the form, use and perception of public spaces. A clear example of disruption witnessed in the last 20 years has been the abrupt change in economic and governance systems in Eastern Europe, a disruption that occurred just as issues of sustainability were being raised and codified in the United Nations’ Agenda 21 plan released in 1992. Have the recently disrupted cities of Eastern Europe benefitted from the contemporary discussion of resilience and incorporated these principles in the emerging capitalist public spaces? What barriers to their adoption existed?

Prague’s Wenceslas Square serves as the case study within which to examine the changes in urban social spaces subsequent to the political and economic upheaval of 1989. A comprehensive assessment of the changes to the social system and recognition of the interconnection with economic and environmental systems within the space guide the analysis and discussion of change in Wenceslas Square. Gunderson and Holling and Walker and Salt’s writings on resilience and resilience thinking shaped a framework for assessing resilience potential in Prague. As part of the analysis of social changes, the thesis will define a connection between current observations and contemporary theories of urban space and place and examine the emerging relationships between residents, tourists and to a lesser extent, the sex and drug trades in the square. The changing perception and use of this place is examined through the works of Massey, which are rooted in Lefebvre’s foundational work linking the production of space to the social actions that occur within, yet are more open-ended and optimistic. When paired with the writings of Hoffman and Musil and Simpson’s research into tourism in Prague, a framework for understanding and analyzing the social shifts in the square is defined. Interviews with residents of the city and a survey of visitors to the city provide insight into the attitudes of these two important social groups within the square; their views are discussed within the framework of creating resilience in an urban social space. The latest plans for the square, approved by Prague in 2005, are reviewed and critiqued on their potential to contribute to development of a more resilient city.
The changing nature of Wenceslas Square highlights a number of missed opportunities to establish a resilient space, able to respond to a level of disruption and return to its earlier form and function. The lessons of Wenceslas Square can serve to inform design decisions in emerging Eastern European cities, with the intent of creating urban social spaces that can meet the social needs, as well as economic and environmental needs of their residents and visitors in the face of future disruption.
Literature of Urban Spaces and Resilience

As the years pass since the transformation of Eastern Europe politically and economically, the body of literature describing the region’s urban form and function increases. Many authors approach the topic from a planning perspective, assessing the change in urban morphology, especially at the edges of the city. Other authors account for changes in social patterns, the shifting of the classes in the post-socialist world. Still other authors discuss a range of topics from the view of a geographer, from the revolutionary meaning of Wenceslas Square, to the impact of shopping malls and tourism, to changing structures and signals of power in these rapidly changing cities. However, none of these authors studies Wenceslas Square to understand the shifting uses and spaces within, how the segregation of spaces may be more pronounced than in the past, the implications for resilience of a city and how design can contribute to more resilient urban spaces. My thesis will answer discuss these issues as well as investigating potential design interventions in Wenceslas Square.

Urban Form and Urban Places

Theories of the genesis of urban form abound and several authors provide valuable foundational material on city form. The historical context, discussed by Kostof, provides insight into the historical precedents for the socialist city.¹ The socialist “Cities of the People” were in many ways similar to capitalist cities such as Haussmann’s Paris. Both were designed in the “Grand Manner” as Kostof terms it, and depended on the existence of an authoritarian regime or centralized power to execute even moderate insertions of grand city form. The disruptive, destructive outcome of World War II allowed for insertion of, neo-Baroque plans generated from socialist principles into the cities of Eastern Europe. Soviet era planners built long, broad boulevards suitable for

orchestrated public demonstrations that framed monumental buildings at their terminus. Perhaps most important for the planners of Eastern Europe in the 1950s, similar to Napoleon III in the 1850s, was the recasting of history that could be achieved by removing the monuments to past regimes and replacing them with the messages of the new regime.

However, wholesale change of a city center to support a Soviet-principled aesthetic required an expanse of vacant land. Although the Soviet city plan could be applied in cities such as Warsaw and Berlin where the core of the city was in ruins, Prague was relatively untouched by World War II; the pre-socialist city form remained in place, especially in the city core. The manifestation of 1950s socialism was less in form and more in the function of the spaces. With the rapid adoption of a laissez-faire capitalism in the 1990s, function of space again became the manifestation of change. Carmona addresses this dynamic of the fluidity of land use over time as part of a discussion of urban morphology in general. The temporary and moveable nature of function is a central element to the evaluation of change in Wenceslas Square. The functions of spaces within Wenceslas Square have changed as investment has occurred. New functions have been introduced. Some functions have moved to other spaces within the square, some uses have moved off the square entirely.

Jan Gehl looks at the functioning of spaces within the city, drawing examples from European cities. He focuses on the how the physical setting affects the types of activities that occur in a space. Gehl’s discussion of the interaction between setting and necessary, optional and social activities is helpful in understanding the activities that may occur in a certain location. According to Gehl, necessary activities, such as walking to work, will occur in a space regardless of the quality of the setting, since the participants are obligated to engage in this activity. However, physical quality plays an important role in determining where optional activities may take place. Optional activities, including walking and sitting out of doors for pleasure, occur when the physical elements

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of the setting are pleasant. Weather, physical condition, people and amenities all influence the perception of the quality of a place and affect the degree to which optional activities take place. The level and frequency of social activities, activities that rely upon interaction between people, increase with increasing quality of the setting. Since social activities are the result of people spending more time out of doors and having more opportunity to interact, the frequency of interaction jumps dramatically with improvement in setting. This model, when considering the product as the perception of the quality of a public space, is instructive in understanding the types of activities that take place in Wenceslas Square and between which groups of people. In his book *Life Between Buildings*, Gehl uses these principles in defining good urban form.

Kevin Lynch’s *Good City Form* provides a useful review and critique of theories of cities, defining a framework within which to evaluate elements of successful cities. Particularly relevant to this thesis is Lynch’s discussion of sense, form and perception. The “identity” of a given public place in Prague changes as disruption in political and economic system unfolds. As Lynch states, society changes, then the environment changes; change in environment does not drive a change in society. The main squares in Prague illustrate this point. Wenceslas Square was among the first areas that illustrated that a new regime was in place through change in the functions of the spaces within its boundaries.

**Social Space Theorists**

In addition to the empirical view brought to the analysis of city formation by authors such as Lynch and Kostof, a number of spatial theorists contribute to a fundamental understanding of cities, their formation, forms and changes. The more contemporary of these views will be important in forming the theoretical foundation for understanding the changes in public spaces in Prague. Core in this understanding of space is the work of Henri Lefebvre, especially as his work was a turning point in a discussion of space and its production. Lefebvre articulated that the social does not merely exist in space, but rather the social is part and parcel of the production of space; this position is central to the discussion in my study. David Harvey’s and Neil Smith’s works are outside the

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scope of consideration in this thesis; however, they are instructive as a discussion of the flows of capital and their implications on the form and the function of cities. Smith also delves into a discussion of the “production of nature” considering both human and non-human processes as an extrapolation of Lefebvre’s theories on social production of space.

However, Doreen Massey has what I consider to be a more comprehensive and complex discussion of multiplicities in space, considering not only the actors in a space, but larger actors on a space. It is this idea of complex interactions and their relative effects on one another, or spatiality, which is especially relevant for the rapidly evolving perception and use of public space in a city such as Prague.

At the foundation of a contemporary understanding of space is the concept that space is not a void waiting to be filled, but space is produced through the social interactions within it. As Henri Lefebvre states in *Production of Space*, “(social) space is a (social) product.” In this work, Lefebvre defines his trialectic of space: perceived space, conceived space and lived space. These reflect the spaces each of us perceive as we live our daily lives, which Lefebvre also refers to as *spatial practice*; the spaces conceived through quantification and description, or *spaces of representation*; and the spaces of experience described through signs and symbols and through art and literature, referred to as *representational spaces*. Lefebvre argues that these spaces are in place in each society, and their balance is determined by the prevailing mode of production. The balance tips toward spaces of representation in capitalist societies, where quantification, value determination, and commodification are primary activities of the system. In his mind, it is the representational space that brings richness to humanity.

Lefebvre also defines a history of space, effectively an arc of changing nature of space that parallels the Marxist history of class struggle. Absolute space, historical space,

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abstract space and differential space comprise the phases of the history of space. These four spaces are distinct, but not completely mutually exclusive. Absolute space is the space of nature and religion; it is a space where the forces of production and reproduction reside in the individual. Historical space occurs as the segregation of those who produce and those who manage space emerges. Accumulation of wealth and resources in the hands of managers occurs, and the segregation of labor from production becomes complete, leading to abstraction of labor and to abstract space. Abstract space is a space where differences are ground down, leading to interchangeability and mobility. However, abstract space, which Lefebvre most closely associates capitalism, is inherently unstable. According to Lefebvre, differences will begin again to emerge and lead to differential space, which by my reading is the terminal point in Lefebvre’s history of space. A critique of Lefebvre’s writings arises from a perception that the arc of history of space he describes leads inexorably from absolute space to differential space. Many authors understand space to be more complex than Lefebvre would imply. In addition, distilling the factors that shape space down to a class struggle defines the issue in a binary, which is also problematic. Although Lefebvre alludes to a shifting in balance of his trialectic of space through history, perhaps others describe the level of complexity and interaction embodied in space more fully.

Deleuze and Guattari express the concept of the “rhizome” in *A Thousand Plateaus* and their discussion of the characteristics of a rhizome are represented in the writings of a number of contemporary urban spatial theorists. Whether networks, multiplicities or generations of new spatial relationships from old, Deleuze and Guattari’s rhizome helps reflect the complexity and interrelatedness of social and spatial interactions today. They reject an arboreal model as overly simplistic. A branching, tree-like model, predicated upon a set of binary decisions or situations, seems similar to the Marxist view of the forces producing space. This over-simplicity of the binary is the reason that the more complex, rhizomatic urban spatial theories form the basis for analysis in this thesis.

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Amin describes a “juxtaposition” of politics across scales that form the basis for a view of spatial relations. In his view, Amin maintains that global movement of people and information renders earlier frameworks of territory or scale inadequate to describe the complexity of sociospatial relationships. Jessop disagrees. In “Theorizing Sociospatial Relations,” Jessop maintains that territories, scales, places and networks are intertwined and all are essential for understanding spatial relationships. In his view, using any one of these elements alone is one-dimensional. However, Jessop’s intertwining of these four perspectives is unnecessary; the complexity he tries to accommodate is already captured within the concept of a rhizome, or network.

Massey’s writings describe spaces shaped by the interplay of time, politics, and people, and the potential for multiple outcomes. Helpful in understanding the shifting groups and uses on Wenceslas Square is Massey’s position that public places are “…a product of, and internally dislocated by, heterogeneous and sometimes conflicting social identities/relations.” Equally valuable is the concept that space is not closed or finished or fixed; the potential of space is its richness. Massey’s discussion of trajectories are important in this context, space is of the moment, where and when multiple individual trajectories collide. Massey also emphasizes that it is the conflict arising out of these different trajectories that provides the essential element defining public space. In her words, “the very fact that they are necessarily negotiated, sometimes riven with antagonism, always contoured through the playing out of unequal social relations, is what renders them genuinely public.” She is clear that the conflict defines public space, and that “‘negotiation’ stands for the range of means through which accommodation, anyway always provisional, may be reached or not.” Not all actors may be part of the resulting public space, and while some of the richness of the space may be lost, it is no less a public space. For designers, understanding the means and

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the reasons for the inclusion and exclusion of populations in a space is essential as we begin to design more resilient public spaces.

The language and the conclusion of Marxist theorists such as Lefebvre, Smith and Harvey remain those of revolution and replacement of capitalism. It is somewhat ironic to consider these theories and conclusions in the context of a space in a country where communism was the subject of revolution and replacement. Soja’s approach provides a valuable perspective:

“I seek instead new and different opportunities to engage in social action and spatial praxis that is not aimed exclusively at transforming capitalism into socialism *tout court* but at maximizing the possibilities for a flexible and democratic socialism within existing capitalist societies.”

This statement conveys the objective of the final section of my thesis, to provide a set of observations and recommendations that can shape development in other cities experiencing disruption.

**Socialist Cities**

Urban planners and geographers dominate the literature regarding the form of the socialist and post-socialist city. Most authors writing about socialist cities have focused on the manifestation of political and economic policy on Eastern European city form. Musil (2006) describes not only the post-socialist changes in the urban form of Prague, but discusses the series of economic, social and governmental transformations in the last century, which preceded this most recent upheaval. Harloe (1996) highlights the policies of state socialism that framed development and resource allocations in Eastern European cities post WWI: state control of production, collectivized consumption and centralized planning; state control of economic, political and social life; and the homogenization of social classes. While the Soviet socialist states were able to

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implement many of these policies effectively, changing social class structure was more challenging, although in Prague class leveling was more pronounced than in Western capital cities.\textsuperscript{16}

A number of authors have described the socialist city development between the end of WWII and the 1980s, both at the time and retrospectively. Hamilton and French discussed the factors influencing the spatial form of the Eastern European socialist city.\textsuperscript{17} They noted that the degree to which an existing old “capitalist” city remained influenced the extent to which socialist principles were incorporated into the city form. Carter looked at the spatial form of Prague more directly, comparing it to the more highly “Stalinized” city of Sofia in Bulgaria, commenting upon the architectural styles and recreational areas in the cities.\textsuperscript{18} Carter found that in contrast to some of the objectives of socialist planning and other socialist cities, Prague had very little open green space, about 12 percent of city area, and that attempts to green the city had failed.

Another significant body of work generated from a planning perspective addresses the transformation of the economic system post-socialism and the potential effects on the “socialist city”. Szelényi describes the structural changes that occurred in the dismantling of the socialist system: private entrepreneurs rose in power, multi-party government was put in place, and a new social class structure appeared.\textsuperscript{19} Stanilov discusses the effect of these structural changes in post-socialist cities from the vantage point of a fifteen year retrospective, noting some of the negative impacts, including a decline in living standards, loss of open space, and increased air and noise pollution.\textsuperscript{20}

Tsenková describes the geographic shift in functions of the city. New residential development is shifting to the periphery, as is select industrial and commercial development. The center of the city is being gentrified, and the service economy begins to dominate the central core as well.

Other authors have looked at the changing character of the Eastern European city and how that change affects residents. Andrusz and Allen both examine the effect of inflow of capital as seen in the city’s changing architectural styles and the meaning of the spaces created. The gleaming glass tower at Potsdamer Platz in Berlin not only demonstrates outwardly the power of money in the new post-socialist city, but the internal spaces shape experiences that reflect a new openness and transparency on a social level as well. Pusca discusses how residents register the ongoing change in their cities through an evolving understanding of the aesthetics of the spaces around them. Pusca postulates that temporary structures, such as kiosks, advertising and informal markets, provide an important indication of the fundamental change occurring in society, even while the majority of the built environment remains the same.

A number of authors focus on the changes in Prague specifically. Musil describes how the social, political and economic changes have affected the spatial form of the city. Deregulations of rents, increased investment in commercial enterprises and tourism have changed the character of the city and its public spaces. This is played out in the changing commercial face of Wenceslas Square. There is a Prague of tourists and business, and a Prague for the locals. Sýkora notes the conflict between the objectives of commercial developers and those interested in preserving the cultural heritage of the

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Prague has allowed a fair amount of latitude to developers. Sýkora, Temelová, and Spilková and Šefrna have all described the influence of commercial development in their work. Sýkora emphasizes the effect on the core of the city, Temelová describes the impact of a flagship retail development on the character of a former industrial area of the city, and Spilková and Šefrna discuss the larger impact of the repurposing of fertile agricultural land to sites for major hypermarkets. All three authors emphasize the significant shifts occurring in land use throughout the city. In addition, Spilková’s work in process looks at the emergence of new public and commercial spaces in Prague and their relationship to global trends and local needs. One such example is the recent emergence of Saturday organic farmers’ markets established by the city, which are located in underutilized spaces and catering to the interests of upper middle class Czechs.

The post-Wall development of Potsdamer Platz in Berlin serves as a counterpoint to Wenceslas Square. The German government had an opportunity to re-make an image for the country in this vacant vestige of the Cold War. The redevelopment in Potsdamer Platz and throughout Berlin during the 1990s has been widely reviewed. Marcuse comments on the drivers behind the rebuilding in Berlin: image and power. He maintains that the building of government sector, the Regierungsviertel or “ruling quarter,” is as much a demonstration of the political power of a renewed Germany as Potsdamer Platz is a signal of the economic power of the country. Flierl discusses the arc of architectural styles in Berlin since 1945. He criticizes the redevelopment of Berlin as backward looking to a time before the division of Germany, rather than a post-division statement. By reinstating Potsdamer Platz as a hub of the city, the government

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29 Spilková, J. (2010). *Interview, September 17, 2010*
is attempting to return to the past rather than redefining a new forward-looking Berlin that
“resolves the contradictions of German history.” Flierl and Marcuse reflect that the
rebuilding of Berlin misses an opportunity to create a City for People, one that is not
driven by a profit motive but by the interests of the population. An ideal outcome
perhaps, but a more revolutionary outcome than the Germany of the 1990s was able or
willing to adopt.

In addition to the critique of the drivers behind redevelopment, the architecture of the
new Potsdamer Platz and surrounding area has been the subject of criticism as well.
Several authors describe the convoluted competition and replacement of the first choice
with a collection of iconic buildings designed by feature architects. Keating and Milfull
engage in a point/counterpoint debate of the need to redevelop Berlin at all.\textsuperscript{32}  \textsuperscript{33} Keating
maintained that the warnings embedded in the history of Berlin should not be plastered
over by new buildings throughout the city; Milfull counters that the better use is in
rebuilding and allowing the city to move on. This level of debate is absent in Prague.

Tourism and the City

Fiona Simpson has authored an investigation into resident perception of the changing
level of tourism in the city that can inform the discussion of Wenceslas Square.\textsuperscript{34} Her
research, which was focused on the Old Town in Prague, delved into the differences in
perception of the city between residents and tourists, highlighting differences in sense of
place and identity. Simpson also notes the changing land use and levels of
development in the historic core of the city and discusses the residents’ concerns
regarding the longer term livability of the area. Simpson’s research has a number of
important observations made in the Old Town that may be extended to Wenceslas
Square and potentially addressed within the set of recommendations delivered in this
thesis.

Affairs}, 9(1), 78-84.


\textsuperscript{34} Simpson, F. (1999). Tourist impact in the historic centre of Prague: Resident and visitor perceptions of the
While Simpson emphasizes the alienation of the residents from their city and the arriving tourist, Hoffman and Musil examined the benefits of tourism in easing Prague’s transition from an industrial to a service economy.\textsuperscript{35} They emphasize a positive role that tourism played in Prague during a critical time during the 1990s, when, Hoffman and Musil maintain, the levels of unemployment and social unrest might have been much higher without the moderating influence of the emerging tourist economy. They argue that during the socialist years when the country was effectively closed to tourists the cultural assets of the city were underutilized, and it was only with the influx of tourists that the value of these assets could be realized and exploited for the benefit of the city. However, the view presented is not completely rosy. In addition to discussing the benefit of tourism to date, the authors describe what could be considered the longer lasting dangers of relying upon a tourism service economy. Hoffman and Musil argue that the skills required in a tourist service economy are not those that support the next wave of economic development, risking future economic growth in the city.

Complementing the quantitative work on Prague, MacCannell provides a conceptual framework to understand tourists and their interests.\textsuperscript{36} Tourists travel for a number of reasons and given that tourism will remain a major economic driver for Prague, it is important to consider tourists’ experiences and motivations. MacCannell’s writing highlights not only the reasons behind tourism, but raises cautions as well. In his opinion, there is considerable risk that historical sites devolve into sentimental markers of the past. This enshrining of the past is certainly possible in parts of Eastern Europe.

Sustainable Cities, Resilient Cities?

The topic of sustainability entered the discussion of cities and urban development in 1987, with the publication of the report from the World Commission on Environment and Development, the Brundtland Commission. The Commission’s statement that sustainable development “implies meeting the needs of the present without compromising the ability of future generations to meet their own needs” has been


adopted widely. The Brundtland Commission’s report emphasized the balance between and presence of a triad of conditions for sustainable development: protection of the environment, economic growth and social justice. In 1992, the United Nations Conference on Environment and Development, the Earth Summit, reinforced the position of the Brundtland report and created another document defining a direction for sustainable development and outlining twenty-seven supporting principles. This document, Agenda 21, which is also known as the Rio Declaration, encouraged countries and cities to apply these principles to guide local development. In 1993 following the meeting in Rio, the European Union adopted the Fifth Environmental Action Programme “Toward Sustainability.” This document reinforced the need for comprehensive action to further sustainable development. Additional resolutions followed, including the Charter of European Cities and Towns (The Aalborg Charter) in 1994, which defined a set of actions municipalities should take to gain alignment with the principles of Agenda 21. Although governments have reinforced the breadth of the definition of sustainable development, which includes environmental, economic and social sustainability, the popular literature focuses primarily on the green element of sustainability, often to the exclusion of economic and social considerations.

Beatley and co-authors have written extensively on sustainability. One of the early discussions of sustainability by Beatley and Manning in The Ecology of Place focuses heavily on the importance of protecting the environment, whether through environmentally responsible economic growth, conservation-based urban development or providing urban settings that encourage a participative community. This early interpretation of sustainability as environmental consciousness established a limited popular understanding of the issue. Discussions of carrying capacity and living within an ecological footprint oversimplify the concept of sustainability. While the environmental consciousness of the 1990s implicitly comprehends the systemic essence of a healthy environment, it is the same ground covered in 1962 by Rachel Carson with the idea of

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the “web of life,” or ecology, that she introduced in *Silent Spring*.\(^{40}\) In *Green Urbanism*, Beatley again focuses on the environmental aspects of sustainability, with a comprehensive review of the steps European cities have taken to reduce urban impact on the environment.\(^{41}\) The strategies highlighted represent a collection of best practices in transportation, local greening initiatives and dense housing development. These strategies are necessary, but not sufficient, for sustainable urban development.

Some authors look at resilience as a quality to be built in to a system in advance to allow for a given disruption. Newman, Beatley and Boyer interpret resilience as a city or region’s ability to decrease reliance on oil, proposing steps to shift to renewable fuel sources.\(^{42}\) Their approach is more in the area of making preparations to increase resilience rather than creating a resilient city in total. The authors’ emphasis is on transforming our approach to energy production and consumption. Their proposed actions provide a greater degree of resilience in the event of an oil price shock, or man’s tie to global warming is acknowledged. Newman, Beatley and Boyer’s focus on building resilience in energy is important although one dimensional; a city’s social and economic resilience is also important in ensuring the ability of a city to continue to function in the face of disruption.

Another set of writers focuses on the intersection of natural systems and the city. While not writing strictly about sustainability, in *The Granite Garden* (1984) Spirn expands the definition of “urban nature” from the highly managed urban park to a more comprehensive understanding of where one may find the influence of natural processes in urban areas.\(^{43}\) One of Spirn’s contributions to the discussion of sustainability is her observations regarding organization of cities derived from natural features that work in harmony with their environment. Or, in the case of Boston, those cities that overwhelm natural processes and suffer the consequences of stagnant, unhealthy rivers and poorly functioning natural areas. Michael Hough also discusses the role of natural processes

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within the city. In *Cities and Natural Processes: A Basis for Sustainability*, Hough advocates an understanding of the natural processes in cities in order to design urban areas that contribute to, rather than detract from, environmental health.\(^4\)**

In contrast to Hough’s and Spiri’s encouragement of a less homocentric view of the city, Neil Smith emphasizes the need to consider human and non-human roles in the production of urban space; one of his criticisms of Lefebvre’s work is that it is silent on the non-human side of spatial creation.\(^5\)** The editors of *In the Nature of Cities*, Hyenan, Kaika and Swyngedouw, highlight the interconnectedness of the social and the environment and the inherent naturalness of the city.\(^6\)** They also maintain that the means of production of an urban natural environment lies in the hands of the elite, often to the detriment of marginalized populations. This observation is overlooked when the issue of social justice falls from the popular discussion of urban sustainability. However, in areas undergoing disruptive change such as Eastern Europe, considering the needs of the both the mainstream and marginalized populations remain important as urban development proceeds.

Within the last five years, the term “resilient cities” has entered the sustainability lexicon. The emphasis shifts to a city that can “absorb disturbance and still retain its basic function and structure.”\(^7\)** A criticism of sustainability is that it optimizes for current conditions, rather than recognizing that conditions change, sometimes abruptly. Advocates of resilience thinking encourage recognition of the inevitability of change and the ability of the (urban) system to recover from disturbance. According to Walker and Salt in *Resilience Thinking*, the adaptive cycle is core to understanding not only how ecological systems respond to disruption, but how social systems respond as well. They emphasize that the release and reorganization phases of the adaptive cycle are

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essential for the genesis of creative change. The degree to which a system responds with novel solutions to disruption is a measure of resilience.

A more complete discussion of the adaptive cycle is found in the foundational collection of essays edited by Gunderson and Holling in *Panarchy*. Balancing potential and connectedness is at the core of the adaptive cycle. The adaptive cycle emerges out of a study of eco-systems and the language describing the four phases of the cycle reflects that heritage. The adaptive cycle consists of a growth (r) phase, an accumulation or conservation (K) phase, a collapse (Ω) phase and then a reorganization (α) phase. It is important to note that the adaptive cycle has broad applicability to a number of systems, including ecological, economic and social systems. It also operates at a number of scales and the cycles at these different scales are connected, thus the term “panarchy”. As an example, the adaptive cycle applies to the systems present in a forest at the needle, crown, patch, stand, forest and landscape. The adaptive cycle, growth, accumulation, collapse and renewal, for the needle may occur on an annual basis; the adaptive cycle for a landscape may be on the order of thousands of years. A disruption at a lower, faster level can disrupt the larger slower cycles; however, the accumulated potential of a slower system may serve to organize and facilitate the reorganization of the faster systems. These scales are present in social systems as well; the cycle operates at an individual level, and with increasing numbers of people affected, at the levels of policies, laws, governments and cultures. Although this thesis will focus on changes happening at the individual and group level, it is important to realize that these systems are part of a larger collection of systems.

Newman, Beatley and Boyer have adapted resilience thinking to address how cities should prepare for the next oil crisis in their book *Resilient Cities: Responding to Peak Oil and Climate Change*. Striking an apocalyptic note in their call for action, the authors focus on steps towards a resilient city that insulates itself from energy disruption. To the extent that the authors refer to these steps as the means to create a resilient city,

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they imply that there is but one potential means to disturb the urban function. A more comprehensive understanding of cities’ responses to disruption is necessary. During the last 25 years we have observed economic and political disturbance in Eastern Europe and political disturbance on a global basis; oil availability is important, but perhaps not the most pressing issue today.

Disaster and the Resilient City

In their book, *The Resilient City: How Modern Cities Recover from Disaster*, Vale and Campanella describe the variety of means by which cities responded to natural and man-made disasters, with a focus on political and government responses. Although noting that a city’s resilience to disaster cannot be fit neatly to a mathematical model, they present the results of a systematic study of recovery that has parallels to the adaptive cycle. The model is comprised of four stages: emergency responses, restoration of the restorable, reconstruction of the destroyed for functional replacement and (re)construction for commemoration, each stage taking ten times as long as the previous stage. Following the disaster, or release, these four stages of recovery roughly approximate the reorganization, growth and conservation stages of the adaptive cycle. The importance in this comparison is that Vale and Campanella focus almost exclusively on the social resilience of the city. The similarity to the stages of the adaptive cycle affirms its appropriateness as a framework for discussing resilience in the city.

As valuable as the corroboration of the social applicability of the adaptive cycle are the common themes that Vale and Campanella noted across the spectrum of resilient cities. Rather than based on observation of an eco-system, these themes arise from their observation of the social and political systems in cities recovering from disruption. These themes emphasize the political power and necessity of demonstrating resilience through the symbolism of rebuilding, in the narrative of recovery and in the unification through remembrance. The narrative can cast a hardship as an opportunity for a new future. Rebuilding can convey a sense of heroism, while providing a distraction from the existing

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situation. Remembrance plays an increasing role in disaster response; the conflict over what and how to remember can involve a broad swatch of a city’s residents. Government plays an important role in ensuring that the process of change and recovery is visible to the residents; failure to do so puts the political powers in peril. Pusca emphasized the importance of similar visual symbols of change in post-socialist cities such as Prague and Tirana; the small, perhaps temporary, but rapid visibility of a change from the previous condition in the city affect the experience of social change. The symbol and narrative of change is as important as real change to the residents of the city.

The Public, the Private and Resilience

Much as Vale and Campanella identify the social and political characteristics of a resilient city and emphasize an active role of government in disaster response, Lang (2009) enumerates similar issues from the perspective of urban design. Lang has studied a collection of cities to understand what makes a site or city successful, success being defined as if the visitors, users or residents find them “enjoyable” and to a lesser extent if they are market-based financial successes. Lang acknowledges that many of the cases he studied relied on the government exerting some control over the financial aspects of the development in order to fulfill a public good. Newman, Beatley and Boyer also note the role of government in establishing a vision of a resilient city, again filling a role that individuals have difficulty executing. Their ten key strategies for building a city that can absorb disruption as the supply of oil falls all rely upon a strong regulatory role for government.

While the role of government raises legitimate questions and concerns about how choices are made and who makes them in establishing a city’s future, it reflects a pragmatic assessment of drivers of change in a city. The funds and inclination to reconstruct cities may reside in the hands of developers in capitalist cities; unfortunately, expecting a fragmented group to consistently act in both public and investor interest is


difficult. While many authors, including Harvey and Marcuse among others, would hold that capitalists act only in the interest of maximizing capital and exerting direct or coercive, Ettlinger maintains that there is a difference between the discourse on capitalism and the observed, actual practice of capitalism.\textsuperscript{53} She notes that benevolence is often layered into capitalist actions, often at the scale of the individual, and often covertly. Ettlinger emphasizes that if these benevolent capitalist acts were revealed and valued, a common understanding of the positive power of capital could emerge. However, that new discourse remains an opportunity for the future. Today although benevolent acts exist and differ from the capitalist norm, their diffuse nature limits benevolence in emerging as a trend, and government, for better or worse, is the body that injects consideration of the public good into decisions on the city. Government must participate in the vision and creation of a resilient city.

Socialist Countries and Socialist Cities

Prague and Berlin: two cities that physically lie behind what was the Iron Curtain (see figure 1). As socialist cities, they demonstrated certain common characteristics; these characteristics in turn distinguished East Berlin and Prague from contemporary capitalist cities. As cities in countries bordering the West, they became showcases for the new socialist city and emblematic of the changes that were occurring in across the Soviet bloc.

As a result of the Yalta Agreement of 1945, the German Democratic Republic (GDR), Czechoslovakia and the countries from Poland to Eurasia were assigned to supervision by one of the four powers, the Soviet Union, and thus became subject to its ideologies as well.54 However, unlike many of the other Eastern European countries, both the GDR and Czechoslovakia had emerged from World War II with relatively strong industrialized economies, rather than the more common agrarian economies of the area.55 Because of their underlying industrialization, these countries experienced a less pronounced disruption as the industrially-focused socialist economic model was implemented. A focus on investment in state-owned heavy industry was the hallmark of this new socialist system; light industry, consumer goods and services were neglected. Although compared to capitalist cities, workers’ wages were lower, the state provided for the welfare needs of the workers, with generous subsidies for social services, housing and

food. Consumer goods were scarce, as a result of the priorities of the socialist government, leaving residents, at least in Czechoslovakia, the opportunity to save.

Urbanization was a core objective of the socialist society; urban living was “considered the highest form of socialist life.” By the mid-1970s, more than 75% of the population in the GDR and 65% of the Czechoslovak population lived in urban areas. These residents lived in communities organized around the workplace, where state employers provided for their needs “cradle-to-grave.” The workplace was most often a factory; the locations of factories were determined by planners based on their assessment of local or regional need, independent of profit potential. Spatial planning was not particularly relevant; it was the five year development planning that drove decisions.

The form of the Eastern European socialist city emerged in a response to the Marxist views of socialism as interpreted through a Soviet lens. Socialist ideals of removing uneven distribution of wealth and social conditions were implemented, leading to caps on urban populations, distribution of industrial sites around the city, and new housing forms at the city edge. After World War II, many cities had large swaths of the urban fabric that had been bombed, Warsaw and East Berlin being two examples. These were the cities where the principles of socialism were soon represented in the monumental architecture and parade grounds of mass spectacle in the city center. Other cities,

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60 In socialist cities in 1975, employment was dominated by industry (approximately 47%), followed by trade (11-12%), medical, social services and physical education (9%) and retailing (4.5%) from Hamilton, F. E. I. (1979). Spatial structure in East European cities. In F. E. I. Hamilton, & R. A. French (Eds.), The socialist city: Spatial structure and urban policy (pp. 195-261). New York: Wiley.
including Prague, had been relatively undamaged in the war, leaving intact a historic core and first ring of residential housing that reflected the capitalist principles of the past. Authors writing during the 1970s would refer to these areas as vestiges of capitalism; Hamilton noted that declining cities “contain … the most buildings, infrastructure, job opportunities and populations ‘bequeathed’ by the capitalist era. They exhibit most continuities with the past in appearance, land-uses, occupational structure and social behavior.”63 These residual capitalist social practices were especially unwelcome.

Historic cores of cities, where they existed after World War II, were left to decay as those emblems of the capitalist past. Fixed, low rents were relatively constant regardless of location or quality of housing, and would not cover maintenance and repair costs in these older buildings.64 The older housing stock, many once the luxurious homes of the capitalist elite, deteriorated and became housing assigned to dissidents and the elderly among others. In general, when evaluating the costs of repairing a central city residential unit versus building new in the out-skirts of the city, the new construction was far less expensive.65 The socialists turned the celebration of the industrial to residential construction. Principles of mass production and social equality led to the panelák in Czechoslovakia and similar housing throughout Eastern Europe. These large buildings provided housing in estates of 20,000 to 100,000 residents (see figure 2).66 The industry-centric, egalitarian micro-district of the housing estate provided for all the essential needs of its residents and the buildings, flats, spaces and services were all of a sameness that reaffirmed the equality of citizens that was the hallmark of Soviet socialism.

The lack of investment in the city core was not limited to building maintenance. The infrastructure was neglected as well; by the 1980s, the sewer and water supply systems had degraded. In the outer ring of the city, the new housing developments required a supply of electricity; in the Czechoslovakia, power plants burned highly polluting brown coal. The focus on industrial production and meeting targets led to inefficient use of resources and deferred maintenance on production equipment that in turn, led to unnecessary pollutant emissions.67

Under socialism, commercial enterprises were nationalized and rationalized. Family names on shops disappeared, new signs described only function: pastry shop (cukrárna), delicatessen (lahůdky), grocery (potraviny).68 In general, retail was limited in a socialist city, although a relatively higher concentration appeared in certain central areas of a city, such as Wenceslas Square, in keeping with ideological principles. The capitalist organization of a retail area, where there had been many offerings of like goods, was altered to reflect the tenets of socialism. The socialist planning model allocated specific per capita ratios of shops and services that were arranged hierarchically with in the city. By removing the retail redundancy of the capitalist system, space opened to introduce activities that were important under socialism; bookstores and publishers promoting socialist philosophies appeared in the city centers.69 In Prague, Wenceslas Square is a good example of this retail rationalization. While a diversity of goods could be found on the square, there would be one outlet for shoes, another for fashion, yet another for kitchen items. No fewer than three bookstores occupied space on the square in 1989 and were complemented by socialist publishing houses and newspapers.70 While the goods offered might have been diverse, these shops were all state outlets, a very limited diversity of ownership.

By the 1970s, the socialist economies in Eastern Europe were stagnating. The socialist model was dampening initiative and innovation at the individual and the industrial levels, and the inertia of the huge state bureaucracy led to a spiraling decline in growth and productivity. The centrally planned economy had created a system that was so tightly interconnected that it would not be able to respond to the political, economic and social disruption on the horizon. The precipitating set of moves occurred in 1987, when the USSR began to loosen control over its satellite states with Mikhail Gorbachev’s position that there was not one socialism that could be applied across the region, but that each country should determine its own style of socialism.

Socialist Cities in Transformation

In 1989, a series of revolutions swept through Eastern Europe. The centrally dictated economic system was eliminated, as were many of the Soviet elements of socialism. A social, political and economic rupture had taken place. A neoliberal form of capitalism entered parts of the region in the uncertainty and flux of the early 1990s. Rapid change occurred in some of the more open economies of Eastern Europe, such as Czechoslovakia, the GDR and Poland, where investment from the West flowed in. (footnote: FDI in the three years from 1990-93 – CZ $11.8Bn, GDR $11.6Bn, P $10 Bn. Andrusz 1996 p47.)

The collapse of the communist governments throughout Eastern Europe led to very different responses in Czechoslovakia and Germany. While one country split, the other reunited. While one country struggled to define new government structures and regulatory systems, the other country folded into existing legal and control systems of its western half. By 1993, Czechoslovakia had divided in two; Slovakia to the south would

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struggle during the next decade to establish an independent, functioning government. The Czech Republic retained most of the country’s major industries, including pharmaceutical, automobile and tram manufacturing; based on the new government’s philosophies, it was also particularly open to western investment and became attractive to international investors.\(^74\)

The new Czech government of national unity was in place by December of 1989, with the former dissident Václav Havel as president and Václav Klaus, a free-marketer, as Minister of Finance. Under Klaus’ leadership, the government rejected many of the concepts of state socialism, quickly removed many controls and privatized national industries and housing through a widely criticized voucher process.\(^75\) The privatization was considered fundamentally corrupt, with industries landing in the hands of a few investors, uncontrolled sales of restituted properties, and widespread embezzlement of small investors’ funds.\(^76\)\(^77\) The reorganization of the Czech economy was characterized as a “modern experiment in radical capitalist transformation” that resulted in an economy that was 97% state owned in 1990 converting to 80% privately owned by 1995.\(^78\) The process caused an immense disruption through all aspects of Czech society; the fast-track approach to transformation of the economy led to a deterioration of many residents’ living standards.\(^79\)

Privatization, accomplished through restitution of properties to their pre-war owners, generated changes in the cities’ appearance across the country. In Prague, many of the properties in the historic core quickly landed in private hands and Wenceslas Square


\(^{77}\) During the 1997-2000 time frame, a number of instances of embezzlement, referred to as “tunneling” at the time, occurred.


was not an exception. Unfortunately, in many cases the new owners were unable to renovate the buildings that had declined during the past 40 years and sold their properties to international investors.\textsuperscript{80} A great number of residents were displaced as new owners converted residential properties to commercial and office uses that generated greater revenue.\textsuperscript{81} Events that occurred in Prague were a microcosm of those occurring throughout the Czech Republic. Restitution occurred in all the cities and affected rural areas as well. One example is the return of rural castles and estates to the pre-war noble families of the Austro-Hungarian Empire, which governed the Czech lands until World War I. Like their counterparts who received commercial properties on Wenceslas Square, not all new owners had the resources to renovate and maintain estates that might have been converted to a senior citizen’s home or a school under socialism. After a decade, only a limited number of these properties remained in the families’ hands; some had been sold back to the government, others had been converted to successful enterprises.\textsuperscript{82} The leveling of wealth and the equalization of housing that had begun under socialism began to reverse.

The poor air and water quality that were the outcome of the Soviet focus on heavy industry investment and neglect of other sectors also began to reverse. Coal fired furnaces and polluting automobiles such as the Trabant, were upgraded and replaced to decrease the level of airborne particulate matter in cities such as Prague. Yet even after twenty years of effort, air pollution remains the most pressing environmental issue to the city of Prague. The Prague Strategic Plan for 2008 emphasizes the city’s need to focus on building a sustainable city and “efficiently manage all resources – land, property, infrastructure, energy, water and finance – based on the principles of sustainable development; [and] balance their mutual interdependency.”\textsuperscript{83} In Prague, as in many cities, sustainability is considered in its narrowest sense, in terms of the environment.


\textsuperscript{82} As one example, the Lobkovic family had several castles returned; today one is a brewery another a winery and a portion of Prague Castle that was returned to the family is a family museum.

\textsuperscript{83} Prague Strategic Plan, Resolution Number 22/42, 11 December 2008, Prague Municipal Assembly. (2008). 80
Moreover, as language in the strategic plan highlights, the actions are traditional in nature; the city is to “manage resources efficiently” and limit “water and energy losses” rather than explore nontraditional means of generation, of decreasing demand or managing waste streams. Based on comments made at the Copenhagen climate conference in late 2009 by Václav Klaus, who is now president of the Czech Republic, it would appear that actions targeted at minimizing the potential effect of man on the global climate are not of foremost important to the government in the Czech Republic.84

The Czech Republic experienced pronounced disruption in 1989 as a country that was forced to develop an entirely new government, policies and social system within a few years. The condition in East Germany was far different. As part of a reunified Germany, East Germany was folded into an existing set of legislation and regulation, and benefitted from the relative prosperity of West Germany. Investment flowed not only from foreign sources, but from the former West Germany as well. The strong planning history resident in West Germany guided the environmental and urban planning systems that would be adopted across Berlin within a few years.85

In Berlin, the West had an extensive set of environmental regulations in force at the time the Wall fell and a history of legislation aimed at protecting the environment. The Federal German Nature Conservation Act, which mandated a set of environmental assessments as part of development plans, had been in effect since 1976. Berlin had focused on increasing green spaces in the city since the 1980s when the Berlin Landscape Program became law; it was reinforced with an extensive program of incentives put in place in the 1980s and 1990s.86 In 1994, Berlin’s Biotope Area Factor (BAF) Initiative was adopted across the reunited city. The BAF is legally binding and


obligates developers take steps to ensure that a portion of their site is covered by permeable surfaces. Although East Berlin and East Germany faced many of the air and water quality challenges faced by the Czech Republic, the reunification brought the strong tradition of ecological awareness in West Germany to the East.
Figure 1: Location of Prague, Berlin and the pre-1989 "Iron Curtain"

Figure 2: Example of socialist industrialized housing (panalák) in Stodůlky, Prague
Prague

Prague, the capital of the Czech Republic, lies northeast of the center of the country. From Prague, one may arrive in Nuremburg within three hours by highway and Vienna in four hours; for many in Western Europe, the city is an easy drive or inexpensive flight from home. Prague’s central location in Europe made the city attractive for investors in the early 1990s. The city was in newly opened Soviet bloc lands and a convenient hub from which to connect on into other Eastern European markets. Location has made Prague interesting for investors and tourists, with the mixed benefits that accrue.

Unlike many other Eastern European cities, Prague suffered little damage to physical structures in the city during World War II. As a result, the central city retained its prewar look and form. The historic center, roughly the area contained by the city’s early fortifications, retains a large variety of architectural styles, from the Romanesque to the modernism of the 1920s and 1930s; the arrangement of the buildings in the historic center creates close and compact quarters, navigated by narrow winding streets. The central city consists of five districts: the New Town or Nové Město; the Old Town or Staré Město; Josefov, the Jewish quarter; the Lesser Quarter, Malá Strana in Czech, and the Castle District, Hradčany (see figure 3). The main squares in this central core, Old Town Square, Lesser Quarter Square and the Small Square, all create an open relief to the cramped streets. This historic center, which includes Wenceslas Square, is the primary tourist attraction within the city. The “Royal Route” is traveled by millions of tourists annually, passing through each of these areas. Perhaps the most popular points along the route are the Castle and Old Town Square (see figure 4). Residential use in

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this area of the city is minimal; only 5% of the total population of the city lives in the historic section.\textsuperscript{88}

Beyond the historic core is a first ring of development, characterized by its more residential nature; nearly forty percent of the population lives in these inner-city, urban neighborhoods.\textsuperscript{89} Most of the buildings in this area date from the mid-1800s until the late 1930s. Before communism, and increasingly again today, the prosperous lived in the apartment houses of Vinohrady, close behind the National Museum. In the past, the working class and tradesmen lived in the tenements of Žižkov, with industrial areas at the borders, although this area too is seeing increased investment in residential renovation since the end of the 1990s.\textsuperscript{90} The traditional large apartment block constructed around a courtyard was by free-standing three story multi-unit houses in the 1880 followed by single family villas in the 1920s and 1930s. In contrast to the historic center of the city, these areas provided more open space and parkland as well as larger, more luxurious living areas. This ring also saw the first generations of housing estates constructed according to socialist principles of equality in housing. These earliest socialist residential experiments were built in the late 1940s and 1950s.

The highest concentration of socialist housing estates exists in the outer ring of the city. Here, where there was plenty of open land, the expanses of \textit{paneláky} housing up to 80,000 residents were constructed from the 1960s through the 1980s. This was the new, desirable housing for families employed in the industries on the outskirts of Prague, home to the “socialist middle class.”\textsuperscript{91} Most often buildings were four, eight or twelve stories; for each group of buildings containing 1200 units, there would be shops and schools. The estates were served by subway lines from the center; subway stations, hotels and department stores created a hub for a collection of \textit{panelák}. In each estate, apartment blocks were organized around park areas (see figure 5).

\textsuperscript{89} Sýkora, L. (1999). \textit{Changes in the internal spatial structure of post-communist prague}. \textit{GeoJournal}, 49(1), 79-89. 80
With the increasing attention to the development of the large housing estates on the edge of the city, investment in the historic core was neglected. The condition of the historic buildings declined, both in the Old Town and in the New Town, the location of Wenceslas Square. The buildings on the square, constructed between the late 1880s and the 1930s, deteriorated with the rest of the area. While the physical condition of the square might have faded, the meaning of Wenceslas Square to the residents did not. Although the use and meaning of many spaces in Prague changed in response to the policies and politics of the Soviet socialist government in Czechoslovakia, some spaces retained their social and historical meaning to the population. One such space was Wenceslas Square, which was a gathering point at an individual and at a national level. For decades, friends would meet u koně or “at the horse,” at the foot of the statue of Saint Wenceslas, before heading off to the entertainments of Wenceslas Square or its pasaž (see figure 6).

A Physical Description of Wenceslas Square

Wenceslas Square, which is a boulevard in form and city square in function, is in the central core of Prague. From its inception as a horse market as early as the 14th century, Wenceslas Square has been a commercial and meeting place for Prague. Located in the Nové Město, the square has been a central point for commercial enterprise. On a map, Wenceslas Square is a clearly delineated open space, approximately a kilometer long and thirty meters wide. It functions as the spine of the New Town grid, running nearly a half mile gradually uphill from Na Příkopě to Wilsonova and the National Museum (see figure 7). Directly in front of the National Museum stands the statue of Saint Wenceslas and important element of the life of the square.

Although Wenceslas Square proper is the open boulevard, referring to Wenceslas Square includes the blocks of buildings surrounding the open space. The buildings have their primary commercial frontage along the square; however, they also encompass a series of arcades, or pasaž, which are internal to the buildings. The extent of the pasaž system throughout Prague is a unique characteristic of the city, and essential to an understanding of the social dynamics on Wenceslas Square. Brožová traces the history
and function of the pasáž through time. Although the house with a passageway has been a staple of Germanic European cities since the Middle Ages, the Prague passageways and arcades have a broader function than usual. According to Brožová, a distinction was made between the “passageway,” or průhod, which in Czech implies walking through, and an arcade or passage, which had a more prestigious connotation. Pasáž is a Czech transliteration of the word “passage”; in the mid-1800s, the English word was considered more appropriate for the new, modern, glittering commercial spaces inside the “urban palaces” then under construction. Most of the architecture that establishes the character of Wenceslas Square today dates from the 1880s through the 1920s and features the pasáž as an essential element of the structure (see figure 8).

The pasáž play an important role for the city Prague: they reflect the spirit of the city. As Brožová describes one way in which the physical shapes the feeling of the city: “…it is determined also and above all by its secret cavities…” and that the character of Prague is “unfurled towards the interior.” She goes on to elaborate, “…a simple and fundamental fact of Czech civilization, which inspires the genius loci at the same time as it derives inspiration from it: that of the culture of regression. Within it, all that is intimate and familiar in the world coexists with all the anxiety and oppression which this world can inspire.” Throughout Prague and on Wenceslas Square, the pasáž provide a means of retreating from the unpleasant aspects of the surroundings; this historical role of the pasáž as refuge is important in understanding their importance on Wenceslas Square today.

The buildings on the west side of Wenceslas Square are honeycombed with interior pasáž, which house retail, restaurant and entertainment functions. Many of the primary pasáž off of Wenceslas Square contain theaters, featuring both live performances and films. One of the largest and most luxurious of the pasáž, the Lucerna, has always

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housed shopping, a café, a theater, a cinema, and a large reception hall. It was a place where residents danced, drank and ate throughout the night in the 1930s and where the residents continue to meet for an afternoon of coffee, people-watching and gossip in the café. The blocks of Wenceslas Square that house the Lucerna, Alfa and Světovor pasáž are an example of how extensive the network of interior passageways can be. They span a full two blocks of the square, allowing the determined pedestrian to reach the interior of the block. The workers in the offices above use this area for access; in part of the Lucerna one of the older elevators remains to carry them up to their workplace on the upper floors. The connected Světovor and Alfa pasáž contains a popular pastry shop and once housed one of the most famous theaters on the square; today, it is one of few avenues into the hidden Franciscan Gardens.

In general the pasáž suffered from more than forty years of neglect during the socialism. The mosaic floors deteriorated and areas were curtained off. Although portions of the pasáž remained in frequent use, other areas were grey and dimly lit. Most of the pasáž have benefitted from investment in the square since the 1980s, although deep in the interiors of some buildings, the vestiges of decayed pasáž may be found (see figure 9).

In Wenceslas Square, pasaž create a publicly permeable west side of the square; most lead into a series of shops in the building interior and are accessible to pedestrians. These pasaž are quasi-public; they are private property, yet open for the public to use to access the commercial establishments. On the east side, many of the openings lead into courtyards that have been converted into parking areas for offices on the square. These entries are often closed with heavy wood doors, reinforcing the private ownership of these spaces. Other openings in the street wall are controlled, leading to restaurants, hotels, offices and casinos. Although these establishments cater to the public, they effectively exclude those who are not clients or employees. The exclusion creates the impression that the eastern façade is a barrier and impermeable.

Public Protest in the Square

In times of protest and revolution, the Wenceslas statue served the same purpose as meeting point, and Czechs gravitated to the square to express their views. Wenceslas
Square was a space of motivation, inspiration and national unity for the Czechs. It was also a space of power, where governments, local and foreign, showed strength and the citizens vented their anger. The events of Prague Spring in 1968 and protester action in early 1969 illustrate the national meaning of Wenceslas Square. Prague Spring refers to a loosening of Czechoslovak communist policy in early 1968 initiated by Communist Party Chairman Alexander Dubček, allowing greater freedom of speech and freedom to gather. This moment of liberalization was ended when Warsaw Pact forces invaded in August 1968, rolling tanks down Wenceslas Square and firing on the National Museum. In protest of the invasion, a group of students formed a suicide pact; the first to act was Jan Palach, who set himself on fire in Wenceslas Square in January of 1969, followed by Jan Zajíc. After two self-immolations on the square, authorities took steps to arrest the rest of the students. The image of Soviet tanks at the statue of Saint Wenceslas and the story of Jan Palach remain with Czechs, marking Wenceslas Square as a place of domination and of resistance (see figure 10). It was the appropriate setting as well for the protests of November 1989, which led to the downfall of the Czechoslovak communist regime.

The events of the Velvet Revolution began on the 17th of November, with Wenceslas Square in a central role. A gathering of students at the Charles University in the afternoon led to a protest march from campus to the Vyšehrad Castle and back through the center of the city with Wenceslas Square as the intended destination. About a quarter mile before entering Wenceslas Square, the protesting students were stopped by riot police; a number of students were beaten and the rumor began that students had been killed. By two days later, Sunday evening, the call for a demonstration on Wenceslas Square had gone out. On Monday the 20th, more than 100,000 people packed the square, jingling keys, holding placards and waving the Czech flag. The crowd swelled to 200,000 the following day when Václav Havel, a dissident and a founder of the human rights group Charter 77, spoke from the balcony of one of the buildings in the square. Protests continued on the square for another week, when the

97 The rumor of the “student massacre” was in fact only a rumor; no students had been killed although the actions of the riot police against peaceful student protesters angered residents and precipitated the subsequent events.
popular protest starting the revolution culminated in a general strike supported by a reported 75% of the workers in the country. After the 27th of November, the spectacle of thousands of Czech jingling keys in Wenceslas Square was replaced by the political negotiations that led to the resignation of the Communist government at the end of December.\textsuperscript{98}

Investment flows to Wenceslas Square

The timeline and effect of investment may be easily observed on Wenceslas Square. In 1989, the primary commercial establishments on Wenceslas Square, versus in the pasáž, included the House of Fashion, the House of Shoes, and the House of Food as well as a number of pastry shops, delicatessens, hotels and book stores.\textsuperscript{99} Pre-revolution all the stores on the square were owned by the state, and as a square in the center of the city, the types of commercial offerings were broad, even if the selection of a particular good was limited. In the mid-1990s, facades were receiving facelifts, although the condition of the interiors of buildings was lagging. Entrepreneurs had opened kiosks on the square and opened nightclubs in the deteriorated, somewhat seedy, pasáž areas along the square. The diversity of goods increased for a period of time. By 2010, the internationalization of the city was apparent in the retail on the square. While a few well-established Czech businesses remain and thrive, international retailers, such as Marks and Spencer, C&A, H&M, and Debenhams among others, have renovated large portions of the square at the edge and into the pasáž. The services catering to the tourist trade have proliferated along the square. Currency exchanges, garnet jewelry stores and souvenir shops account for nearly 30% of the businesses a portion of the square.\textsuperscript{100}

The core of Prague first felt the effect of the flow of foreign capital in the early 1990s, and Wenceslas Square with its commercial space, was a visible confirmation of change resulting from investment. The ubiquitous McDonald’s appeared. The Dům Boty, the


\textsuperscript{100} The first block of Wenceslas Square on the west side has an extremely high proportion of tourist oriented businesses, although the tourist shops are not limited to that area. There are eleven currency exchanges alone in the less than half mile length of the square.
socialist “House of Shoes,” reverted back to Bat’a, the eponymous store of the Czech shoe industrialist of the 1930s. Although some of the spaces neglected throughout the Soviet time remained in a state of disrepair, entrepreneurs of many types established commercial ventures in the square. Some were “suitcase merchants,” the informal importers who would travel over the border and return with suitcases full of goods to sell; others were selling produce that could now be secured from the West. In Wenceslas Square, as in many other buildings in cities throughout Eastern Europe, local entrepreneurs started businesses almost any vacant space.\textsuperscript{101} The earliest post-revolution businesses were small and met the immediate needs of the population. With an increasing volume of tourists during the next decade, a commercial area that had once catered to the everyday life of the residents now featured restaurants, hotels, shops with \textit{matryoshka} dolls, and sex clubs for the tourists.

Tourism and Wenceslas Square

With the easing of travel restrictions after 1989, Czechs travelled out and foreigners travelled in to the country. Visitors flooded to Wenceslas Square to experience for themselves the square that was the rallying point for 1989 Velvet Revolution. Wenceslas Square caps one of the terminal legs of a common tourist path through Prague. Starting at Prague Castle, the Royal Road leads from the Castle, down the hill and through the major sights of the city. At Old Town Square, which is crowded by tourists nearly year-round, visitors may travel on to Republic Square or to Wenceslas Square (see figure 11). A few tourists visit the square for its historical importance, many more visit for hotels or casinos, and still others for the cabarets that open all night.\textsuperscript{102}

The influx of tourists changed the tenor of the square, and a segregation of spaces catering to residents and visitors has emerged. Today, an average of approximately four

\textsuperscript{101} In 1996, even residences housed urban agriculture. Just off of Betlémské náměstí in the heart of the Old Town, a seemingly successful mushroom farm housed in the basement of one of the apartment buildings sold produce to a distributor in the city.

\textsuperscript{102} A survey of American tourists who had visited Prague conducted during September through November 2010 found that while nearly all (18/19) had visited Wenceslas Square, few (3/19) noted history was associated with the site.
million tourists visits the city annually (see figure 12). The public space of the square is occupied primarily by tourists as is much of the square/building envelope edge. Although many tourist travel the square to view the architecture of the city, access transportation, visit the National Museum or shop, a substantial number of tourists visiting Prague for stag parties visit the cabarets of Wenceslas Square in the evening. Certain parts of the square have been co-opted by the drug trade or prostitution. The commercial spaces oriented towards residents have shifted off Wenceslas Square to the network of internal pasaž. Local residents still traverse the square to reach commercial establishments or travel to their offices; however, they choose not to linger. Many residents avoid the square entirely, citing the unpleasant atmosphere created by the new populations in the square. Interviewed residents state that tourists and “Russians” make the square an unappealing place to these residents. “Russians” is often used as a non-specific term for immigrants from farther east who drive taxis and work in stores that cater to the tourist trade. Others residents frequent the areas internal to the buildings on the square, traversing a parallel path through the Wenceslas Square pasaž and the Franciscan Garden. Many visit the nostalgic places of their childhood, including the pastry shop in the Světozor pasaž (see figure 13).

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Figure 3: Prague central core and development zones

Figure 4: The Royal Route through Prague including Wenceslas Square tourist access (black) and resident access (red)
Figure 5: Housing estate (paneláky) organization in Stodůlky, Prague

Figure 6: Saint Wenceslas statue meeting place
Figure 7: Location of Wenceslas Square in context (source: Google Earth)

Figure 8: Koruna pasáž
Figure 9: Pasáž interior awaiting renovation

Figure 10: Jan Palach memorial
Figure 11: Old Town Square tourist crowd

Figure 12: Prague FDI and tourist inflow
Figure 13: Svétozor pasáž resident meeting point
Berlin

Berlin is located in the east of Germany, in the center of the former German Democratic Republic (GDR) or East Germany. At the end of World War II in 1945, the city, like the country, was divided into four sectors, under Soviet, American, British and French administration. Although many in Germany had hoped for a moderate, centrist future for the country, this division led to a conservative, “restorationist” West and a hard-line communist East. Berlin mirrored the country: East Berlin under Soviet control, and the consolidated French, American and British sectors of West Berlin (see figure 14). Between 1945 and 1949, the period of occupation by the Four Powers, a social and economic transformation took place. In the East, the Soviets worked to implement a Soviet-style society, with the state holding the means of production and providing for the basic needs of the people. By 1949, when the communist party consolidated control over East Germany and the GDR was established, the Soviets had effectively eliminated the aristocratic landowners and the capitalists. Banks, agriculture and manufacturing had been largely nationalized and more than 60% of industrial production was in the hands of the state.

In the West, the western Allies focused on rebuilding the West German economy. The Marshall Plan advocated a free-market economy as the basis for future growth and the establishment of a “stable and prosperous [West] Germany” that would play an integral part in the prosperity of Europe as a whole. The Allies quashed movement towards socialization of any industries and took steps to limit the influence of trade unions. An American-style of capitalism was imposed upon West Germany, with some concessions

born out of opposition by German interest groups. This system supported the economic and political stability of West Germany.\textsuperscript{107}

In 1949, a divided Berlin retained extensive damage from World War II. Large swaths of the city were rubble: almost of a third of the central city had been destroyed, more than a half million apartments lost across the city, the population stood at 2.8 million - about two-thirds the pre-war population.\textsuperscript{108} \textsuperscript{109} Groups of Trümmerfrauen or “rubble women” moved the ruins of the city piece by piece, cleaning the bricks to be incorporated in the reconstruction of Berlin. Potsdamer Platz, the bustling transportation and commercial center of pre-war Berlin, was in close proximity to a several Third Reich government buildings and was flattened by Allied bombs. As striking as the statistics and images of the devastation of Berlin are, most of the buildings remained intact or were salvageable; perhaps more importantly, 90% of the infrastructure below ground was still in place. The buildings and connections formed the basis for the rebirth of the city.\textsuperscript{110}

The East

As the city’s division solidified after 1949, the two Berlins approached rebuilding of the city from the ideological perspective of those in power. East Berlin was particularly important as a Soviet showcase city given that it was in direct contact with the West and the capital city of East Germany. The East Berlin government built a city that emphasized centralization, hierarchy and monumentality, much the same as in Moscow and other Soviet cities. The first major socialist building project, formerly the Stalinallee – now named Karl-Marx-Allee, was a grand, tree-lined boulevard, originally flanked by ornate, seven to ten story buildings in the Stalinist style. The vast boulevard replaced a more dense, finely grained traditional urban fabric. By the time building on Stalinallee was completed in the 1960s, the Soviet aesthetic had shifted from the monumental


\textsuperscript{110} Ladd, B. (1997). \textit{The ghosts of Berlin: Confronting German history in the urban landscape}. Chicago Ill.: University of Chicago Press. 178
building to prefabricated apartment blocks, such as those built at the Alexanderplatz end of the street (see figure 15). The Alexanderplatz, a wind-swept vast square bordered by several undistinguished glass and steel skyscrapers, was the center of East Berlin. Together with the TV tower located adjacent to the square, the Alexanderplatz became the symbol of East Berlin and the socialist portion of the city.

Symbols of socialist ideology emerged in the urban landscape in the 1960s and 1970s. By 1971, housing East Germans had become of utmost importance to the Party and government. Between 1945 and 1971, few apartments were added to the housing stock and the inner city apartment blocks built in the 1800s continued to deteriorate. The Soviet model of industrialized building that shaped workers’ apartments throughout Eastern Europe figured prominently in East Berlin’s solution to their housing crisis. Die Platte, as these prefabricated concrete panels were called in German, were transformed into endless monotonous blocks of apartment housing located at the edges of the city. As in the Czech Republic, the buildings in the housing estates were about eleven stories tall with approximately 180 units per building. The largest of the estates, Marzahn, housed fifty-six thousand apartments; by 1989 almost a third of East Berlin’s residents lived in these estates. Although the estates could be considered undesirable by Western standards, they provided basic sanitary housing that was in short supply and were easy to build; however, industrialization led the craft of building deteriorated during this time.

Some ideological symbols in East Berlin were symbolic less because of their physical structure, and more because of the social interactions that occurred within. The Palast der Republik is one example; the architecture resembled many contemporary Western buildings, yet housed a different program that reflected the state focus on the worker.

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113 Ladd, B. (1997). *The ghosts of Berlin: Confronting German history in the urban landscape*. Chicago Ill.: University of Chicago Press. 191

114 From Urban, F (1997) 12: “Critic Bruno Flierl pointed out, ‘design for the working class’ was no longer aimed at the needs of the workers who inhabited the new buildings but exclusively for those who produced them.”
The predecessor on the site, the Hohenzollern Palace, had been badly damaged during the war and was demolished in the 1950s to make way for a new urban center for East Berlin. The open space created, Marx-Engels-Platz, was used until the mid-1970s as a gathering point for political events and demonstrations. In 1973, the Palast der Republik, a bronze glass and marble clad building was constructed on the site, forming the center of a new government-oriented complex. The corridor from the Alexanderplatz to the Palast complex embodied the Soviet philosophy that grand open plazas for “political demonstrations, military parades and people’s holiday festivals” and the most important and monumental structures should be built in the center of the city. (Schwedler, 2001 p26 with note on Moscow Charter/Athens charter and city form) The Palast housed the Volkskammer (parliament) as well as providing the East Berliners a place for socializing. Cafes, discos, galleries and a theater were some of the facilities housed in this “people’s palace.” If in the West, this structure might house corporate offices; in the East, it was ostensibly the people’s center.

The West

The West’s rebuilding efforts aimed to break from the past and to showcase a “free” Berlin, in contrast to East Berlin. An example of the East-West ideological competition, development of the Hansa Quarter in 1957 was to represent the principles of freedom, individuality and a free-market system. This reconstruction project rejected the organization of its contemporary project in the East, the Stalinallee. The most influential architects of the time created a complex that focused on individual buildings arranged in a park setting versus the boulevard and wall of buildings on the Stalinallee; the Hansa separated shopping, housing and streets, while they were integrated on the Stalinallee. These East-West differences played out across Berlin, and in the planning for the future. While the West held building competitions and planned as if a
reunification might happen in the future, the East’s competitions ignored the existence of the West.

The West’s urban design competitions focused on the Reichstag area, the geographic center of Berlin (Strom, 2001). With the removal of the government functions to Bonn in westernmost West Germany, and because of the proximity to the East-West border, the area was largely unoccupied. As part of an ideological statement, the scope for the “Capital City Berlin” competition in 1957 included the Reichstag area as well as a considerable portion of the central city in the East. Ostensibly, the designs aimed to facilitate rebuilding the center of the city with an eye to future reunification.

Berlin’s division between the Four Powers left what remained of the historical city center in the Soviet sector. The pre-war center stretched from Alexanderplatz to Potsdamer Platz; after the partition, only Potsdamer Platz was located in the West. Most of the structures around in this area had been bombed and were in ruins in 1945. The West’s new center emerged near the Berlin Zoo train station and the Tiergarten, extending to the west along the Kurfürstendamm. The majority of the development in this part of Berlin was privately funded and yielded a dull collection of office buildings, the most prominent of which was the ‘60s era Europa Center, the tallest building in West Berlin. By the 1970s, the West Berlin center highlighted all things capitalist: expensive shopping and cafes along the “Ku’damm,” the Europa Center with the revolving Mercedes-Benz logo on top, expensive hotels and hordes of tourists during the day; by night, discos, doner kebab, cinema, sex shops, drunks and drug use. Relatively few people lived in the new center; retail and office space occupied most of the buildings in the Zoo area. In the 1980s, the government developed regulations to drive out some of these less...
desirable uses and improved the Europa Center plaza; the efforts were only modestly successful.

As in East Germany, housing became a critical issue in the West during the 1970s. And, as in East Germany, much of the construction of housing was in larger modernist blocks, not of the scale of the East, but still large. Nearly three-quarters of the funding behind West Berlin housing development was state subsidy, compared to about a third in the rest of West Germany (Strom, 2001 p48). Most of the West Berlin economy relied upon state support; West Berlin was a city nearly completely disconnected from material supply in West Germany about 100 miles away, with very few industries within its border. Government funding would continue to play a substantial role in Berlin’s redevelopment efforts well into the reunification.

With the building of the Berlin Wall in 1961, the division of Berlin was physical as well as political. West Berlin became an island in the center of a hostile East Germany. The precarious nature of the place had been highlighted in 1948 when Berliners had to rely upon the Berlin airlift to supply staple products from the West. Access from West Germany was limited to a few autobahns that cut across East Germany; West Berliners with “island fever” traversed these threads as quickly as possible. The Wall ran around the perimeter of West Berlin and through the former center of the city. The stretch of Wall from the Reichstag, past the Brandenburg Gate to Potsdamer Platz was a double wall; the gap between the two created a 100-meter wide no man’s land that the East Germans cleared of buildings to allow clear shots at anyone crossing the field. Potsdamer Platz, the center of pre-war Berlin, was devastated, divided and irrelevant.

Potsdamer Platz

The difference between Potsdamer Platz of the 1920s and the 1960s was stark. Potsdamer Platz emerged as a hub of activity in Berlin in the mid-1800s. Originally on the western border of Berlin, Potsdamer Platz grew in importance as the city expanded

123 I. Lenhardt, personal communication, January 22, 2011. 52
and rail travel became important. National and international rail lines passed through Potsdamer Platz; as the number of travelers increased, hotels, cafes and restaurants were built to accommodate their needs.\textsuperscript{124} Potsdamer Platz’s location to the south of the Tiergarten ensured that traffic directed through the area rather than traversing the gardens to the north creating a natural convergence of transportation routes. By 1925, Potsdamer Platz was one of the busiest and perhaps the most famous square in Europe. Rail, electrified tram, the elevated train, automobiles, pedestrians and bicycles all passed through Potsdamer Platz. It was famous as the site of the first traffic signal in Europe.\textsuperscript{125} Clearly Potsdamer Platz was not a \textit{platz}, or square; it was a crossroads that symbolized” the bustle, speed and motion of the modern metropolis” Berlin.\textsuperscript{126}

By the time the Berlin Wall was erected in 1961, Potsdamer Platz represented the demoralized, gray and bleak Berlin. Potsdamer Platz and the surrounding area suffered extensive bombing during World War II given the proximity to Third Reich headquarters buildings, leaving only a few buildings standing. After the conclusion of the war, a series of temporary uses emerged on the site. A black market appeared at Potsdamer Platz, which stood at the intersection between the Soviet, British and American sectors. However, construction of the Wall ended the trade, replacing East-West transactions with souvenirs and viewing stands for busloads of curious Westerners who peered over the wall at no-man’s land.\textsuperscript{127} A trailer park housing members of Berlin’s burgeoning counter culture appeared in the site.\textsuperscript{128}

The Berlin Wall cut through the eastern end of Potsdamer Platz; the formerly bustling area was now on a closed, armored border (see figure 16). People skirting the wall and

\begin{itemize}
\item \textsuperscript{125} Wilderotter, H. (2000). Outside Potsdam gate. In Y. von Rauch, & J. Visscher (Eds.), \textit{Der Potsdamer Platz: Urbane architektur fur das neue Berlin = urban architecture for a new Berlin.} (pp. 9-28). Berlin: Jovis.17
\item \textsuperscript{126} Ladd, B. (1997). \textit{The ghosts of Berlin: Confronting German history in the urban landscape.} Chicago Ill.: University of Chicago Press. 116
\item \textsuperscript{127} Ladd, B. (1997). \textit{The ghosts of Berlin: Confronting German history in the urban landscape.} Chicago Ill.: University of Chicago Press. 120
\item \textsuperscript{128} Strom, E. A. (2001). \textit{Building the new Berlin: The politics of urban development in Germany’s capital city.} Lanham, Md.: Lexington Books. 187
\end{itemize}
travelling from one part of West Berlin had little reason to linger, moving quickly across the space. Nor did trains linger in the subway station at Potsdamer Platz. It became one of Berlin’s ghost stations: the subway platforms that Western trains passed without stopping while in transit from one part of West Berlin to another. West Berlin turned its back on Potsdamer Platz and the Wall. Potsdamer Straße was effectively blocked by the state library, part of the collection of cultural sites built near Potsdamer Platz, but oriented towards and serving Berlin farther to the west. The area was devastated, divided, irrelevant and unappealing to investors.

Reunification at Potsdamer Platz

With the fall of the Berlin Wall in November of 1989, Potsdamer Platz became the center of the city again. Discussions began regarding reunification and moving the federal capital back to Berlin. The swath that was no man’s land and Parisier Platz, just to the east of the Brandenburg Gate, became home to embassies and renovated luxury hotels. In early 1990, a series of deals were concluded, the German government selling large tracts of land in Potsdamer Platz to Daimler-Benz, Sony, and Asea Brown Boveri, the Swiss-Swedish corporation. The transactions were controversial. The Daimler-Benz parcel was purchased for approximately $110 per square meter when property on Unter den Linden, also centrally located, was priced at $600 per square meter. There were questions about when negotiations for the site had been initiated: in summer of 1989, before the possibility of the Wall falling, or in February of 1990, after the Wall was gone and Potsdamer Platz was clearly a prime location (see figure 17). Both the Daimler-Benz and Sony transactions were highly scrutinized within Germany and by the European Union.

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129 I. Lenhardt, personal communication, January 22, 2011.
The conditions of the property sales were not the only controversy surrounding Potsdamer Platz in the early 1990s; the competition for the site design also precipitated political and critical discussion. Many, if not all, major projects in Germany are subject to design competitions run by government; in the case of Potsdamer Platz, a commission designated by the Berlin Senate sponsored the competition. At Potsdamer Platz, the master plan was the subject of competition; Daimler-Benz and Sony held design competitions for their individual sites to conform to the guidelines of the master plan. The Munich firm, Hilmer and Sattler, designed the first place entry, based upon a traditional low Berlin block structure. Although the Hilmer and Sattler design conformed to the competition guidelines, the competition results were criticized as being backwards and amateurish, with Rem Koolhaas being one of the most vocal critics. Daimler-Benz and Sony were unhappy with the results as well, they concluded that the Hilmer and Sattler design did not leave them the flexibility to design signature, read high rise, headquarters buildings on the site. The corporations contributed to the uproar by retaining Richard Rogers to provide a design for the areas bordering the competition site; the Rogers design was denser and featured taller structures. Ultimately, the government upheld the award to Hilmer and Sattler, although a number of Rogers’ elements were included in the final design.

As part of “the biggest construction site in Europe,” Daimler-Benz, Sony and ABB developed their sites individually, creating the images they desired for their corporations. Daimler-Benz hired Renzo Piano who ultimately designed a series of predominantly low-rise structures with two modest high rises for the Daimler-Benz site. The design called for offices, residences and a long covered shopping mall that very loosely resembles a shopping street. The design was generally well-received in part because it conformed to the Senate commission’s view of appropriate development for the site. In contrast, the

Sony Center designed by Helmut Jahn, was widely criticized. Although it followed the letter of the Hilmer and Sattler guidelines, the design was not in keeping with the image the commission desired; the city building director termed the design “monotonous, typical American architecture”. In fact, aside from the large umbrella roof, the design resembles other Jahn designs in the use of color and glass (see figure 18).

An integral element of the site, rarely mentioned in accounts of the site design, is Atelier Dreiseitl’s water landscape, *Urban Waters*. The design is in part a response to the Berlin’s Landscape Program and Biotope Area Factor requirements, which aim to moderate the urban heat island effect and minimize the risk of flooding during major rains. Germany has a history of strong ecological legislation; Berlin is no exception. In the 1970s, the city began to draft the Landscape Program, or LaPro, that shaped environmental protection measures included in the land-use plans governing development in the city. The regulations were adopted in West Berlin in the late 1980s and extended to East Berlin after reunification. The LaPro is a legally binding document with specifications and targets, covering topics from the protection of biotopes and species to the use of open space. The Biotope Area Factor is one element of the landscape regulations, designed to ameliorate the effect of impervious surfaces of development in the city center. Targets for surface permeability are established for alterations to existing sites, as well as new development and vary by type of development, whether residential, commercial, public facilities or schools. The Berlin Senate Department for Urban Development equates the BAF with other development parameters such as site occupancy indices and gross floor area, according the bio-environmental system a status comparable to profit-generating design considerations.

The water feature in Potsdamer Platz is not only a visually pleasing element, but it serves a greater function in the bio-environmental system. As an element of the overall

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design of the area, the water provided a backbone for the public spaces within Potsdamer Platz. Following the water “upstream,” a narrow, unassuming, vegetation-laden canal begins at Potsdamer Straße just to the south of the Sony Center and leads towards the Marlene-Dietrich Platz, where the canal becomes a polygonal pool. The base of the pool is lined with structures that create a rhythm as water flows over.

Following the feature farther to the south, the pool opens further into a large triangular pond, the cleansing biotope (see figures 19-21). This area serves as the primary surface retention for the water and is fed by rainwater runoff from the nineteen buildings of the Daimler portion of the development. Throughout the system aquatic vegetation filters the water flowing through the water feature. The five underground cisterns have a capacity of 2600 cubic meters (approximately 687,000 gallons); the cleansing pond has an additional 1,300 cubic meters of storage capacity. Nearly 35% of the cistern volume is reserved for heavy precipitation events. During storms, rainwater flows from the paved and green roofs on the buildings into the cisterns where solids settle in the underground tanks. Water from these tanks flows to the cleansing biotope, back to the buildings to be used to flush toilets or to other green areas to provide irrigation. Water dwells in the system for approximately three days to complete the filtration process. The system has been designed to slow discharge into the adjacent Landwehrkanal; it is estimated that only three rainfalls burden the canal in a fifteen year span.140 Although the design is highly functional, the feature also engages visitors. Children and families travel across the stepping stones at the Daimler buildings, and residents stop to enjoy the view and sound of the water. The greater value is in creating the interaction between the social and bio environmental systems in Potsdamer Platz.

Today, Potsdamer Platz anchors a collection of government and cultural sites forming the important sites of tourist travel in Berlin. Stretching from the new federal offices along the Spree, past the Reichstag with Norman Foster’s transparent glass dome and the Brandenburg Gate, through the no-man’s land where the American Embassy and Peter Eisenmann’s Memorial to the Murdered Jews of Europe, then on to Potsdamer Platz and the Kulturforum beyond, a visitor travels a landscape of power and memory.

(see figures 22, 23). The entire swath has been built within the last twenty years on land that may have been vacant, but on land that retained history and meaning for Berliners and for the world. Potsdamer Platz and the Kulturforum at the terminus of the tourist swath provide a level of relief from the inspection and introspection of the rest of the tourist route. To a certain extent Potsdamer Platz has recaptured its 1920s reputation as a transport and entertainment hub. The cinemas, shopping cafés and restaurants in the area are palpable changes to the “burdened landscape” of the former no man’s land.141

It is the additional layer of meaning held in the landscape that has made almost every step of redevelopment of central Berlin an angst-ridden process. The discussion and controversy of whether and how to remember history, and as importantly which era of history, surrounds almost every decision in Berlin. The first set of decisions regarding the development of the vacant center of the city is complete; the decision-makers most often struggled with memories of World War II and Hitler’s touch on the city. The next set of decisions comes to terms with how Berliners balance their capitalist versus socialist histories. Vestiges of the East are disappearing: the Palast der Republik has been torn down, ostensibly because asbestos remediation would have been too dear, and plans for Alexanderplatz call for a collection of high rises at the edge. Berlin’s vibrancy, oddness and aura of seediness that were hallmarks during the Cold War have nearly disappeared from the former West Berlin, and are fading in the East. Berlin’s split personality is less noticeable. However, the East is still perceived as home to the edgy, avant garde neighborhoods in the city (Waring, 2011).142 The discussion now is how, and should, this personality of Berlin be retained.

141 According to E. Strom (2001) 67, Germans refer to state officials who are thoroughly identified with a discredited regime as politically belastet or “burdened.” A number of authors refer to both the architecture and the landscapes of the Third Reich and the GDR as potentially being burdened with their history and use in the memories of Berliners and the world.

142 J. Waring, personal communication, January 23, 2011.
Figure 14: Location of Potsdamer Platz in the pre-1989 Berlin

Figure 15: Berlin's industrial housing, *die Platte*, at Alexanderplatz
Figure 16: Relationship of Potsdamer Platz (red) and Berlin Wall (black)

Figure 17: Potsdamer Platz development (source: Google Earth)
Figure 18: Sony Center designed by Helmut Jahn
Figure 19: Cleansing biotope in *Urban Waters* by Atelier Dreiseitl

Figure 20: Channel through *Urban Waters*
Figure 21: *Urban Waters* channel looking towards Potsdamer Straße
Figure 22: Tourist path through central Berlin

Figure 23: Tourist route from Brandenburg Gate (left) to Potsdamer Platz development (right of center)
Resilience and sustainability are popular terms today. Because of their popularity, they are shaped and twisted to fit a number of different applications, some more comfortably than others. Yet the fundamental characteristics of a resilient system are defined from a number of perspectives, whether labeled as resilience and sustainability or not. It matters little if a city is viewed through an ecosystem lens, a social lens, an urban spatial theorist’s lens or an urban designer’s lens, the conclusions are fairly similar: the qualities that create a vibrant city are the qualities that enable the urban system to weather disturbance.

Sustainability versus Resilience

This thesis contends with the application of the concepts of resilience and sustainability in cities experiencing massive economic, political and social change. One challenge to be addressed is breaking from the popular use of the terms sustainability and resilience. Although the notion of sustainability as defined by Brundtland Commission in 1987 reflects the need for balance between three dimensions, protection of the bio-environment, economic growth and social justice, today sustainability is most often distilled to a “reduce, reuse, recycle” catch phrase. The term’s focus in popular use has shifted to the protection of the bio-environment; perhaps it is the easiest of the dimensions of sustainability to address and rally public support around. In part, much of the literature since 2000 has used the term sustainability to mean focusing on how society may limit the use of inflows and minimize outflows, while giving the economic and social components of sustainability merely a passing nod. In addition, the concept of sustainability implies a desire to maintain a static condition, to sustain the status quo. But, as was clear in 1989 in Eastern Europe and is clear today in Tunisia.

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143 In this instance “inflows” describes the natural resources a society may use, such as oil, coal, and water; “outflows” refers to the waste products of society, including trash, sewage, storm water, and pollutant emissions.
and Egypt, disruption happens. A city must be able to accommodate and continue to function in the face of disruption. In this thesis, the primary concept borrowed from sustainability is that of the triad of concerns in a city: the social, economic and environment functioning of a place. However, sustainability as used today implies that a system, in this case an urban public space can achieve a condition and maintain it unchanged, which is not possible; therefore, in this thesis, resilience forms the basis for the analysis of a public space since it better reflects the complexity and dynamism of the system.

Another element of the discourse surrounding sustainability is its anti-urban bent as noted by Vallance and Perkins. These authors describe the conflict between the city and “nature” that is established. Urban residents are asked to act or live differently in order to save the environment, which is not readily visible to them or part of their community. The environment is “out there” in the country. Urban residents are asked to modify their lifestyle without seeing and understanding the value to that sacrifice. It is common to find that residents of an urban center are not aware of the natural systems in their midst; they perceive a city is limited to the social and the economic. Looking beyond preconceived notions of the city to uncover natural processes is often a skill that must be taught and can be encouraged by making processes visible and understood. Increasing the opportunity for routine interactions with natural systems has the potential to decrease the divide between the urban dweller and the bio-environment. This appreciation of the entire urban system, the social, the economic and the environmental, on an individual basis is essential to enhancing a city’s ability to respond to disruption.

Resilience can be a better term to describe the qualities a city must exhibit to continue to thrive over time. However, as with sustainability, the term has a broad set of meanings today. A general definition of resilience is a sound starting point for discussion: resilience is the ability of a system to absorb disturbance and still retain basic function.

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145 Overcoming the perception that a city is devoid of “nature” has been a recurring challenge in teaching undergraduates to look for natural processes and habitats in urban environments. They are often looking only for the nature they might find in a National Park, rather than where nature and man interact within the city.
and structure. The concept of resilience is more dynamic than that of sustainability; it assumes that here will be some level of disturbance, and that a system must accommodate that disturbance. In their book *Resilience Thinking*, Walker and Salt emphasize that a resilient city is not one that operates efficiently along all dimensions. As in any system, too high a degree of specialization and efficiency allows a minor skip to send a system, in this case a city, into crisis. A bit of redundancy or flexibility enhances the resilience of a system.

The Adaptive Cycle and an Urban System

It is important to emphasize that a city is a system, made more complex by consisting of a collection of other systems: social systems, economic systems, eco-systems. It has phases of growth and decline, organization and disruption. The urban system may be described with a model emerging out of a study of eco-systems by Holling in 1986: the adaptive cycle. Using a modified adaptive cycle helps illustrate both the growth phases that a city passes through and the disruption and reorganization that also occurs. By understanding the character of the phases of the adaptive cycle, actions may be taken to improve the resilience of the system or avoid disruption that leads to system collapse.

A closer examination of the social, economic and bio-environmental systems in the context of the adaptive cycle is helpful in identifying opportunities to increase resilience of the city. A shorthand characterization of the phases in the adaptive cycle modified from Walker and Salt provides a helpful summary when considering the manifestation of the cycle in an urban system (see figure 24).

- Rapid growth (r): innovation and entrepreneurship; variable conditions; short time frames; multiplicity
- Conservation (K): accumulation; specialization; homogeneity and segregation; efficiency; decreasing flexibility

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• Release (Ω): disruption; accumulation released and resources freed; chaos
• Reorganization (α): invention; experimentation; novelty; heterogeneity

The r- and K-phases are considered the fore loop when a system grows and accumulates resources; a system tends to progress through these phases relatively slowly. Conversely, the back loop, the Ω- and α-phases, occurs very rapidly. The concepts from the adaptive cycle are applied in the analysis of Wenceslas Square, which serves as a proxy for Prague’s resilience, and in comparison to the Potsdamer Platz development in Berlin.

The adaptive cycle has its genesis in the study of ecological systems and consists of the four phases noted above. In ecology, r-strategists are disperse widely and grow quickly, succeeding in an environment where the first to the resource captures it; the K-strategists grow more slowly and succeed when resources are divided and allocated to specific uses. Collapse (Ω) is the release of wealth that has been accumulated as a system grows. Collapse occurs when a system has become so specialized and interconnected that it cannot weather the smallest of disturbances. Gunderson and Holling use Schumpeter’s economic concept of “creative destruction” to describe this process, where connections are broken, and resources are released to use in the next phase of reorganization. Reorganization (α) is the phase with the greatest heterogeneity, great potential and great risk. In this phase, a system may begin anew, or collapse further into a state of low potential, low connection and low resilience. Resilience is the ability of a system to absorb disruption and return to its previous function and structure. Systems tend to exhibit their greatest resilience as the system reorganizes and through the early K phase. The system has accumulated some potential, but is not so connected that a small disruption leads to a collapse. A system that can adapt to maintain resilience is better able to absorb all but the most catastrophic of disruptions (see figure 25, Table 1).

Table 1: Characteristics of systems in the four phases of the adaptive cycle

<table>
<thead>
<tr>
<th>PHASE</th>
<th>Resilience</th>
<th>Social System</th>
<th>Economic System</th>
<th>Bio-environmental System</th>
<th>Release</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>plus (+)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reorganization</td>
<td>α</td>
<td>Heterogeneous populations mixing at the individual level, an absence of barriers.</td>
<td>Small, opportunistic and temporary businesses emerge.</td>
<td>Spontaneous and visible natural processes in the site</td>
<td>Out of bounds event overwhelms engineered and separated system</td>
</tr>
<tr>
<td>Growth</td>
<td>r</td>
<td>Selected populations begin to grow; the mainstream populations may begin to overtake marginal populations.</td>
<td>Entrepreneurs create highly flexible businesses.</td>
<td>Designed, visible Reinforcing the connection to other systems</td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>K</td>
<td>One population may begin to dominate; population in the area becomes homogeneous.</td>
<td>Larger scale economic entities emerge emphasizing “one size fits all” specialization.</td>
<td>Engineered, hidden Separates the bio-system from others Inflexible</td>
<td></td>
</tr>
<tr>
<td>Release</td>
<td>Ω</td>
<td>Segregation occurs as barriers, both physical and implied, rise.</td>
<td>Efficiency is paramount; customization disappears and the system is inflexible.</td>
<td>Out of bounds event overwhelms engineered and separated system</td>
<td></td>
</tr>
</tbody>
</table>
The back loop of the adaptive cycle compares to the situation in Eastern Europe in 1989 (see figure 26). These are the phases of release and reorganization that are the periods of uncertainty, innovation and opportunity. When applying the model to an eco-system, the newly germinating seed is the organism of these stages. The urban habitat counterparts to the seed include transient opportunistic businesses, temporary uses of urban spaces, and the first wave of pioneer tourists, perhaps better termed “explorers.” These opportunistic businesses are the first urban organisms occupying the temporary uncertainty of a newly disrupted city, in this case Wenceslas Square. They provide the goods and services for newly unleashed needs and desires of the residents and explorers. In socialist countries, these early urban organisms often respond to the pent-up demand for consumer goods long suppressed in an economy focused primarily on industry. These smaller opportunistic businesses may be the greengrocer setting up shop in a doorway, who now provides nearly unlimited supply of bananas, in short supply prior to the revolution. Perhaps it is the new flower kiosk that appears on the square, providing a good that was not easily available before disruption and reorganization of the urban system.

The fore loop, the growth and the early conservation stages, reflects a system that accumulates capital, whether social, economic or eco-capital. During the growth phase, the focus is on using any available resource to develop new opportunities. At this point, the opportunist becomes entrepreneur; they are the urban weeds. The potential of these businesses are high, they operate informally and without a strong structure. They may be the businesses created by local entrepreneurs seeing a long unmet need, or transplanted entrepreneurs who adapt business models to the new market or to serve new customers: a bagel store, a supermarket, a currency exchange, an English language taxi service. Tourists arrive in greater numbers; these are now the “travellers” looking less to discover and more to experience. Travellers have a need for more amenities than their predecessors, the explorers, and with the products of the entrepreneurial businesses as their “nutrients,” they will begin to visit the site, Wenceslas Square. Residents continue to be present, the products and goods are as interesting to them as they are to the travellers. Over time the system grows, becoming more stable as a result of more formalized processes, more specialization, and becoming less
flexible as redundancy is eliminated in favor of greater efficiency. Some of the entrepreneurial businesses grow, others close.

As the space heads into the late conservation phase, the entrepreneurs that thrived in a diverse, changing system give way or evolve to the specialists that aim to reduce variability, improve efficiency and create fixed methods of existing within a more stable and homogeneous environment. The specialist businesses are not specialty businesses; they are the commercial ventures that are driving to increased efficiency and specialization. They are the large international retailers opening large department stores that offer a variety of goods all in one, highly efficient, highly organized space, or the large hotels that appear along Wenceslas Square. Alternatively, these specialist businesses may specialize in products for only one population, such as mass tourists. Mass tourists, as opposed to their predecessors the explorer and traveller tourists, are those who visit a city such as Prague less for the experience and more to consume the sights. The city now has the tourist infrastructure and amenities, the “tourism nutrients,” required to attract a mass tourist population who are generally oriented towards sightseeing. It should be noted that as the city develops the service infrastructure, the explorer and traveller types of tourists do not disappear. They coexist with the tourists who arrive in the late conservation phase, although in smaller numbers, the explorers in particular may have moved off to the next up and coming tourist destination.

As the businesses change and tourists flock to the space, residents are less comfortable and have fewer reasons to visit Wenceslas Square proper and begin to decline in population on the square. In the late conservation phase, a system has become trapped and inflexible in its processes and specialization. Nimbleness and innovation is lost. A small disruption may be catastrophic: the system is finely tuned and functions within very narrow limits so an otherwise minor disruption causes the system to collapse rapidly. An economic crisis can keep tourists at home, or Prague could be replaced by another popular tourist destination. Either has the potential to disrupt a very highly connected system. This release frees resources and begins the process again.
However, the adaptive cycle is not immutable; loss of resilience is not irretrievable. By reintroducing redundancy or diversity into the system, the system can back-track from a late conservation phase on the brink of release to a more resilient state. This redundancy may be reintroduced through decentralization, or by diversifying a population. By orchestrating a transition, such as moving from fossil fuel to alternative fuels, a rapid movement through the release phase to reorganization into a new system is allowed. This controlled release preserves more of the potential that had been captured through the earlier parts of the cycle. Each of these moves that avoid or mitigate a catastrophic collapse of a system enhances the ability of the system, in this case the city, to absorb a disruption and return to its function without devolving into chaos.149

As emphasized, a city is not simple: it does not consist of one system, nor does it exist in an apolitical state. While the social, economic and environmental systems overlay and interconnect on an urban scale, a national or regional scale set of social, economic and bio-environmental systems also exist and affect the city. This is an example of the concept of “panarchy” described by Gunderson, Holling and Peterson within the context of the adaptive cycle.150 The importance of regional scale system must be acknowledged, and is referred to in the context of the national revolution and its effect on Wenceslas Square; in this thesis the manifestation of larger, regional scale influences are recognized in their effect at the site scale in order to simplify analysis and recommendations.

Reading a Resilient City: A Framework for Evaluating Wenceslas Square and Potsdamer Platz

It is worth reiterating here that a resilient city is one that can absorb disturbance and still retain its basic function and structure. A city, an overlay of urban systems, is as resilient as its interlinked components: the social, economic and bio-environment systems. What signs exist that reflect the resilience of a city? As designers considering actions to

reinforce or reintroduce resilience into an urban social space, it is helpful to have a model for understanding the resilience of the city and assessing the resilience value of design decisions that may be made.

A framework for understanding the resilience of a city reflects elements of the adaptive cycle, an interpretation of the writings of the spatial theorists and case studies of cities. The framework and analysis in this thesis are built on several principles surrounding space and its genesis considered within the concept of the adaptive cycle. Fundamentally, a city is a network of interlinked spaces and systems that affect one another; in the words of Deleuze and Guattari (1980 p9) a city is a rhizome, with heterogeneity and connectedness as the essence of the system. “Cityness” is a product of the relationship between the bio-environment, the economic and the social systems, and does not reside in any one of the systems in isolation. Lefebvre shapes the understanding that space is not merely an empty vessel to be filled with activities, it is a product of the social interactions that occur; in his words, “(social) space is a (social) product.” However, rather than accepting Lefebvre’s position that production of space is controlled by one dominant power, this thesis recognizes that power is diffuse, a theory advocated by Foucault. The implication of this departure from Lefebvre is that each individual has the ability to affect the production of space. Massey views space as formed at a moment and of the multiplicity of interactions that occur; space is not static but continually changing as the trajectories of the actors change and affect one another. As space is not static, neither is place, which arises from the individual’s perception of past imbued in that place. The past of a place is not only constructed of history, but of the present as well. Massey’s discussion of space reflects the complexity present in a post-socialist urban space experiencing change in populations, businesses and political structure.


In short, the operating basis for the model of resilience in an urban social space is the following: a city is a complex system of ever-changing spaces shaped by individual interactions between actors, their systems and their pasts; more than a site, it is a condition. That “condition” can be read to determine the degree of potential resilience in a city/space.

Resilience in an Urban Social Space: The Framework Questions

Complexity could render attempts to identify signals of a city’s resilience an impossible task. However, synthesizing the works of the urban spatial theorists, the urban designers and the scientists yields a limited set of questions that can guide both the reading of a city’s resilience and the response.

- How heterogeneous is this space? How varied are the people, the programs, the businesses? Do they mix? Does segregation occur at the level of small groups, or are there visible boundaries and barriers to interaction between entire populations or systems?
- Has there been a government role in the shaping of this space to mitigate a pursuit of accumulation without considering resilience? Is the process public and the basis for discussion and conflict?
- Is the space changing rapidly, responding to changes in individuals’ and systems’ needs?
- Is there a sense of place? Is it a static nostalgia for the past, or an evolving understanding of this place and its meaning? Is the sense of place becoming clearer, or is it fading?
- Are the relationships between the systems and the individuals clear? Are biosystems visible or are they hidden from sight and awareness; are there linkages across systems?

These questions are answered differently depending upon the systems observed, yet the answers point towards a degree and direction of resilience of the urban space. The characteristics of a more resilient space also indicate the responses that may be made.
to reintroduce resilience, short-circuiting the adaptive cycle. With these questions and signals established, the framework helps read the resilience of the case study public spaces: Wenceslas Square and Potsdamer Platz.
Figure 24: The adaptive cycle

Figure 25: Area of increased resilience
Figure 26: The Adaptive Cycle separated into slow fore loop and rapid back loop
Analysis of Resilience in Wenceslas Square

Using the framework established in the last chapter to describe and assess resilience, this thesis examines Prague’s ability to respond to future disruption, using Wenceslas Square as a model. In turn these findings will be used to shape the strategy for design interventions in other sites which are presented in Chapter 6. Wenceslas Square has demonstrated resilience in the past, during disruptions in the 1940s and 1960s. The social, economic and bio-environmental systems within the square have responded to the disruption and release sparked by the 1989 Velvet Revolution, passing through the reorganization and growth phases and on to the conservation phase. However, the condition of the social, economic and bio-environmental systems in the square today are materially different than on the eve of the revolution in 1989 as are the challenges to the resiliency of those systems.

It should be noted that this analysis focuses on resilience in an urban social space, Wenceslas Square, and the scale of the discussion is primarily that of a site scale focusing on the interactions of individuals and populations. As discussed in the literature review, the concept of “panarchy” recognizes that a system may operate at a number of different scales. When considering a difference between resilience of space at a site scale and at an urban scale, similar principles should apply. A collapse of the function of a social space within a city does not necessarily lead to collapse at the urban scale; an appropriate comparator may be the panarchy of a forest described earlier, where the slower moving system supports the reorganization of the smaller scale system.156 However, a national collapse is at a large enough scale that it affects the smaller systems that depend upon it for its stabilizing role.

Wenceslas Square’s resilience to disruption is compared to that of Potsdamer Platz in Berlin, a public space in a city also affected by the fall of communism. The resilience of each space has been shaped by its history and the economic and political systems that emerged after the fall of communism; a common disruption has led to different potentials for resilience in these spaces today.

The Social Resilience of Wenceslas Square

Recent history and the recollections of residents reveal a changing resilience of Wenceslas Square. The variety of people, programs and businesses that occupy the exterior and interior spaces of the square has increased and decreased in response to the political and economic conditions of the time. The resilience of the space has changed along with the changing character of the space. This section draws on the author’s interviews with residents, who are identified by first name and first initial of family name. The discussion guide for the interviews is included in Appendix A.

From the 1950s through the 1960s, the square was a place of entertainment, shopping, employment and political expression, as evidenced by the resident interviews. One resident, Eva V. now in her seventies, remembers that Wenceslas Square “was a place to meet other young people in the milk shops and sweet shops” along the square.157 As an employee of one of the state trade companies located on Wenceslas Square, Eva had both worked and played in the area. She recalls that the 1960s were “excellent and [Wenceslas Square] was a place full of life and amusements.” The square was lined with restaurants, a number of them self-serve (cafeterias) such as the restaurant next to Koruna “that had excellent food, was inexpensive, and gave left-overs,” the large cafeteria in the Hotel Juliš, or the modern “Automat in the building next to Bat’a.” Evenings on Wenceslas Square might be filled with dancing and dinner at the Fenix, or upstairs at the Alfa, two pasáž to the west of Wenceslas Square, and followed by a quick snack of klobása at one of the sidewalk stands before heading.158

Also during the 1950s and 1960s, crowds of Prague residents would gather on the square for important events. Eva noted that the funeral of Klement Gottwald (footnote: the Stalinist President of Czechoslovakia from 1948-1953) passed through the square, as did the processions for the Spartakiad and the May Day parades, until the latter were moved to the larger Letna Plain.159

These recollections emphasize a Wenceslas Square that was diverse in its program, yet more homogeneous in the people that gathered. Large events noted would draw families to attend as can be seen from news reels and photographs of the events; the evening activities catered to the young adults. The population was likely to be nearly all Czech and from Prague. At the time, tourism was limited; there were barriers to travel even among the nations within the Soviet sphere, so Wenceslas Square could be expected to be the domain of the Prague resident.160 These residents tended to be of the same social class, socialism having been largely successful in eliminating class differences.161

In the language of the adaptive cycle, the social system of Wenceslas Square in the 1950s and 1960s was in an accumulation or conservation phase. The square was not in the overly specialized, highly connected late accumulation phase that precedes collapse of a system. Rather, the square could be considered to have a moderate level of resilience; while population diversity might be limited, the social reasons for visiting the square were sufficiently varied to allow for the square to continue functioning in the face of a certain level of disruption. The events of Prague Spring in 1968 could be considered such a disruption. Although Warsaw Pact tanks travelled through Wenceslas Square, causing a degree of damage to the square and the National Museum, the space returned to its previous social function.

159 The Spartakiad were highly orchestrated mass physical exercise events that featured tens of thousands of participants.
During the 1970s and 1980s, Wenceslas Square remained an important social space for residents not only for entertainment, but for finding the right good for a special occasion. A hard-currency store, the Tuzex, was on a side street just off of the square. According to Charlotte S., a Czech-American resident of Prague, dollars could be used in the Tuzex, where luxury imported consumer goods were available, but only for Czechs with dollars or Deutschmarks. A number of residents noted that the square was lined with specialty shops, from delicatessens, to specialty cakes and other foods. Jana K. remembered that the square was “once a place with specialized [food] shops, such as the Dům Potravin.” Not only did adults visit the square, but, as Tereza M. recalls, as a teenager, she was frequently in the square for a variety of purposes. Wenceslas Square was a teenager’s hangout, where “we would get pizza at the bottom of the square, then sit by the statue behind Baťa and people-watch.” At the time, young teenagers could travel unaccompanied into the downtown to meet a date “at the horse” or for ice cream at the Světozor. The cinemas in the pasáž remained popular; the Lucerna, Světozor, and Blaník drew residents into the area.

According to residents, Wenceslas Square was a popular social space, in spite of a decline in physical quality. In the 1970s and 1980s investment was diverted away from maintaining properties in the center of Prague including Wenceslas Square, and toward the housing estates and industrial developments. According to accounts written at the time, the street facades were dingy; the pasáž that were built with extravagant mosaic work and glass in the 1920s and 1930s were dark and crumbling. A number of pasáž appeared closed off and some storefronts vacant, giving the square an air of neglect. Clubs were not as elegant in the past, but Wenceslas Square retained much of its mainstream social diversity. As of 1989, there was also some level of prostitution on the square although not to a great degree.

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162 C. Sommer, personal communication, September 15, 2010.
164 T. Mannová, personal communication, September 15, 2010.
On the eve of the revolution in the late 1980s, the social system in Wenceslas Square appeared relatively stable, moderately diverse and connected by a generally common purpose for visiting the square - to consume - to the extent that was possible in a communist society. Residents continued to visit the square for entertainment and shopping, although some of the shops were vacant. The social system present in the square remained in a phase of accumulation, perhaps moving into a late K-phase; one could argue it was less resilient than in the past. Socialist economies deprioritized consumer good and service production, leading to a limited set of options for residents’ consumption of these products; less heterogeneity existed. In a western city, the declining condition of the physical environment might have encouraged residents to seek alternate areas to satisfy their consumption needs; however, in socialist Prague the alternatives to Wenceslas Square were limited. The absence of alternatives reinforced the residents’ connections to the square.

In late November 1989, the primary function of Wenceslas Square changed dramatically. The larger political movements within Eastern Europe spurred a new set of individual and group actions, which played out on Wenceslas Square. It became a space of protest and revolution. The gatherings on Wenceslas Square and the time of the Revolution remains fresh with Czechs, and Prague residents in particular. The events are part of the deeper meaning and continuing identity of Wenceslas Square. Tomaš C. was part of the student protest on November 17 that ended with riot police called on peaceful protesters marching to the square; he recalls the feeling of danger in the area. He characterizes the time of the Revolution as another “layer in the sedimentation of events” that create the meaning of Wenceslas Square. By resident Tereza M’s account, the time of the Revolution was both exciting and frightening. With her parents, she traveled to the site of the “student massacre” on November 17 to leave flowers; as an eighteen-year-old ready to attend university the next year, the event was quite

personal.\textsuperscript{170} \textsuperscript{171} She recalled that the Monday after the student protest, the university had called a general student strike and the high school students joined the strike. Against the warnings of her teachers, who were worried about police teargasing students, the strike committee and many of the students from her school joined the protest on the square. Tereza remembers the excitement of knowing that Vaclav Havel, one of the signers of Charter 77, was going to speak, although she was not certain who he was.\textsuperscript{172} She recalls that at Wenceslas Square, people were certain something was going to change. It was a time and a location where the interrelationships of the Czechs present on the square created the possibilities of space that Massey describes in her writings.\textsuperscript{173}

After the student protests on November 17, through the nationwide general strike on November 28, the numbers of people on the square exploded. The dominant population was students, who were on the square throughout the day; however, in the afternoons, the crowds would expand to hear addresses by the leaders of the revolution. The people were there for a common purpose: communication. Wenceslas Square had become the place to hear the news of revolution. Word spread individual to individual, not through established networks, but through chance meetings in the square and the speeches from the balcony of the Melantrich Building.\textsuperscript{174}

In the language of the adaptive cycle, the collapse of the government foreshadowed the social system release seen on Wenceslas Square. After the change of government, the character of the social interactions on the square changed. The barriers against travel to and from the West were lifted and tourists streamed into Prague and Wenceslas Square; the number of tourists increased by 50% in the first few years after the revolution. For a time, the businesses on Wenceslas Square served both the tourist and the resident.

\textsuperscript{170} T. Mannová, personal communication, September 15, 2010.
\textsuperscript{171} The “student massacre” on Národní třída was the rumor that proved to be untrue several days later.
\textsuperscript{172} Charter 77 was a human rights document written and signed by a group of dissidents in 1977. Possessing a copy of the document was illegal, therefore it was circulated informally as a samizdat document (hand written and circulated). The signers of Charter 77 were prosecuted through much of the 1980s by the Czechoslovak government.
However, as the flow of tourists increased from approximately 1.3 million visitors in 1989 to 4.1 million in 2010, the social character of Wenceslas Square changed (see Appendix B).\textsuperscript{175, 176}

The change in character is reflected in residents’ comments regarding their perception of Wenceslas Square today. The attitude of the residents was summed up by Tomaš Č: ”It is not a nice place now.”\textsuperscript{177} Most of the residents interviewed remarked upon the visibility of prostitution and drug trade on the square. As Hoffman and Musil note, the rise of such activities is not uncommon and is a contributor to the displacement of residents from tourist areas within the city.\textsuperscript{178} Drug activities do occur on the square and in the passageways to the Metro; an informal needle exchange program was observed on the square and appeared to be at least tolerated by the police.\textsuperscript{179} Cheap flights from the UK facilitated a new segment of tourism: the British stag party. Wenceslas Square has all the amenities and entertainments that groups of rowdy, randy young Brits might desire. However lucrative their trade may be, their behavior on the square makes some residents uncomfortable.\textsuperscript{180}

Although there may be negative perceptions of groups of tourists on the square, most residents interviewed noted that the “busyness” of the square was the factor that made it unappealing. Jana K. commented that she would rather “hurry through the pasáž…. I won’t fight the crowd on the square.”\textsuperscript{181} That view was echoed by Tereza M. who noted that in addition to the sidewalks being busy, the tourists seem to be in a hurry; the

\textsuperscript{177} T. Charamza, personal communication, September 9, 2010
\textsuperscript{179} Noted at the top of the Metro stair in front of the McDonald’s in September 2010. Four police officers were nearby watching the process, which proceeded without much notice in general.
\textsuperscript{181} J. Korbelová, personal communication, September 14, 2010.
square is less of a place to linger.\textsuperscript{182} A rendezvous “at the horse” has also lost its appeal; rather than meeting on the square, Olga K. prefers the Lucerna pasáž, since there one can “hide from the outside” and it is easy to connect using public transportation.\textsuperscript{183} Wenceslas Square, like much of the historic core of the city, is increasingly divided into tourist and non-tourist zones, evidencing to a Prague for tourists and a Prague for locals, as Hoffman and Musil highlight.\textsuperscript{184}

In a survey of nineteen tourists conducted between September 2010 and November 2010, some visitors agreed with the residents’ perception of the busy nature of the square. Survey results are included in Appendix C. Many visited the square for one of the same reasons that Prague residents had historically traveled to the square: shopping, restaurants or the National Museum. Unlike the residents however, tourists were less likely to register if there existed drug or sex trade on the square. Nor were the visitors likely to mention the historic nature of the square, only three of the respondents mentioned the revolution or history present in the place. These new actors within Wenceslas Square have a more superficial connection to the square; it is difficult to create a deep connection to the place when visiting once or twice within the space of a few days, and with little connection to the past of this place.

Segregated, specialized spaces

Today, the primary activity on Wenceslas Square is the tourist trade, which creates a new space with different actors and interactions. Recall that Wenceslas Square has three zones: a public square, a semi-public edge, and the quasi-public arcades. These spaces are now occupied by different populations as described by residents and observed on site. The public square has become primarily a space of tourism. Interactions and connections are most often between tourists or a tourist and a service provider. Visitors frequent the restaurants, tourist-oriented “folk” markets, hotels and the National Museum on the square, rarely passing through the semi-public area of square-

\textsuperscript{182} T. Mannová, personal communication, September 15, 2010.
\textsuperscript{183} O. Kauka-Kroftová, personal communication, September 13, 2010.
side establishments to the interior quasi-public pasáž. The pasáž spaces remain more the domain of the residents.

For the residents, the pasáž provide a corridor for travel parallel to Wenceslas Square; one need traverse the square little if at all. Jana K. is one of many residents who use the pasáž to bypass the crowds on the square. The entrances to the pasáž may be on a side street off of the square, or be unappealing to tourists past a certain point, which effectively serves as a barrier to the ignorant or incurious (see figure 27).

Notably, one of few green spaces in proximity to the square is reached exclusively through the pasáž. The Franciscan Garden remains a place where parents bring children to play, and seniors sit in groups chatting or reading; few tourists wander in and happen upon this urban refuge (see figure 28). In contrast, limited seating on the square proper is provided along the exposed central spine; it is haphazardly arranged, public and serves as a place to rest for a moment (a tourist activity) rather than a place to gather, read the paper and converse with friends (a resident’s activity). The element of a protected social space appealing to residents is absent in Wenceslas Square, and an opportunity to draw a more varied population to the square missed.

Massey emphasizes that public spaces are “a product of, and internally dislocated by, heterogeneous and sometimes conflicting social identities/relations.” Sometimes the conflict is resolved with one actor removing from the interaction, creating a new space. To continue with Massey’s observation, she notes that “all spaces are socially regulated in some way, if not by explicit rules then by the…competitive regulation which exists in the absence of explicit controls.” It is this conflict and subsequent negotiation that leads to a genuinely public place. In Wenceslas Square, the social regulation has resulted in residents ceding much of the exterior space to the tourists and withdrawing to the internal areas of the pasáž or leaving the square for the new shopping alternatives that

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185 There is a precedent for a parallel culture during the Communist era in Czechoslovakia. Dissident Václav Benda coined the term paralelní polis or parallel community for the structures that came into being that “might supplant or humanize the existing official structures.” Václav Havel wrote that this community contributed to the “independent spiritual, social and political life of society.” From Skilling, H. G. (1991). Introductory essay. In H. G. Skilling, & P. Wilson (Eds.), Civic freedom in Central Europe: Voices from Czechoslovakia (pp. 3-34). New York: St. Martin's Press.

have emerged in the city.\textsuperscript{187} While the conflict and regulation resulting from the overwhelming burden of tourism leads to a genuine public space per Massey, the resulting public space may be less resilient than in the past.

Similar to an ecological system in the late accumulation (K) phase of the adaptive cycle, a sub-species, in this case tourists, has formed “self-organized clusters of relationships” that are mutually supportive.\textsuperscript{188} On Wenceslas Square, these close relationships are the connections between tourists and the service providers. The increasing homogeneity of the space and over-reliance on one social system on the square leads to decreasing system resilience. As characterized by Holling and Gunderson, a rigidly bound system is “an accident waiting to happen” waiting for a trigger to spur system collapse.\textsuperscript{189} The trigger for collapse of the social system in Wenceslas Square could be as simple as a shifting trend of the “in” tourist destination or as significant as a lingering economic crisis. However, the risk of collapse may be mediated slightly by the continuing presence of residents in the area of the square, although not on the square proper. Residents have not abandoned the Wenceslas Square yet, in part because the pasáž still retain some attraction for them. A common culture provides connections between individuals within a social system and increases resilience; similarly a common understanding of the meaning of Wenceslas Square may create connections between residents and this social space.\textsuperscript{190} A common culture allows for a degree of connection between strangers, this connection allows for the accumulation of a degree of social capital, the potential or wealth in a social system. These connections enable the resident “species” to persist longer even as the tourist species begins to dominate the resources available in the square.

\begin{itemize}
\end{itemize}
Social system comparator: Potsdamer Platz

Although Potsdamer Platz was subject to disruption arising from the changes in Eastern Europe in 1989, the situation and outcome in Berlin is substantially different than that of Prague and Wenceslas Square. Clearly, from the 1960s until 1989, diversity of populations in Potsdamer Platz was limited. The location was at the margin of West Berlin and empty other than a caravan camp, the odd Berliner scuttling from one portion of West Berlin to another, and a tourist’s viewing stand to peer over the Wall.191 192 193

With the fall of the Wall and the decision to return the German capital to Berlin, the character of the city and Potsdamer Platz in particular, changed considerably.194 Following the tourist boom and the spectacle of the Info Box that arose around the activity at Europe’s biggest construction site during the 1990s, Potsdamer Platz appears to have settled into a balance between tourist and resident that is not as segregated as in Wenceslas Square.

Like Wenceslas Square, Potsdamer Platz is at the end of a tourist trail through Berlin. However, unlike Wenceslas Square, the trail’s tourists have not overwhelmed spaces that residents used on an everyday basis. In part, the social system in Potsdamer Platz is less stressed by tourists than Wenceslas Square; Berlin is a less popular destination for international tourism than is Prague.195 Also, given that Potsdamer Platz was an expanse of vacant land, there was not an immediately preceding use of the space that residents would recall fondly. Perhaps most importantly, however, the program defined for Potsdamer Platz created an area that was diverse by design.196 Transport, retail, residential, office and entertainment functions were incorporated into the guidelines for

192 I. Lenhardt, personal communication, January 22, 2011.
194 Ladd, B. (1997). The ghosts of Berlin: Confronting German history in the urban landscape. Chicago Ill.: University of Chicago Press. 226
195 Both cities are extremely popular cities for domestic and international tourism; in Euromonitor’s January 6, 2011 press release Prague ranked 24 and Berlin ranked 36 in the number of international arrivals in 2009.
the original design competition and now serve to draw both resident and tourist into Potsdamer Platz. The final, winning design developed 340,000 square meters of space allocated across a spectrum of uses: 56% office space, 19% residential units, 11% retail, 9% hotel and 5% cultural space.

The Arkaden and the Sony Center retail areas are quasi-public places, like the pasáž in Wenceslas Square, yet the Sony Center in particular acts more as the gathering area, in the tradition of European public squares, attracting a relatively diverse set of actors. Sony Center is similar to a public square in form and serves as a market place, but it is clearly a branded, privately-owned space. Entry to the space is limited, but does not feel controlled. The entrances are openings between buildings, narrow, but full height. The Sony Center has been described as a place of seductive power; the design and program pulls resident and tourist alike into the space and offers a set of choices to consume.

The final design shifted the focus of the social interaction from the square to the Alte Potsdamer Straße that serves as a central piazza. The street is tree-lined, with narrow traffic lanes and wide sidewalks that may be filled with tables and tourists. Cultural activities are focused in this portion of the site. As an example, Berlin’s World Children’s Day event in September 2010 extended from the transportation hub, along Alte Potsdamer Straße to the terminus at Marlene Dietrich Platz. The entire length of the street, booths attracted and entertained both children and parents.

The qualities of the built environment in Potsdamer Platz contribute to the intermingling of tourists and residents. West Berlin had a tradition of planning by experts with an aim

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to build a city, rather than merely develop a site.\textsuperscript{201} This tradition became the prevailing approach in a reunited city. The land use plan for the city considers not only the economic interests of developers but the aesthetic and social needs of the city and its residents. The attitude of Berliners toward land use and landscape planning, as well as the design competitions and opportunity for public comment all shaped the future of the city and Potsdamer Platz.\textsuperscript{202} The design competition and the corporate sponsors’ headquarters design decisions contributed to defining a place that was both an architectural draw and an inclusive space. Development in Potsdamer Platz was unusual; starting from a clean slate, the area was planned as a whole and has created a collection of spaces that encourages intermingling of different populations.

Reflecting upon Massey’s discussion of public spaces noted earlier, the conflict between residents and tourists has been resolved, allowing both to occupy the spaces of Potsdamer Platz.\textsuperscript{203} It should be noted that with few spaces within Potsdamer Platz are public, most are quasi-public; they are privately owned but function as a public space. While areas of the site may cater more to one group versus the other, such as the office space or the Sony Center, in general, throughout the core of the area both groups seem to co-exist. One “species” does not dominate the space, allowing both for the breadth of diverse interrelationships that creates heterogeneity and multiplicities of public.\textsuperscript{204} If examining Potsdamer Platz through the lens of the adaptive cycle, the public space is along the continuum between growth (r) and accumulation (K). The occupants of the place and their purposes are diverse, but within limits. The conditions of Potsdamer Platz, the allocation of program within the site in particular, supports the viability of certain populations and not others. Today’s Potsdamer Platz is not a place for the poor, nor would the caravan residents of the late 1980s be welcome in the new platz.


\textsuperscript{203} Doreen Massey does not particularly public space distinguish based on ownership, her writings focus access which allows interrelationships between different individuals.

Economic System and Resilience in Wenceslas Square.

As with social space, the economic space in Wenceslas Square has moved through the phases of disruption, reorganization and growth, and into late conservation. Wenceslas Square has been a commercial center throughout its history, with its first incarnation that of a cattle market. While the businesses found on the square would not be expected to represent the breadth of economic activity in the city, they reflect the role of an industry that represents 10.4% of the Czech Republic GDP, tourism.205

Pre-1989 businesses, which were state-owned, included specialty stores, department stores, hotels, and restaurants on the square proper.206 After the Revolution, the economic environment changed radically. The elections in 1990 placed a right-of-center, free-market government in power, with Finance Minister, later to become Prime Minister, Vaclav Klaus leading the transition to a capitalist economy.207 Restitution of state-held property was one of the government’s earliest moves; by 1992, many of the properties around Wenceslas Square were returned to their pre-1948 owners. Prime real estate in the city center was quickly sold to developers; other properties fell into further disrepair as new owners found they did not have funds to renovate their properties.208

Redevelopment of the central areas of the city proceeded rapidly and with little oversight, driving many residents out of the center and away from Wenceslas Square. In spite of ostensibly having a master plan in place, the municipal government exerted little planning control over redevelopment. The prevailing attitude considered forward planning a vestige of the socialist system; developers readily received ad hoc variances

to the plan, diminishing the long term effectiveness. New office buildings were built and residential units converted to office space to respond to the demand for commercial space in the center of the city. The focus on office space development reflected the flow of private and foreign capital into the city and the high rents paid for Class A office space. In the early 1990s, demand was for small office spaces, on the order of 500 square meters, for the new branches of international corporations establishing a presence in the city; by the mid-1990s, the demand shifted to larger office spaces as the existing businesses continued to grow. Only at the end of the 1990s did the municipal government begin to exert some control over the rate of residential conversion.

During the first decade following the Revolution, the residential to office conversion and residential renovation to international standard affected the center of the city including the area around Wenceslas Square, putting rents beyond the reach of most Prague residents and forcing many to the housing estates in the outskirts of Prague.

Investment in retail properties followed the office boom, leaving a span of almost ten years before the stores and pasáž on Wenceslas Square began to be renovated. In the intervening decade, vacant storefronts on the square housed interim new uses: low-end retail, vegetable markets and clubs. Small scale, entrepreneurial economic activity emerged. “Suitcase merchants” would set up a table in a doorway selling the goods they had informally imported. More formal signals of a changing economic system

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emerged. Residents quickly recognized the signs of change as the House of Shoes became Bat’a again and currency exchanges appeared on Wenceslas Square.

As large scale retail investors entered the market in the late 1990s and tourism continued to rise, the local stores were displaced. Many of the specialty stores on Wenceslas Square, the delicatessens, the milk bars and the sweet shops, that had catered to a resident clientele disappeared. Resident Olga K. summed up the change succinctly: “there were more food stores in the past, now there are ‘things’.” Some shops that remained followed their Czech customers and moved into the pasáž where rents were lower. Major bank headquarters remained, although bank ownership may have changed. The large bookstores on the square also survived, adapting by complementing their Czech language offering with large tourism sections and books in French, Spanish, and English. However, in general, the economic diversity in the square was narrowing. By 2010, the establishments on Wenceslas Square constituted a collection of hotels, currency exchanges, restaurants, clubs, cabarets and casinos that were more clearly targeting the tourists on Wenceslas Square. Today, fifteen souvenir and jewelry shops line Wenceslas Square, complemented by eleven currency exchanges. Three new hotels, the Juliš, the Rokoko and the Ramada have opened on the square, bringing the total to seven. A weekend tourist market appeared at the foot of the square. The changed retail and entertainment environment on the square served to further local/tourist segregation. Within the last five years, major international retailers have entered Wenceslas Square; these may be the sources of a level of reintegration of the square. If these retailers provide goods unavailable elsewhere in Prague, some segments of the resident population may return to the square.

The change in the economic system on Wenceslas Square parallels the change in the social system. In the years shortly after the Revolution, small, entrepreneurial businesses dominated the new entrants into the market. Along Wenceslas Square, businesses that emerged in the vacant storefronts and doorways complemented the businesses that survived the disruption of the Revolution. The availability and variety of

217 O. Kauka-Kroftová, personal communication, September 13, 2010
goods attracted residents to the square, just as the flow of tourists began. The public spaces created by the interactions between residents and tourists, and between the shopkeepers and residents and tourists were rapidly changing. The economic system was in the reorganization (α) to growth (r) phases of the adaptive cycle, and highly resilient. However, by 2010, the businesses on the square are overwhelmingly dependent upon the tourist trade; they are balanced to a limited extent by the establishments within the pasáž that attract residents. On the whole, the economic system in Wenceslas Square is homogeneous, relying upon and tightly connected to the tourist element of the social system. Resilience is low and the system is in the late accumulation (K) phase of the adaptive cycle.

Economic system comparator: Potsdamer Platz

As mentioned earlier, the program defined in Berlin’s competition document mandated a collection of retail, commercial and residential space, a mixed use plan that was intended to create a diversity of populations and uses, to “counter the functional homogeneity of the Kulturforum.”218 219 When considering the composition of the businesses housed in the public areas of Potsdamer Platz, the objective of creating a successful economic space appeared to have been achieved. Although the covered shopping mall, the Arkaden, has been criticized as an “American attack against occidental urban culture,” it is one of the most successful shopping malls in Berlin (Sewing/Enke, 2000 p56).220 Alte Potsdamer Straße is lined with cafes, restaurants and retail catering to residents and visitors.

From an investor’s perspective, Potsdamer Platz may be less successful. The Sony Center has changed ownership twice since it was built, each time for a price lower than the last purchase price (Deutsche Welle, 2008; Clifford Chance, 2011). The nineteen Daimler complex buildings were also sold to a Swedish bank in 2007. The sales may

218 Kulturforum lies adjacent to Potsdamer Platz and houses several of the former West Berlin’s cultural venues.
have reflected the perception that Potsdamer Platz had failed to become the new commercial center for the city.\(^{221}\) Although the development may not have provided the returns the investors originally expected, by most accounts the area is a commercial success.

When using the now familiar language of Massey and of Gunderson and Holling's adaptive cycle, the economic system within Potsdamer Platz supports social interactions between residents and tourists who visit the square for a variety of program opportunities. The social spaces created reflect the multiplicity and variety inherent in the interactions between the individuals passing through Potsdamer Platz, contributing to resilience in the economic space. However, the repeated sale of the properties for declining prices, may hint at an element of the Potsdamer Platz development that is sliding into collapse (Ω). One can imagine a situation where a spiral of lower rents, deferred maintenance and a general decline could lead to residents or tourists looking for alternatives to the entertainment and shopping; this level of disruption may exceed the ability of the system to return to its previous function, leading to collapse of the public space.

The Bio-Environment?

During the decades before and after the 1989 Velvet Revolution, the primary bio-environmental concern in Prague was air and water quality. Air pollution was a particular problem, a combination of polluting Trabants and old Skoda cars, industrial emissions and a predominance of coal-fired residential heating contributed to a high level of air-borne particulate pollution. The city has had success in decreasing sulfur from 140 \(\mu g/m^3\) in 1996 to 20 \(\mu g/m^3\) in 2007 as coal burning furnaces were replaced in the city. However, NO\(_2\) emissions have been more challenging; rates remained fairly constant at 120 \(\mu g/m^3\) during the same period, with increases in automobile use offsetting any gains in other areas.\(^{222}\) Minimizing impervious surfaces, addressing


\(^{222}\) Prague Strategic Plan, Resolution Number 22/42, 11 December 2008, Prague Municipal Assembly. (2008). 76
surface runoff or limiting an urban heat island effect are a lesser priority for city
government and are not addressed in Prague’s strategic plan.223

The city has natural elements of the city landscape including the Vltava River, the large
parks and forested areas, a number of which are included in a land protection plan that
not only reflects the city objectives but the Natura 2000 Network. Natura 2000 is
network of landscape areas protected by European.224 However, it would appear that in
the central urban squares, vegetation serves almost exclusively as decoration. Petr
Franta, an architect practicing in Prague, noted that awareness of the functional potential
of green roofs and urban vegetation in mitigating urban environmental concerns is
emerging but not yet.225 Some architects and planners incorporate plantings in a
functional and decorative fashion; these are individual, philosophical choices and are not
encouraged or subsidized by local government.

Wenceslas Square reflects these societal priorities vis-à-vis the bio-environment. The
visible elements of the bio-environment are decorative: trees line both sides of
Wenceslas Square and gardens interrupt the central path through the center of the
square. The gardens are formal, manicured and maintained for their decorative value;
they also span the width of the central area of the square, driving pedestrians into the
roadway. The competition winning design for a new Wenceslas Square reflects the
traditional view of the decorative role of vegetation in the city (see figure 29). According
to the firm responsible for the winning design, Ciglar/Marani, the city’s main interest was
to reintroduce mass transit along the half-mile square and create a pleasing strolling
environment for shoppers and “improve the image” of the Wenceslas Square.226
Encouraging a visibly functional bio-environment was not part of the city’s agenda; the
design reflected these priorities.

223 Prague Strategic Plan, Resolution Number 22/42, 11 December 2008, Prague Municipal Assembly.
(2008).
and green space system: Berlin and Istanbul (pp. 43-53), Berlin: Mensch & Buch Verlag. 48
While applying Massey’s concepts of interrelations that create space to a bio-environmental system may seem unusual, when one considers that individuals may interact with such a system, the connection is more plausible. While decorative vegetation may be admired, a bio-environmental system that functions as a means of managing storm water or serves as a habitat for wildlife engages an individual on a different level, perhaps cerebral or emotional. If, as Massey maintains, our interactions with people and the subsequent creation of space is a product of our individual experiences, this deeper quality of interaction leads to a different space. Today, given the decorative nature of the bio-environment in Wenceslas Square, resilience is minimal. The plantings in the center of the square are tightly connected and rely upon the care and maintenance by the city; the trees in the grates along the sidewalks are also quite susceptible to disruption of their growing cycle by pollution in the city. In addition to the homogeneity of the decorative plantings, the natural processes on the square have been engineered and hidden, eliminating an opportunity for social-biological interaction. Limited interaction between human and functioning bio-environmental systems within the city reinforces beliefs that “nature” in the city is to be found only in parks and other curated areas. Rendering the connection between the social system and the bio-environmental system visible can promote a greater degree of ecological awareness, as well as enhance mutually beneficial relationships between the social, economic and bio-environmental systems of the city. Increased exposure to these relationships enables people to comprehend their own ability to affect the bio-environmental system; for urban dwellers, this interaction may bridge the perceptual divide between the city “here” and the environment “out there” as discussed earlier.²²⁷

Bio-Environment Comparator: Potsdamer Platz

In Potsdamer Platz, a functional element of the landscape is made visible. The scheme used to manage runoff from the Daimler-Benz portion of the site is highly engineered, but the system is used as an opportunity for education and interaction with the users of the area (see figure 30, 31). The use of a functional landscape to manage storm water runoff and decrease the extent of impermeable pavement is mandated by Berlin’s

Landscape Program, which was adopted in the 1980s and extended to East Berlin after the fall of the Wall. The purpose of the plan is, according to Berlin Senate Department for Urban Development, to "safeguard and improve microclimate and atmospheric hygiene, safeguard and develop soil function and water balance, create and enhance the quality of the plant and animal habitat, and improve the residential environment." In certain areas of Berlin, including the Potsdamer Platz area, these legally-binding guidelines govern the balance between permeable and impermeable surfaces and are accorded the same importance as land-use plans. While the degree of pervious surfaces are dictated, the choice of a visible and aesthetically pleasing means of accomplishing the regulatory objective was in the hands of the developer. This design choice encourages interaction and reinforces the relationships between people and the bio-environment in Potsdamer Platz.

Using the framework questions to assess resilience of an urban social space

A series of questions was formulated in the last chapter to provide a means of assessing resilience in an urban space, and here shape a summary of the preceding analysis of Wenceslas Square today.

How heterogeneous is this space? How varied are the people, the programs, the businesses? Do they mix? Does segregation occur at the level of small groups, or are there visible boundaries and barriers to interaction between entire populations or systems?

Perhaps the best characterization of the social system in Wenceslas Square is that it is generally segregated, with tourists and residents occupying different areas of the square. Interaction is limited and as a result the social space in the square has limited resilience. The economic system mirrors the limited resilience of the social system in great part because the two systems are both dependent upon tourist presence in the

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square. The resilience of the bio-environment in the square is very low; the decorative vegetation in the square does not serve a larger function, nor is it connected to other green sites within the city. A small disruption could lead this system to collapse.

Has there been a government role in the shaping of this space to mitigate a pursuit of accumulation without considering resilience? Is the process public and the basis for discussion and conflict?

Unlike the competition and planning process defined and guided by the Berlin Senate for the development of Potsdamer Platz, development on Wenceslas Square proceeded with minimal consistent oversight by the municipal planners. Although the municipal plan created in 1986 prior to the Revolution remained in place, it was ill-suited for the new situation and developers could easily avoid the limitations of the document. Because of the ad hoc variances granted, there was no public discussion; development rarely considered a greater public good which could be highlighted with an open forum for discussion and critique of plans.230 Today a strategic plan is in place, and the revised planning processes in Prague are more robust than in the past.231 The process and regulations has the potential to reintroduce a level of resilience into the economic system and bio-environmental system within the square, provided that the overall city strategy (which drives the planning regulations) is not overly dependent on a single industry to support the future of the city.

Is the space changing rapidly, responding to changes in individuals’ and systems’ needs?

Wenceslas Square changed rapidly during the 1990s as the social and economic systems present in the square reorganized after the Revolution. Entrepreneurial

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businesses emerged and both residents and tourists were drawn to the square. The pace of change has slowed in the square as the social and economic systems have stabilized and Wenceslas Square has become a tourist-oriented space.

Is there a sense of place? Is it a static nostalgia for the past, or an evolving understanding of this place and its meaning? Is the sense of place becoming clearer, or is it fading?

Wenceslas Square holds a national meaning to Czechs, a meaning that was built across the years when the square was the site of invasion and revolution. As a cultural connection for the residents of Prague using the site, this national meaning has contributed to resilience. A common culture contributes to resilience by providing a level of connection between people who are strangers. A social system accumulates wealth in the form of social capital, which is the networks that are created through a history of interactions among individuals. In the absence of such a history, a common culture serves to establish a degree of connection and social capital between individuals.232 However, residents with a common culture and understanding of Wenceslas Square as a place are not the primary occupants of the square today. With an increasing temporal distance to the events of 1989, the history of the place means little to the site’s tourists. As the meaning fades for the primary users of the site, Wenceslas Square loses a degree of resilience.

Are the relationships between the systems and the individuals clear? Are bio-systems visible or are they hidden from sight and awareness; are there linkages across systems?

The connection between the social system and economic system and the tourists on Wenceslas Square is clear. It is also very strong and nearly overwhelms residents’ connections to the square. The functions of the natural processes on the site are hidden

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from view, severing any potential connection between bio-environment and social or environmental systems.

Overall, Wenceslas Square today demonstrates little potential for resilience (see figure 32). The over-reliance on one social and economic system to drive the life and prosperity of the square, the tourist system, leaves the square at risk of social and economic collapse should that population leave from the area. The bio-environmental system on Wenceslas Square is decorative, with the natural systems that could be present on the square hidden from view. In contrast, Potsdamer Platz demonstrates a greater degree of resilience per this framework. There is an extensive interrelationship between tourist and resident, if merely because one population has not withdrawn from the site. Potsdamer Platz also has a better developed bio-environmental system present on the site, which engages visitors and makes the function of the system visible to the population using the space. The next chapter discusses design interventions aimed at addressing the causes of the segregation of Wenceslas Square and reintroducing a level of resilience into the setting.
Figure 27: Entrance to the Alfa pasáž – few enter from Wenceslas Square

Figure 28: Franciscan Garden which may be reached only through the pasáž
Figure 29: Competition winning design for Wenceslas Square by Ciglar/Marani
Figure 30: Family crossing *Urban Waters* collection pond on stepping stones

Figure 31: Panorama of collection pond at Daimler properties
Figure 32: Relative resilience of Wenceslas Square and Potsdamer Platz
Designing Resilient Public Spaces

At the core of this chapter is this fundamental question: how can design create the conditions to encourage resilience? To reiterate the common definition, resilience is the ability of a system to absorb disturbance and still retain basic function and structure. For most public spaces, three systems will interact within a space: a social system, economic system and bio-environmental system. A resilient public space balances these systems and maintains a diversity of peoples and uses, so that diminution of one population or function, or a political or economic disruption does not lead to a collapse of an entire system. Design can create a setting for a diverse set of interactions between individuals and systems, thereby creating a rich space.

The framework established in chapter 4 and the subsequent analysis of Wenceslas Square compared to Potsdamer Platz in chapter 5 have highlighted factors that can affect resilience within an urban social space. With knowledge of the adaptive cycle and resilience, a designer can choose specific strategies to enhance the resilience of an urban social space. Design decisions that serve to create an opportunity for different individuals and different systems to interact, will enhance complexity and heterogeneity, yielding a resilient space.

The social, economic and bio-environmental systems within a city and a public space are intertwined. Literature on resilience and sustainability often focuses only on the social/bio-environmental pair. Yet in designing a public space all three systems affect resilience and must be consciously integrated when making design choices. This chapter will discuss means of improving the resilience of the social system as the lynchpin for reintroducing resilience to the systems resident in Wenceslas Square. The

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The role of regulation will be discussed briefly, based on the observation that the different regulatory environments present around the development of Wenceslas Square and Potsdamer Platz drove different outcomes with respect to resilience.

Role of regulation

Regulations establish a guide and limits within which design decisions and development decisions may be made. Used as a tactic supporting the strategic goals of a city, regulations reflect the priorities of the municipal government. These public framework documents encompass a set of incentives and sanctions to encourage behavior, in this case design decisions, in the interests of the city.\textsuperscript{234} Clearly, if regulations are to encourage a comprehensive systems view for design of an urban space, public officials must also recognize the complexity of the context for the design and shape guiding regulations accordingly.

The regulations in place during the development of Potsdamer Platz, in this case competition guidelines, were the product of a history of planning and a commitment to planning present in Berlin. The competition guidelines also reflected the political philosophy of their author, a member of the Green party, and were formulated reflecting a set of ecological principles.\textsuperscript{235} The guidelines dictated the quality of the urban character, emphasizing pedestrian transit and an aesthetic connection to the architecture of Berlin’s historic inner city.\textsuperscript{236} As described in the previous chapter, the regulations in place in Potsdamer Platz led to a series of decisions that resulted in a relatively resilient social space. While the space does not include all segments of a social system present in the city, Potsdamer Platz is not overly reliant on one population for its continued function as an urban social space; programming attracts Berliners of all ages, although not all income groups, to complement the influx of tourists and weekday office workers. In Berlin today, the robust landscape planning program and land-use


planning encourage a comprehensive approach to development in the city that considers the interactions between social, economic and bio-environmental systems,

The segregation of Wenceslas Square, where tourists occupy the exterior spaces and residents the interior spaces, lessens the social resilience of the square. Design decisions that support integration of populations using the public space can serve to reintroduce a degree of resilience to the system. The objectives of the design interventions and precedents discussed in this chapter are focused on breaking the barriers between different users of Wenceslas Square and introducing qualities of a good public square. Today, physical barriers within the square, a lack of spaces to encourage social interaction, a narrow offering of retail and service establishments and an absence of an active bio-environment on the square all contribute to the segregation present. Design that reinforces the plaza or square nature of this space serves to improve resilience by the measures discussed earlier.

_Critique of the future design plans for Wenceslas Square._ The 2005 competition winning proposal for the design of Wenceslas Square does little to encourage interactions between all the systems present on the square. As related by a principal of the firm responsible for the design, the city had two primary objectives for the space: reintroduce a tram line along the length of the square so that people travelling from the bottom to top of the square need not walk the half mile, and to improve the image of the square.237 The city was concerned that the image suffered as a result of the same issues that interviews with residents and tourists highlighted earlier: crowding along the sidewalk, the presence of a drug and sex trade on the square, and the quality of the retail establishments. The Ciglar/Marani design integrates the tram line that the city required, decreases parking and traffic flow through the square, widens sidewalks and integrates additional tree canopy into the site.

When evaluating the design to assess its potential to enhance resilience of Wenceslas Square, it becomes clear that some city’s objectives serve to reinforce rather than reduce barriers. The new tram line that bisects the square along its length discourages

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237 V. Marani, personal communication, September 7, 2010
pedestrian travel across the square, offsetting some of the gains achieved by minimizing automobile traffic. The emphasis on reintroducing tram transit the length of the square introduces a new barrier to interactions between populations on the square by diverting a portion of the pedestrian activity. The proposed design widens sidewalks with the intention of enhancing the pedestrian experience; places to linger are absent. In the future Wenceslas Square, the characteristics of a great street are emphasized, rather than the characteristics that make for a great plaza or square. Although Wenceslas Square has the form of a street, to reintegrate populations and encourage a multiplicity of interactions among them, a square better serves the objective of enhanced resilience.

Reintroducing resilience to Wenceslas Square.

A series of design considerations can shape a new more resilient Wenceslas Square that functions as a square, rather than a street, attracts residents back to the center of the square from the pasáž, and continues to appeal to tourists visiting Prague. It should be emphasized that design decisions should consider not only residents and tourists as general populations, but recognize the age and income gradation within the resident group in particular. An American example, the Santa Monica Third Street Promenade, can serve as a precedent for this type of street to plaza conversion. In their book *People Places*, Marcus and Francis discuss the successful elements of a street-plaza.

Integration of formal and informal seating; achieving a pedestrian scale throughout the space; program in the form of food, entertainment and vendors to draw people to and through the site; and the incorporation of water features all contribute to the success of the space. These are generalizable guidelines, which when considered in the context of Prague and Wenceslas Square can address some of the resilience challenges in the space.

Remove physical barriers. Physical barriers abound on Wenceslas Square. Roadways limit access across the square and decorative plantings interrupt the pedestrian path along the spine, forcing pedestrians into the roadway to continue down the square. The sidewalks are pinched along their length by a number of kiosks, making the sidewalks difficult to negotiate. The dimensions of the space and the limited seating inhibit use of the center of the square as social space.

Gehl discusses the importance of integrating activities and functions within an urban space in order to create richness. He emphasizes the value of multifunctional areas, especially places in an urban setting where both pedestrians and automobiles occupy the same zones. Whether applying the concept of a woonerf or minimizing traffic on the square, allowing pedestrian traffic to flow across the square, using both the length and width of Wenceslas Square can improve integration of the populations (see figure 33a).

Encourage lingering. If pedestrians can cross into the center square, providing a series of areas to encourage lingering and interaction enhances the resilience of the space. Based on the popularity of the Franciscan Garden just inside the pasáž, creating a collection of smaller rooms along the central spine of Wenceslas Square can provide semi-public social areas that are in demand in this area of the city. These smaller, enclosed social areas provide a perception of separation from the publicness of the square (see figure 33b).

Attractions draw residents back into the square. Eliminating automobile traffic from the perimeter opens the center of Wenceslas Square for a diversity of program. The program must appeal to tourists, but in this case, it is essential that program also lure residents from the interiors of the pasáž back into the center of the square. The attractions of Wenceslas Square must also compete with other program emerging in the city. Interviews with residents revealed a set of activities that they seek in other parts of Prague, some of which could be brought to Wenceslas Square to encourage residents to return to the square. Prague resident Olga K. who still enjoys the pasáž, travels to other

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areas of the city for activities for her family such as farmer’s markets or cultural program.243 (see figure 33c)

**Seasonal and occasional activities to attract a diverse population.** As ordinary as a farmer’s market may be for Americans, the organic and farmer-centric Saturday markets familiar here are new to residents of Eastern Europe. Prague hosted its first set of outdoor summer *farmářský trh* in 2010.244 During their inaugural season, market sites were primarily in more affluent areas of the city and were extremely popular. According to Professor Jana Spilková who is studying the social impact of these new markets, the first *farmářský trh* sold out within an hour, and had trouble accommodating demand throughout the season. Resident-oriented farmers’ markets, flea markets, and outdoor concerts would complement the tourist-oriented folk market, attracting residents back to the square, increasing interactions between populations, and thus increase resilience of the space.

**Provide a retail business incubator.** As a complement to seasonal activities and markets aimed at residents, reintroducing smaller, more entrepreneurial businesses to the square, again aimed at the resident population, can enhance the economic system resilience in Wenceslas Square. These businesses reintroduce a level of diversity to the system that is absent with the preponderance of tourist oriented stores and large international retailers, and are in keeping with the commercial heritage of this space. Kiosks, stores at the subway entrances, and smaller, incubator retail spaces on the square could serve as locations for these potential entrants. These small spaces could be the first outlet for a developing business or an expansion of a business from elsewhere in the country. Although a government role may be necessary to encourage development of incubator sites on the square, by providing unusual products not available elsewhere in Prague, residents may be attracted in greater numbers.

**Bio-environment for attraction and interaction:** Incorporating an active natural system in the social space on Wenceslas Square encourages interaction between populations...
the square and between the individual and the bio-environmental system. As made clear in water features throughout the world, including those in Millennium Park in Chicago, few people, children in particular, can resist the attraction of water. The Dreiseitl water feature in Potsdamer Platz is a precedent for incorporating a functional bio-environmental system into Wenceslas Square. Integrating a storm water management system and wildlife habitat in the space encourages interaction between the social and bio-environmental systems. Dreiseitl’s design, Urban Waters, provides an attraction, a place to linger and an education regarding the interplay between the built environment and natural processes. The larger area of the water feature is lined with cafes, and the juxtaposition of the vegetation against the hard edge of the stone materials in the platz creates visual interest. Although signage regarding the function of the Dreiseitl design is limited, it was sufficient to stop one visitor to Berlin to take a moment to read the information and remark on the complexity of the system. Uncovering and featuring the natural processes in Wenceslas Square can play a functional and educational role and increase awareness for both resident and tourist (see figure 33d).

**Bio-environment for energy conservation.** Although most of the design interventions described to this point are aimed at the ground plane, the green roof system in Potsdamer Platz is an essential element of managing the impact of the built environment on the city. A similar scheme can prove valuable for Prague. Periodic flooding throughout Eastern Europe during the last decade, including the Vltava’s disastrous flood of 2002 that affected large swaths of Prague and disrupted the tourist trade, has emphasized the risks of ignoring natural systems in development.

Although at first glance incorporating a set of green roof systems in Wenceslas Square may seem impractical, opportunities do exist as renovation of buildings on the square continues. As of September 2010, a completely new structure is being constructed on the square, and at least one other is undergoing a complete interior renovation. To date, few designers incorporate functional bio-systems elsewhere in the city. One notable exception is Petr Franta’s design for a green roof over the rail yard at Prague’s train station; his is one of few examples of an individual architect’s focus on integrating
Appropriate regulation will guide design decisions toward more environmentally sensitive options. As Prague revisits its planning and regulations, one would anticipate that improving the energy efficiency of buildings within the city receives scrutiny. Although the Prague Strategic Plan mentions only “sustainable development” and is silent on “green” building, presentations by the Prague City Development Authority emphasized their projects that improve “the quality of life for Prague residents as well as minimize the ecological impact of development.”


Prague Strategic Plan, Resolution Number 22/42, 11 December 2008, Prague Municipal Assembly. (2008), 29

Figure 33: Increasing resilience of an urban social space at Wenceslas Square
Enhancing Resilience in an Urban Social Space:

The transformations in the public spaces of post-socialist cities provide insight into the factors that shape the richness and diversity of the space today and enhance, or limit, its resilience to future disruption. Studying the case of Wenceslas Square provides insights for other urban social spaces in other cities, whether post-socialist or capitalist. Many cities face the same challenges of ensuring the continuity of urban social systems present in their public spaces. Tourism and development place pressures on cities, and as observed from Wenceslas Square, allowing public spaces to become the exclusive domain of a tourist population puts the resilience of that place at risk. Although an unusual situation in that it was a vacant site pre-development, Potsdamer Platz illustrates some of the regulatory and design decisions that help shape an urban social space that responds to the needs of a number of populations.

Ensuring resilience within an urban social space begins with two critical steps: assessing the resilience of the space today, and acting upon those findings by designing a more resilient social space. The framework of questions based on Massey’s writings on the production of a social space of possibility and the concepts of the adaptive cycle as developed by Gunderson and Holling provide a useful guide for assessing the social resilience of an urban space. The process of developing this model as described in chapter 4 provides insight into the drivers of resilience in a public space; the application of the model after an analysis of Wenceslas Square demonstrates the type of information that can be used in shaping design interventions. The series of interventions discussed in chapter 6 provide a broad set of actions that a designer may take to create a space that may absorb and rebound from disruption.

The discussion of resilience in an urban social space does have some limitations. A space can be resilient, but not completely inclusive. When considering the adaptive cycle, there is a range within which a system exists that has a relatively higher level of resilience.\textsuperscript{252} Systems residing in the reorganization phase, through the growth phase and into the early accumulation phase demonstrate resilience. However, as discussed, as a system grows and begins to accumulate, heterogeneity starts to decrease. In a social space, this means that some of the populations that should, or could use the space, are no longer present. This system is still resilient, but it not socially inclusive. Recognizing this limitation of the model as described in this thesis is valuable and provides a basis for further refinement of the model to more fully consider and address issues of social equity.

This thesis has also focused on the resilience of an urban social space; the analysis and model have been derived primarily at a site level. As has been noted, systems operate at a variety of scales. This model has been concerned with the lowest level of scale, at the individual or group. However, a site clearly does not exist independent of the urban fabric and habitat surrounding it; events and disruptions in the adaptive cycles in other places and at other scales can affect the adaptive cycle of Wenceslas Square. Recognizing this interplay of scale is important in considering how design can improve resilience of an urban social space. No site exists independent of its context, the greater scales of systems; although this thesis focuses largely at the site scale with respect to design interventions, it acknowledges and stresses the importance of the larger scale.

How can design increase resilience of an urban social space? This question will remain an important issue for designers who understand the city as a complex set of intertwined social, economic and bio-environmental systems. The challenge for the design community is that once the complexity of a city is understood and embraced, the difficulty in managing the complexity of the system cannot be allowed to overwhelm the design process. The framework and design interventions presented in this thesis can

help simplify the challenge, without losing sight of an important goal of urban design, creating resilient social spaces within the city.
Works Cited


Appendix A: Discussion guide used for individual interviews

Tell me a little bit about Wenceslas Square today.  
  Do you go there?  
    Square proper versus pasáž  
      Why or Why not?  
    If go: types of activities  
    If not:  

Did you go there in the past?  
  When?  
  Why?  
  Impressions?  

If went in past and not now, has another place in the city filled the role of Wenceslas Square?  

Tell me a bit about the meaning of the square (prompt with “historical significance” if necessary.)  

Is Wenceslas Square different than Old Town Square? How so?  

Any other things that you would like to tell me about Wenceslas Square today or in the past?
Appendix B: International visitor arrivals in Prague (source: Czech Statistical Office)
### Number of guests in collective accommodation establishments by country in Capital Prague

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Residents</th>
<th>Foreigners</th>
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<tr>
<td>2000</td>
<td>2,316,398</td>
<td>3,108,277</td>
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<td>2002</td>
<td>2,908,139</td>
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<td>3,280,385</td>
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<td>2004</td>
<td>3,683,094</td>
<td>3,165,949</td>
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<tr>
<td>2006</td>
<td>4,321,725</td>
<td>4,502,750</td>
<td>4,516,193</td>
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<td>2007</td>
<td>4,401,587</td>
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<td>2008</td>
<td>4,088,487</td>
<td>4,089,543</td>
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<td>2010</td>
<td>4,687,843</td>
<td>4,695,132</td>
<td>4,682,787</td>
</tr>
</tbody>
</table>

### Region-wise Breakdown

#### Belgium

- 2,308,322
- 2,079,401
- 2,338,513

#### Bulgaria

- 2,600
- 1,172
- 2,324

#### Denmark

- 131,462
- 115,095
- 13,994

#### Estonia

- 3,000
- 3,515
- 3,958

#### Finland

- 25,521
- 23,401
- 22,505

#### France

- 112,765
- 13,877
- 172,384

#### Greece

- 11,369
- 2,025
- 17,088

#### Ireland

- 5,970
- 5,077
- 11,507

#### Italy

- 4,728
- 3,960
- 4,200

#### Latvia and Montenegro

- 2,867
- 3,858
- 3,324

#### Cyprus

- 3,075
- 1,675
- 2,688

#### Luxembourg

- 2,917
- 1,263
- 1,913

#### Netherlands

- 26,854
- 3,900
- 4,340

#### Norway

- 286,044
- 2,967
- 2,867

#### Poland

- 2,614,588
- 3,109,298
- 3,283,512

#### Portugal

- 3,396
- 1,514
- 3,901

#### Switzerland

- 3,396
- 1,514
- 3,901

#### Austria

- 3,396
- 1,514
- 3,901

#### Hungary

- 3,396
- 1,514
- 3,901

#### Germany

- 339,036
- 382,932
- 539,496

#### Sweden

- 75,387
- 70,553
- 88,009

#### United Kingdom

- 194,298
- 226,430
- 264,175

#### United States of America

- 159,688
- 153,205
- 201,962

#### Brazil

- 4,448
- 3,109
- 3,908

#### Africa

- 25,829
- 22,385
- 20,085

#### China

- 13,749
- 16,694
- 21,435

#### Russia

- 74,023
- 51,127
- 38,919

#### Ukraine

- 116,079
- 128,595
- 181,579

#### Japan

- 62,185
- 45,875
- 44,760

#### United Arab Emirates

- 25,697
- 23,209
- 22,932

#### United Kingdom

- 195,382
- 232,978
- 281,175

#### United States of America

- 159,688
- 153,205
- 201,962
Appendix C: Internet tourist survey results
| Have you ever been to Wenceslas Square in Prague, Czech Republic? | When you visited Prague, how many times did you visit Wenceslas Square? | Please use 5 to 10 words or adjectives to describe what you think about Wenceslas Square during that visit. | Do you go to Wenceslas Square during the day? | evening? | night? | shopping in department stores | shopping in specialty stores | cafes/restaurants | theaters | museum | entertainment (clubs) | transportation (train, subway, taxi) | stayed in hotel near Wenceslas Square | other (please specify) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 yes, as a visitor to the Czech Republic | 1 time | busy welcoming green walkway | yes | no | no | shopping in specialty stores | | | | | | | | | |
| 2 yes, as a visitor to the Czech Republic | 2 times | open, historic, cultural, rustic | yes | no | no | shopping in specialty stores | | | | | | | | | |
| 3 yes, as a visitor to the Czech Republic | 2 times | | | | | | | | | | | | | | |
| 4 yes, as a visitor to the Czech Republic | 1 time | | | | | | | | | | | | | | |
| 5 yes, as a visitor to the Czech Republic | 3-4 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 6 yes, as a visitor to the Czech Republic | 2 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 7 no | | | | | | | | | | | | | | |
| 8 yes, as a visitor to the Czech Republic | 3-4 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 9 yes, as a visitor to the Czech Republic | 2 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 10 yes, as a visitor to the Czech Republic | more than 4 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 11 yes, as a visitor to the Czech Republic | | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 12 yes, as a visitor to the Czech Republic | 1 time | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 13 yes, as a visitor to the Czech Republic | 3-4 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 14 yes, as a visitor to the Czech Republic | 1 time | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 15 yes, as a visitor to the Czech Republic | 2 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 16 yes, as a visitor to the Czech Republic | 2 times | | yes | yes | yes | shopping in department stores | | | cafes/restaurants | | | | | | |
| 17 yes, as a visitor to the Czech Republic | 1 time | | yes | yes | no | transportation (train, subway, taxi) | | | Wenceslas Square | | | | | | |
| 18 yes, as a visitor to the Czech Republic | 1 time | | yes | yes | no | transportation (train, subway, taxi) | | | Wenceslas Square | | | | | | |
| 19 yes, as a visitor to the Czech Republic | 2 times | | yes | yes | yes | museum | | | transportation (train, subway, taxi) | | | | | | |
## Wenceslas Square Internet Survey Results

<table>
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<th></th>
<th>People walking</th>
<th>People shopping</th>
<th>People seeing (Flags)</th>
<th>People sitting in the center of the square</th>
<th>People sitting at status</th>
<th>People sightseeing</th>
<th>People lobbyists</th>
<th>People dealing drugs</th>
<th>People soliciting/prostitution</th>
<th>People in transit (train, Metro, taxi)</th>
<th>People going to work</th>
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<td>Open-Ended Response</td>
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<td>I stayed in Prague for (days)</td>
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<tr>
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<td>in the passages/arcades</td>
<td>in the passages/arcades</td>
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<td>on the square closer to Na prkope</td>
<td>in the Museum (subway)</td>
<td>in the passages/arcades</td>
<td>in the passages/arcades</td>
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<td>1987</td>
<td>2007</td>
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<td>in the Museum (subway)</td>
<td>in the passages/arcades</td>
<td>in the passages/arcades</td>
<td>US</td>
<td>1988</td>
<td>2000</td>
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<td>in the Museum (subway)</td>
<td>in the passages/arcades</td>
<td>in the passages/arcades</td>
<td>US</td>
<td>1970</td>
<td>2000</td>
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<td>7</td>
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<td>on the square closer to Na prkope</td>
<td>in the Museum (subway)</td>
<td>in the passages/arcades</td>
<td>in the passages/arcades</td>
<td>Greek, Irish myst</td>
<td>1950</td>
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<td>4</td>
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<td>in the Metro</td>
<td>in the Metro</td>
<td>at the Museum</td>
<td>in the passages/arcades</td>
<td>in the passages/arcades</td>
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