

## **CHAPTER I**

### **INTRODUCTION**

State and local authorities in the United States are confronting a variety of complex urban environmental challenges, such as loss of open space, toxic derelict industrial sites and polluted stormwater (EPA 2003). In their efforts to promote sustainable urban environments, these authorities are looking with greater regularity to policies and experiences overseas, particularly from Germany. Germany has long been considered a leader in environmental policy and urban planning (Jaenicke and Weidner 1997; Andersen 1998; Wuerzel 2002). The combination of high population densities, severe resource constraints, and thoughtful planning approaches motivated Germany to develop innovative policies for forestry management, land-use and transportation ahead of many other countries. For example, Germany's national spatial planning and nature protection policies have been merged with regional and local stormwater policies to promote "green" roofs to address sewer overflows, preserve open space, protect urban forests, facilitate "cool air" flows, and to promote sustainable brownfields redevelopment (Spirn 1984; Beatley 2000).

By past and present standards, Germany has been seen as an environmental and planning leader ahead of the United States. As early as the 19th century, pivotal American planners and conservationists such as Aldo Leopold, Gifford Pinchot, Frederick Law Olmsted, Jr., Frank Lloyd Wright, Benjamin Marsh and others have traveled to Germany to learn from and apply its experiences in their respective fields. In 1889, Gifford Pinchot went to Germany to study

forestry management and returned to the U.S. to create the first national program to regulate forests (Miller 2001). In 1908, Benjamin Marsh published “City Planning,” which reformed New York City’s zoning laws based on information collected from planning models in Frankfurt, Cologne and Munich (Peterson 2003).

Today, several key indicators suggest that Germany outperforms the United States in most environmental areas. According to the 2006 Yale Center for Environmental Law and Policy’s “2005 Environmental Sustainability Index,” a global ranking of every country’s environmental performance, Germany ranked 31 compared to the United States’ 45 (Yale 2005). In 2001, the OECD reported in its review of environmental indicators that the United States trailed Germany in key environmental issues such as CO<sub>2</sub> emissions intensities (10 tons per capita in Germany compared to 20 tons per capita in the United States), municipal solid waste production (400 tons per capita in Germany compared to more than 600 tons per capita in the United States), and fresh water consumption (500m<sup>3</sup>/per capita per year in Germany compared to approximately 2000m<sup>3</sup>/per capita per year in the United States.) (OECD 2001).

Of course, not all urban environmental policies in Germany merit transfer to the United States. American planners and environmentalists have also learned from some mistakes of Germany’s experiences with urban planning and conservation management. Aldo Leopold returned to the U.S. from Germany in 1932 appalled at the “straight jacketing” of its rivers and encouraged the U.S. to learn from Germany’s errors (Leopold 1936). Frederick Law Olmsted, Jr., returned from Berlin and Leipzig aware of the importance of learning from Germany’s successes and mistakes with urban planning as he helped with the creation of the National Mall

in Washington, D.C. (U.S. Senate 1910).

Nevertheless, despite a handful of historical and contemporary precedents in the United States where one can see how park planning from Berlin has been imitated in Washington, D.C., or brownfields programs from the Ruhr have been adopted in Buffalo, New York, an apparent knowledge vacuum exists in the U.S. in the area of international urban environmental planning and the transfer of such policies (Masser 1986, Altermann 1991, Wolman 1992). The vacuum is characterized by a lack of understanding about the transfer process and the adaptation of appropriate environmental and urban planning policies into the U.S. from overseas in general, and from Germany in particular. As Bob Yaro, director of the Regional Planning Association, commented, “Learning from abroad does not come naturally to American planners. Over the past few decades, American planning and land-use regulation have become increasingly insular and introspective” (Faludi 2002:210). The experiences of the author support this assertion.

Little is available or has been researched about the conditions that support or inhibit the voluntary transfer of urban environmental policies into the U.S. The same observation can be made for outcomes. Questions persist over whether the attainment, review and application of policies from abroad is a rational, orderly process shaped by structured reviews, debate and assessment of goals and alternatives or whether it is chaotic, shaped by unclear objectives, means and ambiguity. Finally, there is little understanding of the outcomes or degrees of transfer that emerge from the voluntary transfer process. The knowledge trail is not particularly well marked in the wilderness of cross-national urban environmental and planning policy transfer.

This dissertation concerns itself with governmental urban environmental policies, ideas

and lessons which have evolved in Germany and are candidates for potential voluntary transfer into the U.S. The intention of this dissertation is to shed light on the process of voluntary policy transfer of urban environmental and planning policies from Germany to the United States. The specific research questions addressed in this dissertation include:

- 1) In the context of the voluntary transfer, is the acquisition and use of imported information a more rational or more anarchic process?
- 2) What factors enhance or limit the voluntary transfer of urban environmental planning policies from Germany to the United States?
- 3) Are there identifiable effects of voluntary transfer of urban environmental planning policies from Germany to the United States?

Among the disciplines of international and comparative urban planning, the terms “transfer,” “diffusion,” and “learning” are used interchangeably (Masser 1986; Ward 1999; Beatley 2000; Dumpelmann 2000). Bennett (1991:32) asserts that “the words lesson learning, diffusion, transfer have all appeared in the literature to describe the same phenomena.” Nevertheless, this dissertation relies on Dolowitz and Marsh’s definition of “policy transfer” for direction. Dolowitz and Marsh (2000:1) define policy transfer as “*The process by which knowledge about how policies, administrative arrangements, institutions, and ideas in one political system (past or present) is used in the development of policies, administration, arrangements, institutions, and ideas in another system.*”

The preference for Dolowitz and Marsh’s (2000) definition of policy transfer emanates from the framework that they developed to analyze transfer and the creation of a continuum created to classify “voluntary”, “mixed” and “coercive,” transfers - particularly in a cross-

national context. Dolowitz and Marsh (2000) assert that most actors involved with policy transfer operate within confines of bounded rationality. It is the author’s assertion that the transfer of urban environmental policies from Germany to the United States is essentially a voluntary process, rather than coerced, and that this process occurs within the confines of “bounded rationality” and notions of “organized anarchy,” as characterized by Cohen, Marsh and Olsen (1972) and reinforced in the works of Kingdon (1995). In the “organized anarchy” paradigm of Cohen, Marsh and Olsen, the rational processes of goal setting and organized methodology are subverted by “solutions searching for problems,” ambiguity, and trial and error. Mossberger (2000) has explored aspects of policy diffusion of enterprise zones in the U.S. in the light of “bounded rational” and “organized anarchy” policy models and drew some useful conclusions with relevance for this study.

**Table 1.1**  
**“A Policy Transfer Framework”**

Why Transfer? Continuum		
Want to .....Have to		
Voluntary	Mixtures	Coercive
Lesson Drawing (Perfect Rationality)	Lesson Drawing (Bounded Rationality)	Direct Imposition

Source: Dolowitz and Marsh (2000:9). With Permission from Blackwell Publishing.

It appears to the author that the voluntary transfer of urban environmental policies from Germany to the United States mirrors many aspects of Rogers’ (2003) innovation-decision

model. In that model, an innovation is developed and exposed to a potential importer, reviewed and studied by the importer, and adopted or rejected by the importer. The addition of outcomes and degrees of transfer are drawn from modifications of Rose (1993), Mossberger (2000), and Evans and Davies (1999):

**Table 1.2**  
**Voluntary Transfer of Urban Environmental Policies From Germany to the U.S.**

A) The existence of specific urban environmental policies in Germany ---> leading to---->	B) Awareness <u>or</u> acquisition and use of information about urban environmental policies in Germany by U.S. practitioners —> leading to-->	C) The attempt to test or implement aspects of urban environmental policies from German, resulting in adoption of —>
1) “ <u>hard transfers</u> ” (laws, regulations, codes, or standards) or 2) “ <u>soft transfers</u> ” (ideas, attitudes, “labels” or inspiration)		

In his theory of cross-national lesson drawing, Rose (1991, 1993) asserts that a policy program “cannot be transferred if it cannot be stated in a form of law” (Rose 1993:127). Evans and Davies (1999:382) have developed an elementary classification for policy transfer. Evans and Davies suggest that outcomes of policy transfer involve “soft” transfers (ideas, concepts, attitudes) and “hard” transfers (programs and implementation). In her study of the transfer of enterprise zones from the UK to and throughout the U.S., Mossberger (2000:7) asserts that U.S. states chose from among policy labels, policy concepts and designs as outcomes of the transfer process. Mossberger (2000:117) defines policy concept as the basic idea and the “general mechanism” through which a policy functions. Mossberger (2000:123) defines policy labels as

“a general category of policies, encompassing wide variation” that importers pick up, rearrange and apply to their own unique policy contexts.

The economy of defining outcomes as only laws produces a narrowness which overlooks a range of other outcomes that can evolve during transfer. To balance clarity, focus, and flexibility, this dissertation will classify two outcomes: 1) “hard” transfers of policies that consist of the core elements of a policy and are manifested in the form of the general mechanisms of laws, rules, regulations or standards; and 2) “soft” transfers, consisting of ideas, attitudes, labels or inspiration that are not codified, but may be precursors or contributors to policy.

The research questions are guided empirically by the following propositions:

**1) The voluntary transfer of urban environmental and planning policies from Germany to the U.S. is most often shaped by the absence of an informed, goal-directed, problem-focused search and utilization of imported information;**

**2) The voluntary transfer of urban environmental and planning policies from Germany to the U.S. depends heavily on the role of key individuals and communities of experts to identify, interpret and implement information and knowledge from Germany.**

**3) The voluntary transfer of urban environmental and planning policies from Germany to the U.S. tends to be more of a local nature consisting of ideas, concepts and attitudes, rather than national-level codes, laws and regulations. This emanates from the unique complex environmental and urban planning policies in Germany that differ from those in the United States.**

Important variables affecting the voluntary transfer of local urban environmental policies from Germany to the United States studied in this dissertation include:

1) The political and cultural issues in the U.S. affecting the collection and application of urban environmental policies from Germany;

2) The role of key individuals and communities of experts working to identify and test

urban environmental policies from Germany in the U.S.;

3) The complexity and special nature of urban environmental planning policies in Germany and the differences with the U.S.

The approach of this dissertation is to use three embedded descriptive case studies to focus on the voluntary transfer of priority urban environmental planning policies from Germany to the U.S. Each case study describes the key characteristics and differences of the selected urban environmental and planning policies in Germany and the United States. The political, cultural and financial variables affecting voluntary transfer of these policies are considered, particularly their role in determining whether the transfer process conformed to the notions of “bounded rationality” or “organized anarchy.” To help shape context and provide reference for the case studies, this dissertation conducts a literature review of concepts related to cross-national voluntary policy transfer and historical precedents of urban environmental and planning transfer from Germany to the U.S.

Published books, journals, articles, and official governmental reports form the basis of the data. The “live” data has been gathered from interviews conducted with over 35 U.S. and German urban planning and environmental specialists.

The three case studies represent the following themes concerning the transfer of urban environmental policies from Germany to the United States:

1) Low-impact development stormwater management (decentralized, on-site stormwater treatment) to Maryland, Virginia and the District of Columbia;

2) Brownfields revitalization (redevelopment of contaminated industrial properties) to New York and Maryland;

3) Open-space protection (integration of regional landscape planning and greenbelt development) to Virginia and Oregon;

The selection of these themes as units of study emanate from the status of each as high national-level urban environmental priorities in both Germany and the United States (German Federal Environment Ministry 2002; U.S. EPA 2003).

The geographic areas were selected because of their: 1) relevance to the themes; 2) the availability of practitioners; and, 3) the knowledge and experience of the practitioners about urban environmental policies in Germany.

*Assumptions.* This dissertation assumes and has not engaged in a protracted argument concerning:

- Germany is a global leader in contemporary urban environmental and planning policy implementation;
- Identifying urban environmental and planning policies which are practiced in Germany has merit as does understanding the policy development processes;
- The flow of knowledge and policies between Germany and the United States and the adoption of those policies is voluntary and not coerced.

Not surprisingly, this dissertation will suggest that voluntary transfer of German urban environmental and planning policies is a relatively anarchic process, specifically, that the search and testing of policies from Germany to the U.S. is seldom conducted in purpose-driven or goal-oriented contexts. American awareness about urban environmental and planning policies in Germany is frequently characterized by chance encounters among policy entrepreneurs rather than problem-focused searches and seldom understood through the use of “cause-and-effect”

models that explore fungibility of German policies in the U.S., comparison of alternatives to goals, or studying equivalency of resources.

This dissertation also will suggest that voluntary transfer of German urban environmental and planning policies gains impetus from determined policy entrepreneurs with cosmopolite qualities who bridge environmental and planning communities in both countries. These entrepreneurs are equipped with some explicit knowledge of performance of German urban environmental and planning policies and rely heavily on tacit knowledge derived from site visits. These policy entrepreneurs often rely on intuition rather than rational, orderly and critical review of data to inform decisions and judgments about transfer process. Moreover, policy entrepreneurs can be seen to work persistently to build advocacy coalitions after travel or contact with information from Germany, through which focusing events evolve to share and implement ideas and concepts from Germany. In addition, this dissertation will indicate that there is a relative absence of networks in the U.S. that access and share information about urban environmental planning policies from overseas. This absence may be attributed, in part, to a national culture of exceptionalism in the U.S. that resists the active importation of information from abroad.

This dissertation also will suggest that the frequent outcomes of harvesting urban environmental and planning policies are soft transfers of ideas and concepts rather than hard transfers of laws and regulations. It appears that the predominance of soft outcomes is affected by the filters of complex German urban environmental and planning systems and a U.S. national environmental and planning culture reluctant to embrace national-level government involvement in

environmental protection and land-use issues. This dissertation also will point to how transfer often results in relatively tangible domestic outcomes, despite barriers of complexity and culture which appear impermeable. Finally, this dissertation will point to several convergences between the cross-national policy transfer and domestic planning research - particularly the importance of sufficient information, the leadership of policy advocates and the development of advocacy coalitions.

The author believes that the potential usefulness of this dissertation will include insight into ways that cross-national exchanges of lessons are enhanced. The author also believes that this dissertation will present indications of cross-national policy transfer as a radial process often shaped by accidental, intuitive learning efforts, rather than linear processes of direct cause-and-effect. Moreover, the author believes that cross-national policy transfer can be seen as a “knowledge trail” in which unstructured information is acquired and intuitive learning characteristics are involved and that almost parallel implementation, confirmation and decision processes follow.

This dissertation is organized into ten chapters. Chapter 2 reviews relevant social theories related to policy transfer in general and aspects of voluntary transfer in particular. Chapter 3 reviews the literature on cross-national voluntary policy transfer and policy transfer between the U.S. and Germany. Chapter 4 presents the methodology used to gather and review data for this dissertation. Chapters 5 through 7 contain three embedded descriptive case studies, with analysis of semi-structured interviews concerning the voluntary transfer of local urban environmental policies from Germany to the United States. Chapter 8 draws some conclusions

and recommends further research. Chapters 9-10 contain references, appendices and supporting documents for this dissertation.

## **CHAPTER II**

### **THEORY**

#### **I. Relevant Social Theories**

At the present, there is no single or unified theory available to explain the complex phenomena of policy transfer (Evans and Davies 1999:361). Perhaps it is neither useful nor possible for such a theory to be developed. However, it does seem of value to examine, test, consolidate, and further develop concepts of voluntary policy transfer, particularly with respect to urban environmental and planning policies, as a way of promoting sustainable urban development in the United States.

The theoretical roots of voluntary policy transfer are tied to the perspectives and social theories guiding past and current research of diffusion. Accordingly, this chapter summarizes some key social theories relevant for understanding diffusion, particularly the aspects of voluntary transfer in the context of bounded rationality and organized anarchy. Attention also is given to the variables affecting the search, use, and variations of outcomes and degrees during cross-national voluntary policy transfer. This chapter also focuses on theories that explore the role of communities of experts and policy entrepreneurs involved in the voluntary policy transfer process.

To interpret the contexts and variations affecting voluntary policy transfer, especially the acquisition, use and testing of information from abroad, this research draws on Rogers' (2003) work with the diffusion of innovations. Rogers' model offers a comprehensive overview of social processes affecting the accumulation and use of innovative ideas, particularly the role of

individuals and networks harvesting ideas. Rose's (1993) notions of lesson drawing, and Dolowitz and Marsh's (2000) research into the process of policy transfer offer helpful contexts in which to frame the empirical work of voluntary transfer from abroad. Rose (1993), and Dolowitz and Marsh's (2000) work also offer helpful frameworks in which to analyze the outcomes and degrees of the transfer processes. Simon (1986) and Kingdon (1995) are consulted to develop platforms on which the voluntary cross-national transfer of policies can be studied as rational or anarchic processes.

#### I.A. *Diffusion*

*1. General.* Everett Rogers (2003) developed an integrated model for diffusion research useful for interpreting a range of social phenomena that are elemental to voluntary policy transfer. Rogers (2000:11) asserts that the diffusion of innovations is “the process by which an innovation is communicated through certain channels over time among the members of a social system.” Rogers (2003:11) defines innovation as “an idea, practice or object that is perceived as new by an individual or other unit of adoption” and interprets “innovation” and “technology” as interchangeable. An important research focus of Rogers is the rate of diffusion, measured as the number of importers adopting a particular innovation over time and reflected in the “S-shaped curve.” Rogers (2003:170) portrays diffusion as a phenomenon of communication between groups and individuals occurring in a 5-stage “innovation-decision” model. In the context of accumulating and adopting innovations, Rogers confesses uncertainty as to whether exposure to an innovation's existence is facilitated by “needs” or “awareness.” The “innovation-decision” model characterizes the gathering, review and testing of information. The five parts of Rogers'

“innovation-decision” model consist of: 1) *Knowledge* - when an individual or other decision-making unit is exposed to an innovation’s existence and gains understanding of how it functions; 2) *Persuasion* - when an individual or other decision-making unit forms a favorable or unfavorable attitude towards the innovation; 3) *Decision* - when an individual or other decision-making unit engages in activities that lead to a choice to adopt or reject the innovation; 4) *Implementation* - when an individual or other decision-making unit puts the new idea into use; 5) *Confirmation* - when an individual seeks reinforcement of an innovation-decision already made, but he or she may reverse this previous decision if exposed to conflicting messages about the innovation.

**Table 2.1**  
**Model of Rogers’ Five Stages in the Innovation Decision Process**

<u>Prior Conditions</u>	<u>I. Knowledge</u>	<u>II. Persuasion</u>	<u>III. Decision</u>	<u>IV. Implementation</u>	<u>V. Confirmation</u>
1. Previous practice 2. Felt Needs 3. Innovativeness 4. Norms of the social systems	Characteristics of the Decision-Making Unit  -----> >	Perceived Characteristics of the Innovation  -----> >	----->  Leading to  ----->	----->  ->Adoption----->  ----->  --->Rejection----->	----->  Continued Adoption (or Later Adoption)  ----->  Discontinue (or Continued Rejection)

Source: Diffusion of Innovations, 5th Edition by Everett M. Rogers (F. 5.1, p 170). Copyright 1995, 2003 by Everett M. Rogers. Copyright 1962, 1971, 1983 by The Free Press. Adapted with permission of The Free Press, a Division of Simon & Schuster Adult Publishing Group. All rights reserved.

2. *Actors*. In the context of the 5-stage innovation-decision model, Rogers explores the influence and roles of two actors in special detail: “change agents,” and “opinion leaders.” Both change agents and opinion leaders act in specific cultural contexts and networks to stimulate awareness and to facilitate the interpretation and adoption of an innovation. Change agents initiate the innovation decision-making process by introducing new ideas to a social system.

They possess technical competencies that empower them to review and share complex information and knowledge about the functions of an innovation within their culture. Change agents are “risk takers,” intent on introducing and advocating change. Rogers (2003:27) characterizes opinion-leaders as “elites” at the middle of “a communication network, who take innovative ideas of change makers and communicate them within a communications system.” Opinion leaders are generally more exposed to many varieties of external communication, more “cosmopolite,” and proximate to the adopters to whom they pass information and advice. Opinion leaders employ change agents as their “lieutenants.” (Rogers 2003:15). Rogers (2003:290) characterizes opinion leaders as equipped with “cosmopolitaness” - a quality Rogers borrows from Merton (1949:441) to describe the “degree to which an individual is oriented outside a social system.” In his research of elites and the influence of media exposure, Merton (1949) asserts that “locals” are static and provincial with respect to their orientation and interests. “Cosmopolitans” are more mobile, “more highly educated, traveled widely and had friendship networks with individuals outside the community.” Rogers also borrows from the social theories of Lazarsfeld and Merton (1964:23) to describe the barriers and permeability to imported ideas within social networks. Lazarsfeld and Merton observed that humans communicate best when exchanging information with other individuals within the same social, demographic, value and belief systems - a relationship they classify as “homophily.” Heterophily is the opposite of homophily and characterized by the behavior of individuals and communities obstructing relations and communications because of separate social, demographic and value systems. Rogers (2003:306) asserts that “more effective communication occurs when

two or more individuals are homophilous” and adds that laggards, fearing stigmatization of perceptions of falling behind, respond to pressure from adopters to adopt innovations.

3. *Networks.* To further analyze the permeability of homophilous relations, Rogers turns to Granovetter (1973), who observed that individuals searching for jobs in Massachusetts suburbs in the 1960s seldom gathered information about new jobs through homophilous relations, such as close friends or relatives. Granovetter observed that information about employment was gathered via contact with distant individuals and “weak ties,” defined as infrequent communication and contact among individuals or members of a separate social system. Weak ties serve as “bridge links,” (defined as an “individual who links two or more cliques in a system from his or her position as a member of one of the cliques”) between heterophilous communities (Rogers 2003:340). Granovetter’s work is a particularly useful demonstration of the role that chance and timing play in the voluntary transfer process.

4. *Outcomes.* Rogers (2003:186) suggests that innovations rarely remain impervious to change during the diffusion process. The outcome of the diffusion is rejection, copying, or more frequently, modifications that Rogers labels “reinventions.” Rogers (2003:17) defines re-invention as “the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation.” Key elements affecting re-invention include the complexity of an innovation and the perceptions of the complexity in the eyes of the importer. Lack of knowledge and understanding about the function and context of the innovation are key variables affecting perceptions of complexity. Re-invention also is characterized as a process involving many “general” concepts with multiple applications affected strongly by “change agency”

influences.

### *I.B. Lesson Drawing*

*1. Background.* The concept of “lesson drawing” emerged out of concerns about perceived deficiencies with policy diffusion research and methodologies. Specifically, diffusion research, as shaped by Rogers, was perceived to be overly dependent on quantitative methodologies that over-emphasized rates of dispersion at the expense of interpretation of content, history, social context, power politics, and institutional performance (Dolowitz and Marsh 1996; Jacoby 2000). Diffusion was criticized for being overly grounded in “technocratic determinism” that obscured changes in the meaning of innovations and assumed that diffusion was an automatic process in which understanding of the properties was irrelevant (Bennett 1997; Rose 1993; Jacoby 2000). Moreover, research in political science, particularly comparative politics, emerged that suggested policy diffusion is part of a broader process of policy-making efforts. Heclo (1974) observes that policy development emerges as governments respond not only to power politics, but through a rational learning process characterized by the acquisition and use of knowledge from abroad. Heclo (1974:306) speculates that “governments puzzle” as they search for ideas and responses to domestic policy challenges. As theorists began to look at the union of policy diffusion and policy development, efforts were undertaken to explore anarchic and rational elements of the diffusion process.

*2. Lesson Drawing.* Rose (1991, 1993) describes “lesson drawing” as a process to understand the circumstances and conditions that policies and programs in one jurisdiction can be transferred to another. Rose (1993) asserts that lesson drawing is an active and “systemic”

search for understanding and application of lessons across time and space. Rose distinguishes lesson drawing from the study of innovation by claiming innovation research is too narrowly focused on “novel programs.” Lesson drawing, in contrast, “presupposes that even though a program may be new to a government considering it, something very much like it will already be in effect elsewhere” (Rose 1993:24). Rose adds that lessons are short-cuts used by policy makers to overcome obstacles through the use of knowledge, experience, or conclusions drawn from the past and from abroad (Rose 1991). Lesson drawing is the process of using “cause and effect models” to examine “the probability or improbability of a transfer in light of experiences abroad” (Rose 1993:13). Four steps characterize Rose’s lesson drawing process. Policy makers: 1) search elsewhere over time and space; 2) develop a model of how a program operates; 3) create a new program; and, 4) evaluate transfer prospectively (Rose 1993:20).

*3. Search Across Space.* The search for lessons emerges out of crisis or dissatisfaction that “drive” policy makers to initiate an active “information search” for solutions. The pressure to find solutions to unsatisfactory problems motivates policy makers to learn about and understand how a program operates in one country and can function in another. Lesson drawing places special emphasis on the active search for positive models with application to solve problems, rather than negative models that are unable to promise benefits. The “bounded rational” elements affecting the search across space, especially for local and regional authorities, are shaped by growth in technology and communications, the profusion of information sources and the commonness of challenges around the world - especially among cities and regions. Rose (1993) affirms the presence of “satisficing” in lesson drawing processes. Satisficing emerges

from, among other variables, the commonness of problems and presumed assumptions of readily available solutions to these problems particularly during the search across space. Rose (1993:3) claims that “problems unique to one country, such as Watergate or the fall of the Berlin Wall, are the exception rather than the rule,” and adds that cross-national differences “are increasingly matters of degrees, not kind.” Rose (1993) adds that problems at the local level are especially ripe for lesson drawing due to the common challenges and solutions of education, waste removal, and traffic at the local level - particularly among developed countries. However, Rose (1993:17) asserts that the search for lessons across space and the definition of proximity is variable rather than constant. Rose (1993:22) also claims that “The bottom line in lesson drawing is not the explanation of a measure’s initial effect but an assessment of the consequences of putting something similar in effect elsewhere.” In other words, the core of lesson drawing is a focused, rational analysis of differences between programs in other countries, and the interpretation of the transferability of those lessons to the importer. This includes expanding the awareness of the importer about how a program abroad has worked and its potential effects if transferred.

Rose (1993) explores three filters affecting satisficing during the cross-national lesson drawing: 1) money; 2) geographic propinquity; and, 3) ideological propinquity. The presence or absence of funds enhances or limits cross-national searches. In the absence of funds, Rose (1993) asserts that neighboring governments are the logical places to start a search for lessons and implies that lesson drawing is most economic when undertaken among geographic neighbors. Nevertheless, Rose (1993) also concedes that geography is not always a reliable indicator for determining where lessons across space are sought and cites the poor history of lesson drawing

between the UK and France. Rose (1993:96) adds that ideological propinquity also plays a critical role during the search and observes that “Democratic governors may look to other states with liberal programs, and Republican governors to states with conservative programs.”

4. *Communities of Experts and Policy Entrepreneurs.* Rose asserts that lesson drawing in general, but cross-national in particular, is shaped by policy makers using formal and informal “communities of experts linked by common professional concerns to intergovernmental agencies consciously trying to spread ‘best practice’ programs around the world” (Rose 1993:16). To define these communities, Rose (1993) borrows the concept of “epistemic communities” from Haas (1992:3) to describe “networks of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area.” According to Rose (1993), in the transfer of lessons, epistemic communities are relevant not only for moving information and ideas, but also for analyzing fungibility of potential lessons. They play especially important roles in satisficing by providing analysis and information to interpret complex technical questions and problems. For Haas (1992:2), epistemic communities study “the cause and effect relationships of complex problems, helping states identify their interest, from issues of collective debate.” Rose (1993:51), also turns to Merton (1968) to describe the influence of “cosmopolitans” and “locals” as agents engaged in the cross-national search. Rose (1993:51) defines locals as policy makers who concentrate primarily on their immediate local conditions, such as a local government or authority. According to Rose (1993), “Cosmopolitans” are policy makers interested in what is happening in other agencies, in other states, and even in other countries (Rose 1993:51). Cosmopolitans develop ideas through a

wide-set of contacts. Locals explore the relevance and possibility of fungibility. Rose (1993) suggests that organizations have both locals and cosmopolitans engaged in the cross-national search and review of lessons and that the motives promoting cosmopolitans to undertake a cross-national search are both random and goal-oriented.

5. *Outcomes.* Rose (1993) claims that lesson drawing is part of a “contested political contest,” marked neither by total blockage nor total fungibility. Rose (1993) adds that the outcomes are invariably a function of subjective interpretation dependent on the matching of a program’s outcomes with a policy-maker’s aspirations (Rose 1993:58). Rose (1993:35) claims that the notion of “perfect fungibility and total blockage are logically contradictory. The former assumes that lesson drawing is always possible and the latter is invariably impossible.” In that context, Rose (1993:30) classifies five degrees of transfer:

- 1) Copying - the adoption, more or less, of a program already in effect abroad;
- 2) Emulation - the adoption with adjustment for different circumstances, or a program already in effect in another jurisdiction;
- 3) Hybridization - the combination of elements of programs from two different places;
- 4) Synthesis - the combinations of familiar elements from programs in effect or one or more different places;
- 5) Inspiration - the use of programs elsewhere as intellectual stimulus for developing a novel program without an analogue elsewhere.

Drawing from Rogers, Rose (1993) agrees that lesson drawing is not necessarily about “exact replications,” but rather the ways in which functional equivalents can be substituted with

an existing policy. Rose adds that “a program cannot be transferred if it cannot be stated in a form of law” (Rose 1993:127). Rose (1993:119) draws up seven filters affecting the fungibility of lessons from abroad. These include: 1) elements of uniqueness of a lesson; 2) the suitability of the institutions involved with program delivery; 3) equivalence of resources between importing and exporting governments; 4) cause-and-effect structure of a program; 5) scale of change resulting from the adoption of a program; 6) interdependence between imported and exported programs in different jurisdictions; and 7) congruity between the values of importing and exporting policy-makers and a program’s values. Simplicity and complexity of programs are particularly influential in determining the transfer of lessons and Rose has drawn a table to identify the attributes.

### *I.C. Policy Transfer*

*1. Background.* Dolowitz and Marsh’s (2000) work with policy transfer emerged from perceived limits to lesson drawing, particularly assumptions buried within lesson drawing that the process is guided entirely by rationally-driven actors. Dolowitz and Marsh (2000) assert that policy makers confront limits to gathering and understanding information that invariably affect the outcome of the transfer process. Dolowitz and Marsh (2000) also suggest that policy transfer process can be coerced, voluntary or combinations of both. To classify voluntary, coerced or “mixed” policy transfers, Dolowitz and Marsh (2000) created a three-tiered policy transfer continuum. At one end of the continuum is “lesson drawing” guided by totally voluntary (rational) processes. At the other end of the spectrum are “coerced” transfers shaped by forced governmental mandates - either domestically or internationally. In the middle rest

“obligated” transfers - transfers characterized by global technical and economic forces.

2. *Voluntary Transfers*. Voluntary transfer, also referred to on the continuum as “lesson drawing,” is the movement of policies through “free choices by the political actors,” in the absence of pressure or force. Like Rose, Dolowitz and Marsh (2000:9) suggest that “voluntary” policy transfers occur in response to external and internal policy pressures and reflect both “rational” and “bounded rational processes.” Social, economic, and political stability promote voluntary transfers. Crises, or “urgent problems,” accelerate searches for solutions and improves the likelihood of a transfer. Dolowitz and Marsh (2000:14) observe that “dissatisfaction with the status quo” drives actors to voluntarily engage in an active search abroad for new ideas as a “cheap” means to solve a problem. In this context, the assumption of perfect rationality during the process is flawed. Most actors they assert, “act with limited information or within the confines of bounded rationality” (Dolowitz and Marsh 2000:14). Dolowitz and Marsh (2000) add that policy transfer occurs at the sub-national level, but is an under-explored and under-researched topic.

3. *“Mixtures”*. In the middle of Dolowitz and Marsh’s spectrum (2000:15) are “mixtures” “characterized by voluntarily transfers but driven by perceived necessity - such as the desire for international acceptance.” Dolowitz and Marsh (2000) assert that governments or policy makers conduct policy transfer out of obligations that they may carry as members of global regimes or treaties. Obligated transfers are reflected in actions of states seeking to comply with policies established by international organizations, such as the European Union, or global treaties developed by the United Nations. Mixtures, and the “desire for international

acceptance,” are linked to Rogers’ (2003:283) observations about laggards following leaders.

4. *“Coercive” Transfers.* Coercive transfers are characterized by the forced and external imposition of policies from one entity to another. Examples of “coercive” policy transfer are the policies imposed under colonial or martial rule. The imposition of loan or financial conditions by international aid agencies, such as the World Bank, serve as additional examples of “coercive” policy transfer. Crisis may add coercive elements, such as strict loan conditions, to force transfers.

5. *Who.* Dolowitz and Marsh (2000:9) reveal that the universe of actors involved with voluntary transfer is broad, and identify nine categories of actors. There are elected officials, bureaucrats/civil servants, pressure groups, policy entrepreneurs and experts, transnational corporations, think tanks, supra-national governmental and non governmental institutions, and consultants. Dolowitz and Marsh (2000:16) add that as a general rule policy entrepreneurs initiate the transfer process “voluntarily.” Dolowitz and Marsh (2000:14) contest the notion that the roles of borrowers and lenders of policies are fixed and assert that the roles are dynamic and sometimes interchangeable. The presence of ambiguity in the context of voluntary transfer encourages anarchy. Dolowitz and Marsh (2000:14) assert that bureaucrats “typically seek mixtures” of policies during the transfer process and that politicians typically seek copies and “quick fixes”. They add that international consultants can often blur the distinction between voluntary and coercive transfer depending on the mission and organization for whom they work. Dolowitz and Marsh (2000:21) claim that “policy entrepreneurs ‘sell’ policies around the world,” and that “international policy networks, advocacy coalitions or epistemic communities



- 1) Copying - which involves direct and complete transfer;
- 2) Emulation - which involves transfer of the ideas behind the policy or program;
- 3) Combinations - which involve mixtures of several different policies; and
- 4) Inspiration - which involves policies in another jurisdiction inspiring a policy change, but where the final outcome does not actually draw on the original.

#### *I.D. Rational and Anarchic Aspects of Policy Transfer*

Rose (1993), and Dolowitz and Marsh (2000) explore the roles of rationality and anarchy within lesson drawing and policy transfer theory. The author also explores the rationality or anarchic elements of voluntary transfer of urban environmental policies from Germany to the U.S. Therefore, it appears useful to summarize two relevant theories of bounded rationality and organized anarchy ensconced within policy transfer theory that have special relevance for understanding voluntary transfer of urban environmental policies from Germany to the United States.

*1. Bounded Rationality.* Simon (1986) asserts that bounded rationality in policy making follows a process of problem-definition, goal setting, review and selection of alternatives. However, constraints of information and time cause policy makers to ‘*satisfice*.’ Simon (1986) characterizes satisficing as the practice of setting “an aspiration level” and searching “until an alternative is found that is satisfactory by the aspiration level criterion,” resulting in the selection of the first alternative (Simon 1986:168). Time, resources and information constraints also limit the “analytical rigor” decision makers invest in policy development. “Satisficing” among policy makers includes searches for experiences from the past “or for solutions that minimally satisfies

their aspiration” (Simon 1986). Simon, like Rogers, asserts that complexity of policy problems limits rationality and contributes to the uncertainty and inability of policy makers to confidently interpret consequences and outcomes. Simon also adds that bounded rational processes are goal-directed, but goals are dynamic and not static.

2. “*Organized Anarchy.*” Cohen, March and Olsen (1972) and Kingdon (1995) assert that rational models are incomplete in their ability to explain policy making. Cohen, March and Olsen (1972), charge that rational processes of goal setting and incremental change are invariably subverted by participants in the policy making processes who have unclear and ambiguous goals, lack a clear understanding of content, and ill-defined methodologies. Cohen, March and Olsen (1972) summarize the condition of policy making in which multiple opportunities and preferences manifest themselves as “garbage cans” into which are dumped “various kinds of problems and solutions by participants as they are generated. The mix of garbage in a single can depends on the mix of cans available on the labels attached to the alternative cans on what garbage is currently being produced, and on the speed with which the garbage is collected” (Cohen, March and Olsen:1972:2). It is a process involving “choices looking for problems, issues and feelings looking for decision situations in which they might be the answer, and decision makers looking for work” (Cohen, March and Olsen 1972:2). Organized anarchy emerges from multiple preferences and multiple actors and there are unclear linkages between means to ends and varying degrees of involvement among all the participants. Solutions are used in a variety of constructs in response to a variety of separate questions.

Kingdon (1995) studies policy making in Washington through the lenses of Cohen, March

and Olsen's notions of garbage cans. Like Cohen, March and Olsen (1972), Kingdon questions rationality and goal-oriented policy development and asserts that policy "agendas" and their alternatives evolve when the three separate streams of policies, problems, and politics are "coupled" at critical times through "windows of opportunity" (Kingdon 1995:20). Policymakers respond to multiple opportunities and multiple problems as political events unfold in a desultory fashion and according to their own schedules and rules. Kingdon (1995:133) adds that government agenda setting is anarchic, formed in problem streams and political streams. Policy alternatives are formed in the policy streams. The evolution of the streams proceeds simultaneously and problems emanate from "conditions" that violate essential values, comparison of conditions with "other countries or other relevant units." The recognition of problems is messy and subject to relative and variable forces. Kingdon claims that political streams "flow along according to their own dynamics and their own rules" (Kingdon 1995:198). The policy stream is formed in a "policy primeval soup," in which ideas - perhaps imported from abroad - "float around, bumping into one another, encountering new ideas and forming combinations and recombinations" Kingdon (1995:199). The three streams of problems, policies, and politics,

"operate largely independently of one another. Solutions are developed whether or not they correspond to a problem. The political stream may change suddenly whether or not the policy community is ready or the problems facing the country have changed...Once we understand these streams taken separately, the key to understanding agenda and policy change is their coupling. The separate streams come together at critical times. A problem is recognized, a solution is available, the political climate makes the time right for change, and the constraints do not prohibit action. Advocates develop their proposals and then wait for problems to come along to which they attach their solutions, or for a development in the political stream like a change in administration that makes their

proposals” (Kingdon 1995:88).

Openings of “policy windows” are caused by the coupling of events in either the problem stream or political streams when crises press “policy entrepreneurs” and “policy communities” to push through “pet proposals” with ideas and contents that change constantly over time. Policy entrepreneurs, acting persistently through networks of specialists, gradually accumulate knowledge and information to advocate a particular idea and response to a challenge. Kingdon (1995:140) explores how awareness and agreement on solutions diffuse among specialists. “People in and around government speak of a ‘growing realization,’ an ‘increasing feeling’ a ‘lot of talk in the air.’” After some degree of diffusion, there seems to be a take-off-point: many people are discussing the proposal or idea.” Kingdon refers to a “tipping point” that is reached momentum gains through bargains among coalitions of experts, concessions are made “in return for participation in a coalition, and as the bandwagon gains momentum, people join out of fear of being excluded” (Kingdon 1995:141).

Kingdon’s (1995) observations of the effect of national culture are especially relevant for understanding cross-national voluntary policy transfer. Like Lipset, Kingdon (1995:133) explores whether a “distinctive ideology or political culture dominates American culture - one that places much more emphasis on the virtues of private sector activity and the evils of government, than the thinking that dominates the politics of other industrialized countries.” Kingdon (1995:134) concludes that “if there is such a national culture or dominant ideology, it affects different policy arenas differently.”

Mossberger (2000) draws from Kingdon (1995), Simon (1986), Rogers (2003) and Rose

(1993), to explore the diffusion of enterprise zones in six U.S. states and the rational and anarchic elements affecting the acquisition and use of imported information. Mossberger’s work is particularly insightful because of the application of an “informed-decision making” model to examine bounded rational and anarchic traits of the diffusion process. Mossberger (2000) defines informed decision-making as a process of attaining knowledge about a diffused idea and assessing the information. Mossberger (2000) claims that attainment is an active or passive effort and defines assessment as a process that “requires adopters to consider or debate the possible application of the idea to their own setting, given knowledge about the policy model, and the adopting government’s own circumstances or needs. Assessment may consist of reasoned consideration, political experience or political debate (Mossberger 2000:9). Mossberger (2000:8) adds that “informed decision making obliges policymakers to consider criticism, potential problems, or evidence such as research” during the assessment process. Mossberger (2000) developed the table below to classify differences between rational and anarchic policy diffusion processes.

**Table 2.3**  
**Criteria to Identify Presence of “Organized Anarchy” or “Bounded Rationality”**

	Organized Anarchy	Bounded Rationality
Process	Opportunistic	Goal-Directed
Search	Solution May Precede Problem	Bounded Search
Decision-Method	Availability of Solution	Satisficing

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**Table 2.4**  
**Comparison of Bounded Rationality and Organized Anarchy**

<b>Bounded Rationality</b>	<b>Organized Anarchy</b>
<u>Logical sequence of steps</u>	<u>Timing vs. logic</u>
- Selection of goals, may revise later	- Problem may be ambiguous
- Bounded search (active, problem focused)	- Preferences ill-defined, may be inconsistent or conflicting
- Comparison of alternatives to goals	- Solutions may precede problems
- Satisficing for first alternative to meet goals	- Process and criteria for evaluation are ambiguous
	- Loose coupling, opportunistic; Decisions may be because of available alternative, or because deadline forced closure
<u>Decision Environment</u> : Problem complexity; Uncertainty of consequences	<u>Decision Environment</u> : Problem complexity; Uncertainty of consequences; Ambiguity in problems and preferences; Fluid participation; Unclear technology (means to achieve ends)

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## II. Review

The process of cross-national voluntary policy transfer is understudied. The theoretical roots of policy transfer are tied to the perspectives and social theories guiding past and current research of diffusion. For interpretation of the contexts and variations affecting voluntary policy transfer, especially the acquisition, use and testing of information from abroad, this dissertation draws from Roger's work with the innovation-decision making process of diffusion. Rogers's model offers a comprehensive overview of social processes affecting the accumulation, and use of innovative ideas - particularly the role of individuals and organizations harvesting ideas. Rose's notions of lesson drawing, and Dolowitz and Marsh's research into the process of policy transfer offer helpful contexts in which to frame the empirical work of voluntary transfer from abroad and

to analyze the outcomes and degrees of transfer process. Mossbergers' work with "informed decision-making" and analysis of the diffusion of enterprise zones in six U.S. states in the light of the "bounded rationality" and "organized anarchy" policy making models also offers a useful lense through which the phenomena of voluntary cross-national transfer can be organized and assessed.

## CHAPTER III

### REVIEW OF LITERATURE

The previous chapter focused on some relevant social theories and perspectives concerning policy transfer and diffusion. The chapter also summarized voluntary policy transfer and its relationship to the policy models of bounded rationality and organized anarchy. This chapter will examine some relevant literature on cross-national voluntary policy transfer with a focus on the filters affecting the acquisition and use of information from abroad - particularly the filters affecting the importing, review and testing of policies into the U.S. This chapter will close with a review of some writing concerning the voluntary transfer of urban and environmental policies from Germany to the United States since the mid-19th century and some links to policy transfer theories.

#### **I. Voluntary Policy Transfer - Filters (Bounded Rational and Anarchic)**

A review of literature supports notions that the subject of cross-national urban planning and environmental policy transfer is understudied - especially at the sub-national level (Dolowitz and Marsh 2000; Masser 1986). This is especially the case when looking at the voluntary transfer of policies into the United States. Nevertheless, research is emerging that examines the filters of time, finances, information, culture and politics on the importation and adoption of policies from abroad. Dearth of information is commonly cited as a filter affecting rational and some anarchic transfer processes (Simon 1986; Dolowitz and Marsh 2000; Mossberger 2000). Rose (1993:3) even goes so far as to say that lesson drawing is “preconditioned” on access “to

information about what other governments are doing,” and implies that more and better review of information from abroad contributes to more rational policy development. Dolowitz and Marsh (2000) suggest that lack of information can be one of three primary reasons for failed voluntary policy transfer. The cross-national transfer and diffusion literature suggests that “satisficing” is the rule and not the exception among policy makers searching for policies from abroad. This is especially indicated with cross-national satisficing when the availability of information is conditioned by lack of shared culture, language and geography (Walker 1969; Weyland 2003). In the same vein, Jacoby (2000) questions whether policy makers involved with cross-national transfers are capable accessing and applying the appropriate information necessary to study the kind of policy alternatives assumed in rational choice theories.

#### *I.A. Organizational and Information Filters*

Organizational and technical filters affect anarchic and rational transfer processes. Simon (1986) suggests that staff availability, organizational size and adequate technical knowledge support a more goal-oriented and rational search for information and ideas from abroad. Research by Rogers (2003), Daley (2000) Stone (2000), and Berry and Berry (1990) point to the abilities of large organizations with adequate staff and research and development budgets to conduct rational searches by overcoming language and technical barriers that restrict the search, understanding and adaptation of policies from abroad. However, Mossberger’s (2000) research into the diffusion of enterprise zones among six U.S. states suggests that politics strongly interferes with rational decision making even among large state-level organizations with adequate staff and resources. Mossberger (2000) observed an inverse relation between the staffing and

spending among state legislatures reviewing the adoption of enterprise zones in the U.S. Adequate staff time and resources within state legislatures did not ensure rational decision making process and were trumped by “the logic of bargaining and compromise that forged policy decisions from conflicting preferences and proposals” (Mossberger 2000:199).

Wolman and Page (2002:478) claim that policy transfer is a derivative of policy and organizational learning and dependent on the access and use of knowledge and awareness of programs in effect elsewhere. Piggy-backing on Rose’s (1993) notions of assessing probable effects of policies transferred from another country through “cause and effect” models, Mossberger and Wolman (2003) examine cross-national policy transfer and prospective policy evaluation for 17 case studies concerned with cross-national transfer and the ties to rationality. Awareness, assessment, and application are the criteria that Mossberger and Wolman (2003) develop to determine rational assessment of imported programs. They define awareness as the scope and diversity of information, including the “range of locations” among policy alternatives. Awareness for them also includes adequacy and accuracy of information, such as whether the information was accessed from formal program evaluations and contains results of performance. They define assessment as the study of similarities and problems of the exporter and inclusion of analysis of the policies’ effects and of differences in the exporter’s legal or political setting.

In their discussion of cross-national policy transfers, Mossberger and Wolman (2003) observe that the search and review of imported information is generally anarchic. Mossberger and Wolman (2003:432) particularly noticed that imported information from abroad is filtered by policy makers placing “reliance on their own senses - what they saw or heard, particularly

informally and particularly from people or sources they trusted.” Mossberger and Wolman (2003:432) also observe that cross-national policy transfers were generally confined to limited searches of one country and that policy importers were equipped with an “insufficient understanding of the way the program interacted with other elements of the political system” in the exporting country. In separate research concerning the transfer of urban development policies from the U.S. to the UK, Wolman (1992:32) and Wolman and Page (2002) observed that the search and use of imported information was “unsystematic and unstructured” and overly reliant on “promotional information” sources from “show case” examples that were descriptive, impressionistic and contributed to “selection bias.”

#### *I.B. Political and Social Learning*

Dolowitz and Marsh (2000) and Wolman and Page’s (2002) research suggests that policy makers - particularly at the national level - “satisfice” during the cross-national acquisition of information because of shared political ideologies. Rose (1993:17) claims that the choice of where to search for lessons and policies is shaped by “subjective political values,” and the “psychological proximity” of two political bodies. In other words, shared or different political ideologies between importers and exporters of policies will trump problem-oriented and goal-focused searches. Dolowitz and Marsh (2000) and Wolman and Page (2002) explore how shared conservative governing philosophies of the Reagan Administration and Thatcher Government during the 1980’s served as the primary catalysts motivating the transfer of health and urban development policies from the U.S. to the UK.

Robertson’s research (1991) resonates with claims that the acquisition and use of

information from abroad is filtered by politics and ideology - especially in the context of the American political system. Robertson (1991:70) asserts that the cross-national search is often politically exclusive because “politicians that adopt conservative policy lessons will not adopt liberal lessons and politicians that adopt liberal lessons will not adopt conservative ones.” Robertson (1991:57) adds that in this context, information about policies from abroad are often used “as political weapons” to manipulate ideas in domestic policy discussions because they help “simplify the premises of complex policy decisions.” Robertson observes that bias emerges during the policymaking process as policymakers will reduce the complexity of public problems “by using analogies, wishful thinking, inferences of impossibility, and negative images to limit the definition of the problem and the possible universe of alternatives and consequences available to solve it” (Robertson 1991:57). Borrowing from Kingdon’s assertion that policy makers are reluctant to embrace policies from abroad if they are incompatible normatively with their citizen’s shared norms, even if the program has been proven to perform effectively elsewhere, Robertson (1991:68) reveals how foreign models are referred to negatively in the debates of the U.S. Congress by a ratio of nearly three to one.

Bennett (1991) also writes about political, rational and anarchic elements affecting cross-national import of information. Bennett claims that foreign “evidence” is imported because policy makers seek to: 1) put an issue on the political agenda; 2) mollify political pressure; 3) emulate actions of an exemplar; 4) search for best policy; and, 5) legitimate conclusions already reached. Bennett’s claims that importers introduce information from abroad to put issues on the political agenda suggest anarchic elements of “fadishness” mentioned by Kingdon. Bennett

suggests that imported information enters the policy discussion in a rhetorical and selective manner, with little regard for methodological reliability or validity, and in “vague or anecdotal terms” because policy makers seeing that “the Americans, Germans, Japanese, Swedes, have a program to deal with this,” so they ought to have one too (Bennett 1991:35). Emulating models of exemplars is another driver behind the import of foreign information explored by Bennett.

Bennett (1991) asserts that emulation of programs from abroad can take on bounded rational attributes when importers study the applications and results of a program in another country and then study which elements can be applied and which cannot. Bennett adds that policy makers may undertake a “global search for the option that is most effective and transferrable,” a process he refers to as mixing-and-matching. Finally, importers will introduce information from abroad to reinforce decisions that have already been reached - a process that relied on using evidence “in highly selective ways to reinforce positions and to legitimate conclusions” (Bennett 1991:37).

The concept of “laggards learning from exemplars” has its origins in social learning theory which claims that individuals learn by observing others and imitating similar but not identical processes (Bandura 1977). Bandura (1977) observes that learning is a process in which people act through a set of continuous processes of “reciprocal interactions” between environmental, personal, and behavioral factors. Direct experience on a “vicarious basis” through observing other people’s behavior and its consequences for them forms the core of learning. Polanyi’s (1967) work concerning how people learn also is instructive when considering anarchic elements of policy transfer. Polanyi (1967), asserts that informed guesses and hunches are part of

exploratory acts motivated by “passions.” For Polanyi (1967:4), human learning involves the recognition that “we can know more than we can tell” - a phenomena he refers to as “tacit knowledge.” Tacit knowledge appears to relate to hunches and “gut feel” drivers which practitioners do not seem to be able to explain rationally. Something akin to Polanyi’s tacit knowledge seems an appropriate name for some of what goes on in the transfer process of this study.

Applying social learning notions to cross-national environmental transfer, Kern (2001), Tews (2005), Jaenicke and Weidner (1997), and Busch and Juergens (2005) observe how environmental policies are imported by “ideational” competition. They suggest that laggard countries emulate the actions of pioneer countries out of fear of looking like dawdlers and not adopting similar policies. Busch and Juergens (2005) claim that the global adoption of environmental policy innovations reflects ideational competition and mimicking. Tews (2005:67) suspects that the equivalent of global environmental policy bandwaggoning can be observed when a certain “number of countries adopting an innovation increases, the incentive to follow suit grows if one does not wish to be a latecomer.” Kern (2001) attributes the phenomena of gaining acceptance by laggard countries to characteristics of the countries perceived to be pioneers. Kern (2001:11) claims that in environmental policy diffusion “the scales are tipped by large, populous, and economically leading countries” such as the major industrial countries like the U.S., Japan, and Germany. Kern (2001) adds that the large, populous and richest countries have the power to affect policy adoption in other countries in the development of conventions within multilateral fora, or through approval of stricter environmental regulations as demonstrated within the

European Union.

Although focused on policy developments at the national-level, Kingdon also writes about ideas “snowballing” as laggards follow leaders. Kingdon (1995:161) writes that “potential coalition supporters are enticed into support by promises of some benefit, and others climb aboard the bandwagon out of fear that they will be left without their share of the benefits in the event that something should pass.” Kingdon (1995) suggests that herding occurs as ideas take hold in policy communities like fads. “Growing realization,” and “increasing feeling” or “a lot of talk in the air” evolve through regular discussion, talks, and consultations among policy communities and policy makers.

Looking at the above “filters,” the movement back and forth between concepts and observations about groups and individuals creates a somewhat slippery scene. It seems inappropriate to attempt to draw a line because it is individuals with whom this study is working.

### *I.C. Cultural and Geographic Filters*

Geographic proximity is regularly observed to be a driver of voluntary transfer and diffusion especially in intra-national transfers. Walker (1969) was among the first researchers to draw connections between policy transfer, geographic proximity and regional networks among neighboring U.S. states. Wolman and Page (2002) explore how urban regeneration practitioners in the UK first looked for policy ideas and concepts from neighboring jurisdictions. Bennett (1997) observes geographic influences on the transfer of ombudsman policies among Scandinavian countries. However, Rose (1993) and Hoberg (1991) explore the ambiguous influence of culture,

language and geography. Rose (1993) points to the absence of concerted learning and policy transfer between two countries with long-term historical, geographic and cultural ties, such as the UK and Ireland. Hoberg (1991) studies the lack of transfer of environmental policies from Canada to the United States and suggests that despite geographic (and cultural) proximity, the economic and political size of the U.S. confines the transfer to a primarily one-way flow of information and policies to Canada.

Shared culture, and especially language in the context of geographic proximity, are often viewed as important filters affecting rational and anarchic cross-national voluntary policy transfers. Altermann (1999:210) claims, “comparative research is dependent, first and foremost, on the ability to speak the same language.” Rose (1993) has identified the rapid transfer of social policies among Scandinavian countries to similar cultural and language attributes. Waltman (1980) draws similar conclusions about the power of shared language and culture in his observations about the pace at which U.S. policy makers borrowed social security and income tax policies from the UK - although the policies originated in Germany. In the realm of cross-national transfer of urban planning policies, Ward (1999) draws similar conclusions about the power of shared language and culture between the U.S. and Canada. Ward observes that shared language lured together urban planners from Canada and the U.S. to trade lessons and information, such as the “garden city” concept, with the UK.

Weyland (2003) researches the influence of language on voluntary transfer of social welfare programs within South America. Drawing on the work of cognitive psychologists, Weyland (2003:14) affirms that policy makers rely on “inferential short-cuts” powerfully driven

by geographic, cultural and linguistic proximity in order to overcome finite attention spans and information gaps. Weyland (2003:15) highlights that policy makers risk removing critical review and attaching undue weight and bias on narrow sets of observations that tend to over-emphasize initial successes of neighbors policies through “cognitive short-cuts” based on shared language and culture.

Meseguer (2005) also explores cross-national policy transfer as a voluntary act of learning through rational and bounded rational lenses. Meseguer (2005:74) applies a rational learning approach to observe the adoption of privatization, trade liberalization, and central bank development policies among developing countries. Meseguer (2005:74) considers rational learning to occur when politicians “take all information into account about the outcomes of policies elsewhere - regardless of the characteristics of the sources of information.” Meseguer’s (2005:71) study reinforces Weyland’s observations that cross-national policy transfer is often a ‘blind’ action, void of “enhanced reflection about the mapping from policies to outcomes.” Meseguer (2005:71) adds that voluntary learning of lessons and policies from abroad is best understood through “bounded” rational processes and the availability of information, geographic proximity, and cultural biases, which shape the way that governments hunt for “relatively simple and inexpensive” means to gather lessons and information.

Elkins and Simmons (2005 and 2004) also study voluntary cross-national acquisition of lessons and policies as a learning process through the research of social psychologists. Drawing from Merton (1968) and Bandura (1977), Elkins and Simmons (2004) assert that voluntary transfer of policies are initiated when policy makers confront uncertainty or lack of information

about the performance of their own policies and look abroad for solutions. Lacking the ability to assess the consequences of policies from abroad, policy makers turn into “cognitive misers,” and will “rationally seek information relevant to their own policy context” by satisficing through cultural propinquity. Elkins and Simmons (2005:43) assert that “reference groups” of practitioners with similar cultural, economic and class attributes offer lessons which “are viewed as more relevant.” Elkins and Simmons (2005:43) identify three biases contributing to satisficing during the search for imported information: 1) information cascades; 2) availability; and 3) reference groups. Information cascades reflect decisions by policy makers that follow a sequence of other policy actors acting “exclusively on the decisions of the first two or three actors.” Limits to data compel policy makers to rely on what is available through a few “highly selective samples” of other policy models. The availability is often affected by intensity of communication, language, and familiarity of culture. Mirroring Kern, Meseguer asserts that the policies of “prominent nations” with strong economic and cultural influences, increase “availability” of information as policy makers look for models overseas. Elkins and Simmons (2005:43) add that driving cross-national transfer “some of the most visible and defining national characteristics are geographic and cultural, the country’s region, the language of its citizens, religion and even colonial origins.”

#### I.D. American Exceptionalism

The transfer and diffusion literature reflects the common-sense notion that cultural values and beliefs filter the transfer of policies, ideas and lessons. Rose (1993:6) sees filters of introversion and lack of “creativity and systemic international learning” among the U.S.

population at large and among policy makers in particular. Rose (1993:39) includes notions of Lipset's (1996) "American exceptionalism" as an analytical framework to understand the filters affecting the importation and application of information from abroad in general, and from Germany in particular. Lipset's thesis is that the United States is "exceptional" in contrast to all other countries of the world, particularly Europe, because of its anti-statist, individualistic and anti-egalitarian culture. Drawing on a wide variety of research and surveys on public opinion attitudes, Lipset reveals how anti-state, individualist and anti-egalitarian attitudes define American culture and values and suggests that these values of the U.S. differ greatly from the more social, pro-state political philosophies of Europe - particularly Germany. The strong social and pro-state political philosophies of European countries represent the heterophilic faultlines which might cause policy transfer efforts into the U.S. to fail. Lipset (1996:75) asserts that "the United States continues to be exceptional among developed nations in the low level of support it provides for the poor through welfare, housing and medical policies." Thirty-eight percent of Americans are in favor of reducing differences in income between those with high and low incomes versus 66 percent of western Germans." King's (1973:309) research into the influence and role of the state in Germany and the U.S. also reinforces Lipset and Rose's notions of American exceptionalism. From banking, to health care, to education, King (1973) reveals a well-ensconced presence of large-scale public ownership and involvement in policy matters in Germany that is relatively absent in the United States.

Little has been researched about national cultures affecting the adoption of environmental policies in the U.S. from abroad. However, in addition to differences between German and

American perceptions vis-a-vis the role of the state, Hoberg (1986) has observed how environmental policies in the U.S. are grounded more in concern for “brown” policies that focus on human health than Europe. Kellert (1993:59) examines German and American attitudes and behavior toward wildlife and observes that when compared to Americans, the “German public expressed an unusual willingness to sacrifice practical human benefits for the sake of nature and animals.” Exploring ties between environmental protection and international engagement, Andrews’ (1997:37) research of U.S. national environmental policy also points to a cultural tendency in the U.S. to isolate itself from environmental policies overseas, even “brown” European environmental concepts such as precaution or “polluter pays.” Lefcoe’s (1979:43) study of the transferability of urban planning practices from Germany to the United States also plays off Lipset’s theories concerning suspicions in the U.S. about state intervention into urban development and land-use planning policies. Lefcoe (1979:43) concedes that “city growth in Germany” can be a model for the U.S., but warns that “transnational comparisons may seem disappointing if we begin with the expectation of assistance in resolving major political questions, such as whether local governments should be land developers in the United States.”

On a different note, Rose (1993) and Jacoby (2000) warn about the risks of overstating cultural impermeability and note the successful transfer of social, economic, and defense policies from Europe to Japan after a bounded rational search for lessons from abroad during the Meiji Restoration. Rose (1993:43) claims that “the Japanese did not seek to emulate a single nation; instead, individuals with a particular program interest were sent to a particular country identified as likely to have lessons for the modernization of Japan.” Rose (1993:42) adds that the

“Japanese did not regard their distinctive national culture as a block on learning lessons from abroad. Instead they saw technical backwardness as an imperative compelling wholesale importation of lessons from abroad.”

## **II. Communities of Experts and Policy Entrepreneurs**

Cross-national diffusion and transfer research contains many references concerning the role of individuals and communities of experts equipped with global perspectives to identify, interpret and test information about policies from abroad. In the context of “communication networks,” Rogers (2003:363) explores how “interconnected individuals who are linked by patterned flows of information” facilitate the diffusion of innovations. Rogers pays special attention to the roles of “change agents” and “opinion leaders,” who take information concerning innovations and communicate it among specific social groups. Rose (1993) considers lesson learning a process in which policy makers exchange technical information through “epistemic communities,” which are networks of domestic and international experts sharing normative and principled beliefs. Kingdon (1995) observes the influence and roles of “policy communities” on agenda setting and the importance of individuals, groups, and organizations bound together by shared values, world views, and orientations. However, Kingdon (1995:49) sees that policy communities are more often engaged in “negative blocking” during policy development, rather than the positive promotion of ideas.

Rose’s (1993) notions of lesson drawing as boundedly rational are shaped by his observations of communities of experts that satisfice by providing information short-cuts. Rose draws from Haas (1992), who observed the development of “epistemic communities” during the

creation of environmental policies for the Mediterranean Sea. Haas suggests that epistemic communities consisting of technical experts and organizations (governmental, non governmental and academic) were linked together through shared causal beliefs, problems, and notions of validity. Haas (1992:20) adds that epistemic communities offer policy makers value-based rationale in the development of policy recommendations and solutions. Haas, like Simon, suggests that epistemic communities reflect a boundedly rational process by introducing shortcuts to policymakers who search for information, advice, support and “consideration of alternatives.” Haas notes how these communities are particularly helpful in providing shortcuts for policymakers confronting highly complex and technical issues common in environmental policy development. Haas (1992:20) also buys into Kingdon’s notions concerning networks and claims that “whether the parties involved are characterized as interest groups, iron triangles, advocacy coalitions, issue networks or policy networks, the point is the same - small networks of policy specialists congregate to discuss specific issues, set agendas, and formulate policy alternatives outside the formal bureaucratic channels, and they also serve as brokers for admitting new ideas into decision-making circles of bureaucrats and elected officials.”

Bennett (1997:226) explores the influence of policy networks on the rational motives of lesson drawing and less rational motives to seek “legitimation” among Scandinavian countries borrowing freedom of information legislation. Bennett observes that networks of “policy entrepreneurs,” through constant interaction via professional organizations and intergovernmental associations promote “genuine attempts” to gather, review and apply lessons from the experiences of pioneers. Bennett (1997:226) seems to suggest that the absence of policy

communities may lead to the importation of information that is based on anecdote and void of consideration about “differences in the particular problems and resources that each nation may bring to bear.” According to Bennett (1997), the importation of information that is based on anecdote and not review of performance of the policies suggests that importers are mimicking pioneers in order to look modern. Bennett (1997:227) recognized that it is misleading to rely on “keeping up with the Joneses” as a sole motivator for importing information from overseas.

Mintrom and Vergari (1991) also study policy networks as transfer mechanisms for ideas in the context of policy development and the role of policy entrepreneurs. Mintrom and Vergari (1991:128) define policy networks as groups of actors with shared interests in a particular policy area and “linked by their direct and indirect contacts with one another.” Borrowing from Rogers, they affirm that potential adopters base their judgements of an innovation on information from those who have sound knowledge of it and who can explain its advantages and disadvantages (Mintrom and Vergari 1998:128). Mintrom and Vergari (1998) add that interpersonal contacts are essential to exchange information and new ideas which can trump scientific findings or mass-media channels. Mintrom and Vergari (1998) consider policy entrepreneurs to be people seeking to promote policy innovations by convincing politicians about the virtues and benefits of their ideas if they are implemented. Policy entrepreneurs aim first to convince others of the worth of the innovation as a solution to a political problem, and then mobilize people to secure approval of the policy.

Berry and Flowers (1999) observe how policy entrepreneurs in the public sector affect major policy changes with observations paralleling Kingdon’s. Berry and Flowers classify four

types of “public entrepreneur”: 1) Political entrepreneurs who hold elected leadership positions in government; 2) executive entrepreneurs who hold appointed leadership positions in government; 3) bureaucratic entrepreneurs who hold formal positions in government, although not necessarily leadership positions; and, 4) policy entrepreneurs who work from outside the formal governmental system to introduce, translate and implement innovative ideas into public sector practice. Berry and Flowers (1999:585) observe that policy entrepreneurs were “instrumental during the creation phase in placing issues near the agenda.” Berry and Flowers also identify the important role that individuals in quasi governmental commissions play in proposing policy initiatives. Policy entrepreneurs enjoy credibility as experts in a particular policy field and are critical to communicating and “highlighting the problem” (Berry and Flowers 1995:591).

Mossberger (2000:95) explores the development of “polydiffusion” and the means through which information about enterprise zone policies flowed to U.S. states. Mossberger (2000:96) characterizes polydiffusion as the merger of “vertical” and “horizontal” channels of information flows. Vertical channels are “point source” flows of information in which states respond directly to examples and models that emanate from the federal government. Horizontal channels are flows of information and policy content among organizations and generalists throughout the U.S. Mossberger (2000:96) reports that the variety and combinations of sources of information that she observed with enterprise zones was “complex” and involved multiple governmental and non governmental networks. Mossberger (2000:96) observes that enterprise zones flowed via “issue networks” and “policy communities” that grouped around the concept of

enterprise zones, and “included non governmental sources of information such as the press, academics, consultants, think tanks, and others. The distinguishing feature of this issue or policy network, however, was its intergovernmental framework, supported by federal agencies and organizations of the states.”

Burby (2003) and Burby and May (1997; 1998) also are informative in understanding the role of networks and “advocacy coalitions” and their influence on domestic urban planning. Burby (2003) argues that public participation and implementation of “plans that matter” is realized through the advocacy coalitions built through informed policy advocates from the “iron triangle” of business interests, regulators, and the local practitioners. Plans that are implemented evolve from the efforts of planners and policy advocates who obtain and share information that address challenges but also introduce alternatives for the advocates drawn from that triangle.

### **III. Outcomes and Degrees of Transfer**

A review of the “transfer literature” reveals it to be “thin” vis-a-vis the understanding of outcomes or variations of the transfer process (Jacoby 2000). Walker’s (1971) research into laws transferring among U.S. states that shared identical typographic mistakes, suggests outcomes which extend beyond the “coincidence of simultaneous invention,” (Jacoby 2000:7). However, there is much uncertainty around assessing outcomes and degrees. There also has been little theorizing about the relationship between copying, emulation, hybridization, synthesis and the filters of time, resources, culture, or complexity of imported policies. Evans and Davies (1999:381) assert that “the existing literature does not provide adequate techniques for demonstrating policy transfer.” Other challenges that affect analysis of outcomes and degrees

during transfer is determining whether information concerning a particular policy developed in a specific country was used in the development of the same or similar policy in another country. Unraveling the effects of the transfer process also is made complicated by the intensely subjective interpretations of the importer, the various cultural, information or policy filters affecting “re-inventions,” and determining which elements of a program, idea or practice are original or new to the governments adopting them (Walker 1969:881). As Jacoby claims, “measuring success against policymakers’ aims raises questions of which policymakers, which aims, at which times” Jacoby (2000:11). Elkins and Simmons (2005:43) add that there are numerous ways the learning and transfer process can go wrong because “the worldwide policy environment turns out to be a sloppy laboratory and inefficiencies develop as a result of some predictable biases and limitations in the learning process.”

### III.A. *Persistence and Performance*

Jacoby (2000:34) introduces the notions of performance and persistence of transferred institutions to classify outcomes of education and vocational training program transfers to and within Germany. Jacoby (2000:12) classifies performance as “benefits to the proponents of transfer (as in a ‘success’ approach) but also encompass unforeseen outcomes and effects on other actors and institutions in the new setting.” Jacoby (2000:12) adds that judgments about persistence:

“encompass issues of the rooting of institutions and their reproduction over time, and also of the ways they gain legitimacy in the new society. Effectiveness occurs when the transferred institution acquires a legal framework, when it performs in the new society in ways broadly consistent with the aims (promoting efficiency or justice) that led to the transfer attempt, and when it persists by being reproduced over time (though presumably

not without some subsequent changes). In short, my measures of institutional transfer encompasses the tripartite outcomes of legality, performance, and persistence.”

Jacoby adds that the process of transfer has three distinct characteristics:

- 1) breadth (wholesale versus piecemeal transfer);
- 2) depth (exact and functional equivalent); and,
- 3) intensity (continuous interaction and single moment transfers) (Jacoby 2000:34).

Piecemeal transfer refers to isolated institutional changes, when bits and pieces of policies are transported. Wholesale transfer refers to the importing and “adoption of a bundle of purportedly interlocking and mutually reinforcing institutions” (Jacoby 2000:34). Jacoby concedes that both modalities contain great risks and adds that “Piecemeal may leave the institution without its normal support network; the wholesale transfer approach wrongly presumes that it is possible to tell where institutions - especially those that work well -begin and end” (Jacoby 2000:34). Jacoby (2000:34) refers to exact transfer as efforts to “‘attempt’ to reproduce exactly certain laws that either constitute social and state actors in the first place or regulate their interactions,” with emphasis on ambition of the policy makers rather than their achievement. Functional equivalence refers to “the approach that does not try for exact reproduction,” but “abstract from a foreign institution a functional task which is in their view incompletely or poorly fulfilled in their own society” (Jacoby 2000:35). Single moment transfers refer to “a single legislative act encompassing all the interchange between the two societies.” Continuous interaction refers to continuous processes involving “tools as benchmarking, formal partnerships and personnel transfer” (Jacoby 2000:35). All of the above appear to relate more to nation-to-nation transfers than to local transfers deriving from international connections.

### *III.B. Degree Continua*

Dolowitz and Marsh (2000:14) identify eight categories of entities that transfer - policy goals, policy content, policy instruments, policy programs, institutions, ideologies, ideas, and attitudes. They have condensed Roses' five degrees of transfer into four by combining hybridization and synthesis. For clarity, they are repeated below:

- 1) Copying - which involves direct and complete transfer of policies;
- 2) Emulation -which involves transfer of the ideas behind the policy or program;
- 3) Combinations - which involve mixtures of several different policies; and,
- 4) Inspiration - which involves policies in another jurisdiction inspiring a policy change, but where the final outcome does not actually draw on the original.  
(Dolowitz and Marsh 2000:13).

Dolowitz and Marsh (2000) do not identify whether coercive or voluntary transfers are confined to any particular degree or outcome. Copying, emulation, combinations and inspiration occur within coerced and voluntary transfer, although Dolowitz and Marsh (2000) concede that it is unlikely that inspiration is the objective of coerced transfer. Dolowitz and Marsh (2000:17) add that “politicians tend to look for ‘quick-fix’ solutions and thus rely on copying or emulation, bureaucrats, on the other hand, are probably more interested in mixtures.” Dolowitz and Marsh (2000) add that policy transfer fails for one, or combinations of three reasons. Policy transfer is not complete because the process was inappropriate, uninformed, or incomplete. Incomplete transfer occurs when “crucial elements of what made the policy or institutional structure a success in the originating country may not be transferred” (Dolowitz and Marsh 2000:17). Dolowitz and Marsh (2000) define inappropriate transfer as inadequate attention given by the

importer to key economic, social, political and ideological conditions of the exporting country. Dolowitz and Marsh (2000) characterize uninformed transfer as the borrowing country failing to acquire sufficient information about the policy or institution and its operations in the exporting country.

Wolman (1992:41) classifies a broad range of cross-national policy transfer outcomes. These outcomes include general concepts, policy tools, highly specific program design and inspiration. Bennett and Howlett (1992:289) suggest that transfer results in “government learning” and that “we may only know that learning is taking place because policy change is taking place.” Wolman and Page (2002: 481) add that “diffusion studies typically require policy adoption whereas learning through policy transfer, as we have defined it, can occur even if the policy is not adopted.”

### *III.C. Soft and Hard Transfers*

Evans and Davies’ elementary classification for policy transfer consisting of “hard” and “soft” transfers is especially useful for analysis of cross-national transfer efforts. Evans and Davies (1999:381) assert that when researchers examine whether ideas or attitudes transfer, they study the “views and interpretations of the recipient subjects.” Evans and Davies (1999:381) suggest that analysis of whether a program has been copied from abroad, that identification of “concrete physical evidence,” be sought, such as a code or law of a program. Evans and Davies (1999) add that hard transfers may be associated with outcomes of more organized efforts to search and interpret policies from abroad. Soft transfer consists of ideas, concepts, attitudes, or labels and inspiration - factors that may or may not convert into hard transfers.

Tews (2003) explores how factors such as environmental plans, strategies for sustainable development councils and access to environmental information laws exhibited more rapid rates of transfer among 21 global environmental policy innovations in the 1990s. Tews (2003:13) suggests that “soft” (or “open” and “flexible”) policy instruments that diffuse rapidly around the world are characterized by the absence of specific “policy obligations.” Tews (2003:13) adds that the adoption of imported policies and were codified into law, such as freedom of information laws, were often vague in their content and adopted by countries that lacked the capacity to implement or enforce the laws. The implication appears to be that cross-national transfer of environmental policies can be reflected in codified and legally framed outcomes, but unidentified in the absence of well conceived and studied attempts to understand effects.

#### *III.D. Policy Labels Versus General Policy Mechanisms and Concepts*

In the analysis of the transfer of “enterprise zones” throughout the U.S., Mossberger (2000:117) noted that labels consisting of loose categories of targeted policies and ideas for distressed areas, rather than general mechanisms and design from the original UK enterprise zone programs transferred to and throughout the United States. Mossberger (2000:117) classifies two characteristics for policy labels. Policy labels stand for “a general category of policies, encompassing wide variation” which emanate from a process of partial borrowing. Mossberger (2000:117) suggests that importers will pick up a “label, a general concept, or a concept with only elements of policy design” and apply it to their own unique policy contexts. Mossberger (2000:121) adds that policies become labels when “loosely bundled or ambiguous concepts may be applied to a variety of purposes.” Mossberger (2000:123) classifies policy content into two

areas which can be “selectively chosen, rearranged, and recombined.” There is the “basic content,” and “other policy elements.” Mossberger (2000:123) adds that “a concept is the general idea of a policy proposal reduced to its fundamental expression. Borrowing a policy concept would mean adopting at least the general mechanism by which a policy is purported to work.”

Mossberger (2000:123) claims that “adopters may not know whether a policy has worked; even if it has, they may not know what elements were most responsible for its original success.” Mossberger (2000:123) adds that “adopters may make only some assessment of what the essential idea or argument is behind a policy proposal, and then decide to give it a try.” Mossberger’s references to the transfer labels at the expense of general policy content or mechanisms as a result of the influences of complexity and ambiguity also are reflected in Kern’s (2001) research of environmental policy transfer. Kern (2001) claims that problems whose effects are not easily visible, which lack easy technical solutions and which are often long-term, such as land contamination or groundwater pollution, are not easily parked onto the political agenda and therefore are not easily transferrable. Kern (2001:15) adds that “it is likely that the extent of policy change induced by a regulator is deceptively important for diffusion. Thus programs that lead to incremental changes are more likely to be accepted than programs implying massive restructuring.”

Table 3.1 sorts out some sources of the core terms from diffusion and transfer literature.

**Table 3.1**  
**Core Terms From Diffusion and Transfer Theories**

Initiation	Filters	Degrees	Outcomes
<p><b>Purposeful-Problem Solving, Bounded Rational</b>  <i>(Simon 1985; Rose 1993)</i></p> <p><b>Anarchic or Choice Opportunities/Problematic Preferences</b>  <i>(Cohen March and Olsen 1972; Kingdon 1995; Mossberger 2000)</i></p> <p><b>Coerced and Voluntary</b>  <i>(Dolowitz and Marsh 2000)</i></p>	<p><b>Culture</b>  <i>(Walker 1969; Weyland 2003; Meseguer 2005)</i></p> <p><b>Geography</b>  <i>(Walker 2003; Rose 1993)</i></p> <p><b>Language</b>  <i>(Weyland 2003, Meseguer 2005)</i></p> <p><b>Political</b>  <i>(Rose 1993; Dolowitz and Marsh 2000; Wolman and Page 2002; Jacoby 2000; Mossberger 2000; Bennett 1991)</i></p> <p><b>Organizational</b>  <i>(Rogers 2003; Wolman and Page 2002;</i></p> <p><b>Informational</b>  <i>(Dolowitz and Marsh 2000; Mossberger Wolman 2003)</i></p>	<p><b>Copying, Emulation, Hybridization, Inspiration</b>  <i>(Rose 1993; Dolowitz and Marsh 2000)</i></p>	<p><b>Soft and Hard</b>  <i>(Evans and Davies 1999)</i></p> <p><b>Labels</b>  <i>(Mossberger 2000)</i></p> <p><b>Persistence and Performance</b>  <i>(Jacoby 2000)</i></p>

**IV. Review of Literature Concerning Policy Transfer From Germany to the United States**

Although there is an abundance of historical literature recording anecdotes and outcomes of urban and environmental transfers from Germany to the United States, little research has tackled the possible mechanics of the transfer process itself. A look at the available historical literature indicates voluntary transfer processes at work with anarchic and bounded rational elements, shaped powerfully by national and cultural filters, resulting in transfers of hard and soft elements through communities of experts and policy entrepreneurs. The available literature,

particularly for the era 1870-1945, indicates relatively active, problem-focused searches for lessons from Germany - particularly in the fields of education, urban planning and natural resource management. The time period between 1870 and 1945 was when "the reconstruction of American social politics was part of a movement of politics and ideas throughout the North Atlantic world that trade and capitalism had tied together" (Rodgers 1998:3). Rodgers (1998:6-7) adds that the development of reform policies in the U.S. was started by "a sudden abundance of solutions, a vast number of them brought over through the Atlantic connection." Information about an innovation or lesson traveled to the U.S. through networks of interconnected political and academic elites. These forces worked to transform the U.S. university system and management of the U.S. natural resource policies.

#### *IV.A. Late 19<sup>th</sup>-Century Transfers From Germany to the U.S.*

Patterns of the voluntary transfer of urban planning, education, and other social policies during the late 19<sup>th</sup> century followed what could be interpreted as relatively bounded rational patterns, resulting in outcomes of hard and soft elements. Signs emerge from the literature that laggards (the U.S.) followed the pioneering models of German academia and resource management not only out of desire to appear modern, but because of relatively informed and structured searches for information and efforts to apply that information in the U.S. In the late 19<sup>th</sup>-century, Germany seemed a world leader in education, environmental, and urban planning policies (Rodgers 1998:4). American urban planners, academics and conservationists confronted challenges, heard from third parties about innovative ideas and solutions in Germany and endeavored to learn and apply them in the U.S. They committed time, money and other

resources for travel to Germany to gather understanding and knowledge about innovative programs (Rodgers 1998; Miller 2001; Brubacher and Rudy 1997).

Brubacher and Rudy (1997) write about how the entire U.S. academic system, including the development of the modern research university and doctoral programs was modeled after pioneering academic systems in Germany. Brubacher and Rudy (1997:174) claim that "The impact of German university scholarship upon nineteenth-century American higher education is one of the most significant themes in modern intellectual history." Brubacher and Rudy (1997:174) describe how the critical concepts of the German university system such as scientific research through original investigation, the specialists' lecture, the laboratory, and monographic study programs were imported to institutions such as the University of Michigan and Johns Hopkins University. Driven by concerns of poor standards in the American university system, over "ten thousand American students passed through the halls of Germany universities between 1815 and 1914" (Brubacher and Rudy 1997:175). With respect to outcomes, Brubacher and Rudy (1997) point to efforts by Daniel Gilman, the president of Johns Hopkins University, to avoid duplication of existing models in Germany. Rather, Gilman pursued an effort to "supply the needs of the United States in certain specialist learned fields, "such as language, mathematics, ethics, history and science" (Brubacher and Rudy 1997:178).

The transfer of "*Kindergartens*" from Germany to the U.S. during the 1850s reflects the effects of reinvention within cultural contexts and effect of international networks of teachers and pedagogy experts (Wollons 2000:16). *Kindergartens* emanated from the work of Freidrich Froebel, a German landscape architect and educator whose networks of students and followers

included the wife of Carl Schurz, the former U.S. Senator and Secretary of Interior. Although the notion of Kindergartens in Germany were closely associated with the “liberal, democratic and socialist movements” in the mid-19th century, they were ubiquitous in the United States by the start of the 20<sup>th</sup> century (Wollons 2000:16). The transfer of Kindergartens fit the American political and pedagogical landscape because of educators’ willingness to “fit the Kindergarten to national values” Rogers (2003:64). In Germany the core of the Kindergarten included memorization skills and conformity to authority, while in the United States, they stressed folk tales featuring patriotism and independence from conformity.

The period between 1900 and 1930 is considered to be the start of contemporary urban planning in the United States (Dumpelmann 2005). By coincidence, the period was considered the “rationalistic era because of planners’ emphasis on hygienic and social functions of parks” (Dumpelmann 2005:75). The era was characterized by similar efforts of American academicians and the transfer of urban planning lessons from Germany. “Grand Tours” to European capitals were organized to study park designs, transportation planning, and taxation policies (Sutcliffe 1981). Moved by the crisis of cholera outbreaks in New York City, Benjamin Marsh deliberately moved to Germany to understand city planning practices that emphasized human health and hygiene (Peterson 2003; Rodgers 2002). Marsh considered German urban planning systems in general, but the concept of zoning in particular to be a model for public health planning practices for the U.S. In 1901, Marsh traveled to Germany and studied the German language and Frankfurt-am-Main’s planning codes. Marsh returned to New York City to introduce the first city’s first comprehensive zoning regulations (Sutcliffe 1981).

Other noticeable voluntary transfer efforts in the realm of urban planning included Senator John MacMillan's work to transform the National Mall in Washington D.C., by finding and applying positive urban park and streetscape policies from Europe. The tour to Berlin and other European capitals in 1901 profoundly shaped the eventual design of the National Mall (Sutcliffe 1981). Returning from the MacMillan Commission tour of Europe, Frederick Law Olmsted, Jr., testified before the U.S. Congress in 1906 that German urban planning practices offered important lessons (and mistakes) for planning efforts in the United States. Although Great Britain was also considered a model for Canadian and American planners (Ward 1999), the efforts by so many American planners, environmentalists, scientists and education specialists to go to Germany to learn, despite poor communication networks and language and cultural barriers, suggests a relatively rational element to the voluntary transfer process.

In the realm of natural resource management and planning, Gifford Pinchot studied natural resource and forestry management practices for 12-months in Bavaria, Germany, in 1888, before returning to the U.S. to create the U.S. National Forest Service. Miller (2001) records how a range of German forestry harvesting and maintenance practices were emulated by Pinchot after Bavarian models. Aldo Leopold traveled to Germany in 1936, to better understand resource conservation laws and policies. After six months in Germany, Leopold returned to Wisconsin to develop the state's first resource conservation programs (Leopold 1936).

#### *IV.B. Post-World War II*

Rodgers (1998) writes that following World War II, the United States became a world hegemon and that the "entrance of the United States onto the international political stage was

also an exit - the advent of the American century” (Rodgers 1998:488). The era represented a time when comparisons of conditions in other countries were not as useful a justification to look abroad for lessons. As Rose (1993:34) observes, it could be considered a time when “national power was used to afford not to learn” in the United States.

The emergence of a new American century corresponded with the evolution of “exceptional” attitudes toward the importation of environmental and planning ideas after World War II. This was particularly noticeable in the realm of land-use planning. Kayden (2000:452) writes how anti-state attitudes and individualism in the U.S. preclude the transfer of European-style national land-use planning policies. Kayden asserts that the unique nature of American land-use planning, regulatory systems and culture, especially, “the relative primacy of private property and private market ideology in the United States” compared to other countries “where land is or has been predominantly owned by the state” imposes significant barriers to the introduction of national land-use policies. These notions are touched on by Lefcoe (1979), Nivola (1998) and Beatley (2000). Critical variables contributing to different policy responses and differences between U.S. and German environmental and planning policies include the generally higher cost of land in Germany than in the U.S. (Conservation Foundation 1978:145). Bruegmann (2002) has identified population densities and demographic stagnation in Germany as important differences affecting adoption of land-use planning models in the U.S.

Nevertheless, despite the cultural filters inhibiting the introduction of national-level planning and land-use policies, existing literature reflects transfer efforts by various change agents and opinion leaders in the 1960s to transfer urban environmental and planning policies from

Germany to the U.S. In the early 1960s, senior U.S. environmental and planning officials, such as Secretary of Interior, Stuart Udall, led delegations of conservationists and urban planning specialists to Germany to study German land-use and resource management practices. Udall affirmed that “Germany is a leader” from which the U.S. could learn, as it had in the realm of forest management in the 19<sup>th</sup> century (Huehnemoerder 2005:6). In 1966, a “U.S.-German Natural Resources Program” was created to foster the “exchange of information on air and water pollution” (Walsh 1967:530). The U.S.-led delegations were inspired by German practices with land-use restoration, particularly in strip-mined areas, even though they had doubt that “Germans can provide a direct model for American emulation because the land is relatively valuable, while in the United States no straight economic argument for reclamation can be made for much of the land in strip-mining country” (Walsh 1967:530). There are no recorded transfer outcomes from the Udall exchanges of the 1960s.

The “Trinational Inner Cities Project” (Davies 1980) was a systemic effort to identify transfer and application of urban development policies among the UK, Germany and U.S. The core component of the two-year effort involved the meeting of planning academics and practitioners and site visits from one country to the other to study transfer. Davies does not document any transfer outcomes from Germany to U.S. cities beyond ideas, but cites benefits of policy transfer in the form of tacit knowledge. Davies claims that “The main benefits for practitioners that came not so much the possibility of direct transfer from one country to another, but in the extent to which they triggered off lateral thinking amongst the visiting practitioners and encouraged them to consider new ways of tackling the familiar problems that

they encountered at home” (Masser 1986:171).

Leonard (1983) writes how senior policy and land-use planners from the U.S. during the 1970s took interest in Bavarian land-use policies. Leonard (1983:xiv) suggests that Oregon’s “pioneering” land-use management policies drew influences from Bavaria as a result of a sustained, goal-oriented efforts to “examine practical issues and decision relation to the use of land in other countries, with the aim of helping to improve U.S. techniques and institutions’ land-use management policies.”

Other efforts referring to efforts to import German environmental policies to the U.S. include Brown and Johnson (1986), and their analysis of how Germany’s national water pollution effluent guidelines could be transferred to the United States. Brown and Johnson concluded that American reluctance for German-style, state-imposed mandatory limits of effluents would preclude the adoption of the German policy. Rose-Ackerman (1992) analyzed German environmental policies, specifically administrative law, and the potential for transfer to the U.S. Rose-Ackerman’s conclusions warned that profound legal differences between German and U.S. legal and judicial systems preclude the transfer of most environmental lessons to the U.S. Morgenstern et al (2004) also explore the differences between U.S. of German policies to mitigate S02 emissions through command-and-control regulations, but observe the influence of cultural and political limits such as aversion by Americans to higher taxes and governmentally-run command-and-control regulatory systems.

The transfer of urban planning and environmental policy has not always been a one-way path from Germany to the U.S. It also has not been totally voluntary. Ward (2003:91)

documents how American urban planning concepts and housing policies were imposed in Germany in the context of the U.S. occupation following World War II. Kern (2001:19) writes how Germany lagged behind the United States in the adoption of catalytic converters and in the creation of a national environmental authority and adopted the U.S. Environmental Protection Agency as an organizational model for the creation of its national Federal Environment Agency (*BundesUmweltamt*).

## **V. Review**

The study of voluntary urban planning and environmental policy transfer into the U.S. is generally understudied, especially at the sub-national level. Nevertheless, existing research and literature concerning the general aspects of policy diffusion and transfer serve as useful lenses through which some informed observations concerning the transfer of policies from Germany to the U.S. can be made.

An array of literature containing material relevant to filters affecting bounded rational and anarchic search and utilization of imported information was engaged. In this context, Wolman (1992) Wolman and Page (2002) and Mossberger and Wolman's (2003) research offers useful insights into the role of organizational size and information dissemination as filters affecting rational and anarchic transfer processes. Robertson (1991 and 1992) and Bennett's (1991) research was considered because of its focus on the political and cultural filters affecting cross-national search and use of imported information - particularly into the U.S. Weyland (2003), Meseguer (2005) and Elkins and Simmons (2005) were considered because of the in-depth study given to the influences of geography, culture and language affecting rational and anarchic cross-

national transfers. Lipset's notions of about "American Exceptionalism" as a filter affecting policy transfer to the U.S. was explored.

This chapter looked at ties between policy transfer and the literature concerning communities of experts and policy entrepreneurs. Haas's work with epistemic communities and Minstrom and Vergari's analysis of policy networks were useful because of influences each have on affecting rational and anarchic searches of imported information.

The study of policy transfer invariably touches on the subject of effects and outcomes. In that context, the chapter reviewed interpretations of outcomes and degrees of policy transfer as observed by Jacoby (2000), Evans and Davies (1999), and Mossberger (2000). The influences of complexity and re-invention also were explored.

The chapter included some literature concerning global transfer of environmental and urban planning policies and the elements pertaining to their importation into the U.S. (Tews 2005, Davies 1986, Kern 2001, Andersen 2001). This chapter also studied historical precedents of policy transfer from Germany to the United States with an emphasis on voluntary transfers of conservation and urban planning policies from the late 19<sup>th</sup> century to the present (Brubacher and Rudy 1995; Leopold 1936; Sutcliffe 1981; Rodgers 1998).

## CHAPTER IV

### METHODS

The methods for this dissertation relied on the blending of social science field research and the development of three embedded case studies that focused on the voluntary transfer of urban environmental and planning policies from Germany to the United States. Each case study was organized into two sections. The first section described key elements of the urban environmental and planning policies in Germany and the United States. The second section reviewed and interpreted information from the 35 interviews in light of the relevant theories concerning voluntary cross-national policy transfer. The “primary” data consisted of interviews with over 35 urban environmental and planning practitioners in the U.S. involved with the voluntary transfer of urban environmental and planning policies from Germany. Each practitioner was selected because of his or her extensive experiences with the specific urban environmental policy studied in each case study. “Secondary” data consisted of information from published books, journals, articles, and official governmental reports involving international policy transfer and comparative urban planning and environmental policies in Germany and the United States.

#### **I. Design of Study - Multiple Embedded Descriptive Case Studies**

##### *I.A. Design of Study - Multiple Descriptive Case Studies*

The research of cross-national urban environmental and planning policy transfer is a complex process and one for which very few precedents for research exist (Masser 1986, Hallett 1988, Altermann 1991, Ward 1999). Moreover, the search for causality in the transfer process, different cultural values, and legal and institutional structures, may not be a useful approach.

Therefore, in the hope of obtaining a useful map or picture of the process of such transfers there is a need for a flexible research method tolerating a variety of data gathering techniques, research designs and disciplines. In his analysis of urban land-use policies of Europe and the United States, Hallett (1988:6) observes that, “any attempt to discover, by means of international comparison, the effects of specific policies, encounters a familiar difficulty. Social mores, legal systems, and national character all play a role in what happens, so it is difficult to isolate the effect of any one policy. Only tentative conclusions can be drawn.” Hallett’s challenges with evaluating and comparing international urban planning policies, the potential for adaptation, and the special difficulty of isolating phenomena from context, is an experience also shared by Yin (1981), Masser (1986) and Altermann (1991).

In light of these challenges, the descriptive case study format selected for this dissertation offered an extensive, transparent form to provide material for primary research questions that were posed. Yin (1981:59) characterizes the case study as a versatile research strategy “to be likened to an experiment, a history, or simulation,” which applies field-work techniques, verbal reports and observations, and easily incorporates qualitative data, quantitative data, or both. The use of embedded descriptive case studies proved useful in allowing relevant information to emerge about the process of voluntary transfer of urban environmental and planning policies from Germany to the United States. Masser (1986:14) observed that case study methodology tolerates stronger interpretation of international urban planning policy analysis, particularly given its “ability to take into account a large amount of local detail at the same time as generally comparable information, and in their essential flexibility in practice.” Masser (1986) observed

that the flexibility of the case study method accounts for its predominance among international urban planning researchers - observations supported in the cross-national comparative and transfer work of urban and environmental policies of Waterhouse (1979), Cropper (1982), Masser (1986), and Hallett (1988). Three case studies were selected for this dissertation - close to the maximum number of four recommended by Creswell (1998).

### *1.B. Organization of Case Studies*

Yin (1994:20) believes that coherent case studies are built around five components: 1) the research questions, 2) their propositions, 3) their units of analysis, 4) a link between the data and the propositions; and, 5) criteria for interpreting findings. The organization of each case study for this dissertation adopted Yin's recommendations and grouped the five components into two sections. The first section of each case study reviewed key elements of urban environmental and planning policies in Germany and the United States. This was done to support what Creswell (1995:36) observes is necessary to establish "what a stranger would have to know in order to understand what is going on here, or more challenging still, what a stranger would have to know in order to be able to participate in a meaningful way." Yin (1994) also asserts that the successful case study depends on the ties between theoretical propositions and data. The propositions adopted for this dissertation were provoked by Dolowitz and Marsh (2000), Rogers (2003), and Rose (1993). The second section of each case study interpreted the "live" information from the semi-structured interviews and reviewed the link with the key research questions and propositions. The issues of rationality and anarchy during the search and review process, the roles of policy entrepreneurs and communities of experts, and the filters of policy complexity

and national uniqueness affecting voluntary transfer were analyzed.

The following propositions were used to organize analysis of the data and tie to the core theoretical elements of voluntary policy diffusion:

**1) The voluntary transfer of urban environmental and planning policies from Germany to the U.S. is often shaped by the absence of an informed, goal-directed, problem-focused search and utilization of imported information;**

**2) The voluntary transfer of urban environmental and planning policies from Germany to the U.S. depends heavily upon the role of key individuals and communities of experts to identify, interpret and implement information and knowledge from Germany.**

**3) The voluntary transfer of urban environmental and planning policies from Germany to the U.S. tends to be more of a local nature consisting of ideas, concepts and attitudes, rather than national-level codes, laws and regulations. This emanates from the unique complex environmental and urban planning policies in Germany that differ from those in the United States.**

The choice of these propositions and their relation to initiation, filters and manifestation, emanated from the need within both the policy transfer and planning communities for clearer understanding and research into these issues (Masser 1986 Dolowitz and Marsh 2000). The issue of initiation in cross-national policy transfer as a purposeful and rational or reactive and anarchic process is contested within the policy transfer arena. Likewise, the need for understanding about the filters and outcomes is shared within the policy transfer and planning communities. Finally, the choice of these propositions as themes emanates from the desire to enhance theory related to policy development and practice within the planning fields.

### *I.C. Case Study Themes*

Past comparative international urban planning and environmental research encourages the

concept of “conceptual equivalence” to protect construct validity and to avoid irrelevant analysis (Masser 1986; Hallett 1988; Waterhouse 1979). Williams (1986:27), encourages that all cross-national urban policy studies abide by “Sharpes Law” and research that is grounded in maximum similarity between study subjects as possible. The selection of brownfields revitalization, low-impact stormwater management, and open-space preservation as units of study reflects similarity and equivalence. Each of the case study topics are high national-level priorities in both Germany and the United States (German Federal Environment Ministry 2002, U.S. EPA 2003), have evolved from some similar policy contexts.

The selection of Germany also reflected this notion of equivalence and similarity because of its urban “pioneer” environmental planning policies and the strong economic, environmental and social parallels with the United States (Anderssen 1998; Jaenicke and Weidner 1997; Wuerzel 2000). Germany also was selected because of strong historical precedents with the successful voluntary transfer of urban planning and environmental policies to the United States, including zoning (Miller 2001), urban parks (Peterson 2003) and resource management (Leopold 1936). The selection of the three themes as units of study was conditioned by the author’s personal familiarity with Germany and professional involvement with urban environmental planning in Germany and the U.S. over the past twelve years.

#### I.C.1. Justification for Selection of Low Impact Development

The search for sustainable water infrastructure solutions in the United States is a national priority. Current estimates for the costs of just maintaining existing drinking and wastewater treatment infrastructure to 2022 are between \$300 and \$400 billion (U.S. EPA 2000). In cities

such as Washington D.C., the costs of segregating antiquated combined stormwater overflow systems are currently estimated to be approximately \$1.5 billion (D.C. WASA 2000: ES-2). Moreover, questions have been raised about whether the high costs of segregating combined stormwater systems will necessarily protect surface waters from the degradation of non-point urban runoff in cities such as Washington D.C. Many technical and policy elements of low-impact development, including “green” rooftops and constructed wetlands originated from Germany (Vymazal 2001). On the basis of the historical precedents for transfer (especially constructed wetlands) and high-level priorities, low impact development was selected as a case study for this dissertation.

#### I.C.2. Justification for Selection of Brownfields

The redevelopment of contaminated lands also is a priority in Germany and the United States. It is currently estimated that there are between 500,000 and one million brownfields sites in the United States (Kaiser and Bennett 1999:53). Likewise, in Germany, it is estimated that there are approximately 360,000 contaminated sites requiring remediation (German Federal Environment Agency 2006). Moreover, Germany has established a national spatial planning policy to restrict the consumption open space from 129 hectares per day to 30 by the year 2020 through, among other policy tools, the sustainable redevelopment of contaminated lands (Einig 2005:48). The union of these two issues and the relatively sizeable number of practitioners in the U.S. involved with bilateral exchanges in Germany contributed to the selection of brownfields as a topic of research for this dissertation.

#### I.C.3. Justification for Selection of Open Space Planning

Protection of open space from development is a high priority in the U.S. and Germany. The development of innovative policy tools that restrict consumption of land, promote compact urban form and simultaneously protect air and water quality also high priority pursuits in both countries. Like LID, open space protection and related land-use issues have been the focus of relatively long-term cooperation between U.S. and German urban planners and conservationists. The union of the relatively large number of U.S. urban practitioners familiar with land-use planning efforts in Germany and some past precedents to transfer land-use practices to the U.S. served as grounds for selecting open space as a topic of research for this dissertation.

#### *I.D. Data Sources*

Guba and Lincoln (1981) assert that interviews can serve as important information sources for case study development. Accordingly, primary data for this study drew from open-ended semi-structured interviews with over 35 urban planning and environmental practitioners. Documents (published books, journals, articles, and official governmental reports) constituted secondary sources of information - particularly in describing key policy elements of the specific case study themes. The documents were obtained via inter-library loans, literature reviews, the Internet and site visits to Germany and the United States between 1994 and 2006. The author believes that the relatively broad variety of data sources applied in these case studies enhanced objectivity, transparency, and mitigated potential bias.

#### *I.E. Open-Ended, Semi-Structured Interviews*

To encourage a “flexible strategy of discovery” that will “find out what kinds of things are happening, rather than to determine the frequency of pre-determined kinds of things the

researcher already believes can happen,” Lofland (1971:76) recommends semi-structured interviews. The semi-structured interview process was appropriate for this research on the basis of the author’s earlier experiences and pre-testing of fixed standard questions. The standard set of fixed questions failed to produce sufficient clarity about the process of voluntary transfer of urban environmental policies from Germany to the United States. Details concerning the rationality or anarchic nature of the search, the role of policy entrepreneurs, or the filters of national culture or policy complexity remained vague after initial testing. Adjustments were made in the framing of the questions from a “fixed interview” to a semi-structured interview to compensate for the lack of information and detail. Each interview started with a general question and used follow-up questions to verify understanding while allowing the participant to determine the direction of the exchange and dialogue. Sandelowski (1986:32), asserts that “qualitative research depends on human subjects with vivid stories to tell, but the validity of its findings is threatened by over-weighting those stories or not placing them in proper perspective.” To ensure that the interviews were put in their proper perspective and added validity, there was adherence to Guba and Lincoln’s (1981) suggestions for “fittingness.” Sandelowski (1986:32) asserts that “a study meets the criterion of fittingness when its findings can ‘fit’ into contexts outside the study situation and when its audience views its findings as meaningful and applicable in terms of their own experiences.”

Each interview lasted approximately 60 minutes, a reasonable time to ask the questions and listen and record responses. Each interview consisted of a series of general questions about the experiences of the practitioners with German urban environmental policies, the nature of the

search for information, the efforts to transfer information and policies, the obstacles and filters affecting transfer. “Probe” questions and requests for elaboration, techniques encouraged by Lofland (1971), were applied to interpret concepts and to clarify responses concerning the voluntary transfer process. To keep the interview focused and relevant, the respondents were asked to provide in-depth answers and to introduce topics which they consider relevant to the transfer process as observed during their experiences in Germany and after their return to the U.S. Efforts to promote objectivity were made by avoiding leading questions (such as “don’t you think that Germany has superior environmental policies,” or “is it not likely that political obstacles such as the Mayor’s reelection campaign impeded the transfer of “green” roofs from Stuttgart to Northern Virginia?”). Since the focus was on interpreting the process of voluntary transfer, efforts were made to create ample space for contrary views to emerge.

#### *I.F. Guiding Questions for Interviews*

Lofland (1971) and Guba and Lincoln (1981) were consulted with respect to developing the semi-structured interviews. Approximately 15 open-ended questions were developed to address the central research questions on the process of voluntary policy transfer of urban environmental planning policies from Germany to the U.S. The questions explored each practitioner’s level of information about attitudes concerning urban environmental planning in Germany. The purpose was to elicit an understanding of each practitioner’s general knowledge of German urban environmental policies and to provide a context for the practitioner’s opinions about the transfer process. The questions explored the means of the search, the analysis of the information, the practitioner’s understanding of German urban environmental and planning

policies, and the obstacles or incentives affecting the transfer process. Each of these questions was designed to develop a reasonable picture of the voluntary transfer process. Examples of the questions are attached in Chapter 10 - “Appendices.”

*I.G. Recruitment*

Approximately 35 U.S. urban environmental specialists were interviewed over a 20-month period, beginning in January 2005. Specialists were selected on the basis of the following two criteria - criteria which the author believes conform to the elements identified by Lincoln and Gupta (1981) that support credibility and reliability:

1) Participation in urban environmental exchange to Germany under the auspices of the U.S. -German Marshall Fund, the American Council on Germany, or the U.S. Environmental Protection Agency’s international urban environmental exchanges - programs established specifically to support the exchange of U.S. and German urban planners and environmental specialists and policies to the U.S.

2) Past or current involvement with one or more of the specific case study themes in the U.S. states or regions of New York, Oregon, Maryland, Virginia, and the District of Columbia. These states and regions hosted a significant number of American urban planners and practitioners involved with the transfer or urban environmental policies and lessons from Germany to the United States.

The author conducted the interviews at a mutually convenient venue and upon a mutually agreed time. Approximately one-half of the interviews were conducted by telephone. Each practitioner was ensured anonymity and confidentiality that their name or organization would not be stated in this dissertation. Each of the interviews were transcribed, shared with the practitioner for review and accuracy, and securely stored.

**Table 4.1**  
**Case Study Selection Characteristics**

	<b>Primary Data Sources &amp;</b>	<b>National Priority</b>	<b>Complimentarity and</b>
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	<b>Recruitment</b>		<b>Precedents</b>
<i>Low Impact Development</i>	Northern Virginia - 4 practitioners Washington D.C. - 4 practitioners Maryland - 1 practitioner Germany - 1 practitioner	United States - High Germany - High	High
<i>Brownfields</i>	New York - 7 practitioners New Jersey - 1 practitioner Maryland - 1 practitioner Washington DC - 2 practitioner	United States - High Germany - High	High
<i>Open Space Planning</i>	Virginia - 6 practitioners California - 1 practitioner Washington DC - 2 practitioners Minnesota - 1 practitioner	United States - High Germany - High	High

### *I.H. Analysis of Data*

According to Yin (1994), analysis within case studies must link data to propositions and make clear the meaning in which the criteria of the findings are to be interpreted. Yin (1994:25) also admits that this process has been “the least well-developed in case studies.” Creswell (1998:140) adds that “no consensus exists for the analysis of the forms of qualitative data.”

After transcription, each interview was reviewed and coded to find trends and patterns matching the key research questions and propositions. Miles and Huberman (1994) encourage construction of a “chain of evidence” to aid the cataloguing of codes and patterns. This chain of evidence was used to classify patterns related to the rationality or anarchy of the search for policies from Germany, the filters affecting voluntary transfer, and the outcomes of the transfer process. The trends and patterns were manually coded and identified by using colored

highlighters, a process supported by Creswell (1998). The results of the analysis were added to the second section of each case study, with a summary of conclusions for each of the case studies in the final chapter. The author's own experiences with observing trends and patterns during analysis was difficult. Burgess (1982) reports that it is common for researchers to experience an ongoing concern regarding the progress of the research, concern about the right steps, accuracy and integrity. The author experienced such concern with the analysis of the interviews, particularly in the effort to identify outcomes and degrees.

### *1.1. Human Subjects Compliance*

The author received expedited approval from the Virginia Tech Institutional Review Board (August 23, 2005) for the conduct of interviews in the preliminary inquiry (Chapter 10). In this context, I am obligated to protect full confidentiality in each of the interviews and will be the only person with access to the raw data.

### *1.2. Validation*

In determining case study validity, Yin (1994:33) asserts that "because a research design is supposed to represent a logical set of statements, you also can judge the quality of any given design according to certain logical tests. Concepts that were offered for these tests include trustworthiness, credibility, confirmability, and data dependability." The validity of this research relied on each of these concepts.

## CHAPTER V

### CASE STUDY #1 - LOW-IMPACT DEVELOPMENT (LID)

#### I. LID Policies in Germany and the United States

##### I.A. *Germany*

In Germany, the general concept of low-impact development (LID) is characterized by decentralized, on-site, naturally retained or conveyed stormwater systems via “green” rooftops, constructed wetlands or swale infiltration trench systems (Sieker 1998). A fusion of national, regional and local environmental and spatial planning laws affects the application of LID in Germany. German national planning, water, and nature protection laws establish general parameters and processes for spatial planning, landscape development and stormwater management with details about implementation for each law delegated to the individual German states (*Laender*) (Brown and Johnson 1984; Sieker 1998). The relevant national policies affecting LID in Germany include the Federal Building Law, Federal Nature Protection Law, Federal Regional Planning Law, and Water Management Law.

The Federal Nature Protection Law (*Bundes Naturschutzgesetz*) and the Federal Spatial Planning Law (*Bundes Raumplanungsgesetz*) call on each German state to identify, classify and plan protected areas via landscape plans (*Landschaftsplaene*) and to integrate these plans into broader sets of national planning activities established by the Federal Environment and Spatial Planning ministries. The Federal Nature Protection Law provides incentives for LID by specifically requiring “compensation” or restoration (“*Ausgleich*”) for any anthropogenic

impairment (“*Eingriff*”) of natural landscapes and biospheres. The Law also compels the planning process to compensate for all development impairing the natural environment “*in a manner consistent with the landscape concerned. An impairment shall be considered to have been offset in some other way as soon as the impaired function of the ecosystem has been substituted in an equivalent manner or the natural scenery has been re-landscaped in a manner that is consistent with the landscape*”(German Federal Agency for Nature Protection 2002). The Federal Nature Protection Law also creates incentives for LID by outlining a hierarchy of landscape planning practices that support the development of “rain gardens”, bioswales and other impervious areas into which stormwater can filtrate. In tandem with the Federal Regional Spatial Planning Act, state and local planning authorities must develop specific standards for land-use management and zoning. The union of the two laws compels cities and regions to maintain and improve integrative systems of open spaces that protect or restore the ecological functions of soil, water and air quality through the development of landscape plans (German Federal Nature Protection Agency 2002). At present, it is national policy in Germany to restrict the loss of consumed land from 220 hectares per day to 126 by the year 2025 (German Federal Environment Ministry 2002).

Rulings from a German federal court in 1984 also have added incentives to LID in Germany by allowing each individual German water utility to establish billing systems on the volume of stormwater removed from individual properties (Keeley 2004:5). Unified fee systems that calculate only fresh water consumption - as practiced in the U.S. - were replaced with split-rate systems. Approximately 40 percent of all German households receive split stormwater and

sewerwater fees (Keeley 2004:5). In Schleswig-Holstein, the state water law (“*Landeswassergesetz*”) and the state laws for planning and building (“*Runderlass Baurecht*”) authorize cities such as Eckernfoerde (a small city of 25,000 on the Baltic Sea coast), to develop and collect separate stormwater fees based on the volume of impermeable property and estimated rainfalls at all residential and commercial sites. Eckernfoerde currently calculates a properties’ surface impermeability, roof slope, absorptive capacity (such as grass and lawns) times the total volume (square meters) of the property at a rate of EUR 0.23 per square meter (Stadt Eckernfoerde). The following table shows the metric Eckernfoerde uses to calculate fees for impermeable surfaces such as bio-swales, “green” roofs and rain gardens.

**Table 5.1 Impermeability Calculations for Stormwater Fees in Eckernfoerde**

<i>LID Technique</i>	<i>Rating</i>	<i>Calculation</i>
Impermeable roof surfaces with more than 3 degrees angles	0.9	96 cubic meters of impermeable surface 96cm x 0.9=86.40cm
Flat Roof surfaces with up to 3 degrees of angle	0.8	96 cubic meters of impermeable surface 96cm x 0.8=76.80cm
Asphalt and concrete surfaces	0.7	96 cubic meters of impermeable surface 96cm x 0.7=67.30cm
Concrete bricks and cobblestones	0.6	96 cubic meters of impermeable surface 96cm x 0.6=57.6cm
Reed roofs	0.3	96 cubic meters of impermeable surface 96cm x 0.3=28.8cm
Sand, gravel, lawn and permeable bricks	0.2	96 cubic meters of impermeable surface 96cm x 0.2=19.2cm
Swales, “Rigolen-Mulden” systems	0.1	96 cubic meters of impermeable surface 96cm x 0.1=9.6cm

**Source: City of Eckernfoerde, Germany (Stadtwerke Eckernfoerde)**

For example, if a lot had 96 cubic meters of roof calculated as impermeable with a grade greater than 3 degrees, Eckernfoerde's impermeability metric will calculate:  $(96\text{m} \times 0.9 = 86.40$ ;  $86.40 \times 0.23 = 19.87$  EUR) per billing cycle.

Other incentives for LID in Germany include municipal subsidies for retrofitting buildings with "green" rooftops. The City of Saarbruecken awards grants ranging from US \$2,700 to US \$5,400 to decentralize rainwater systems through rainbarrels, bioswales and green roofs. Saarbruecken grants to homeowners are calculated on a square meter calculation similar to the metric used by Eckernfoerde. Using 2000 conversion rates at 1.955 DM per EURO, Beatley (2000:216), calculates grants from the City of Saarbruecken at DM15/square meter for rainwater use (based on the rooftop to DM 30/square meter for de-sealing and rainwater diversion projects, to DM 60/square meter) for installing a "green" roof. "Green" roofs qualify for a maximum EUR 5,000- the highest award (Beatley 2000:216). Stuttgart currently subsidize 50 percent of all costs to retrofit existing roofs for "green" roofs and it is currently estimated that the city has over 500,000 square feet of "green" rooftops (Velasquez 2003).

In Germany, LID derives support from the union of national environmental and planning policies - a clear distinction from U.S. LID policies (Keeley 2004). The Federal Nature Protection Law and the Federal Spatial Planning Laws require every individual state city to identify, classify, and plan protected areas and to "compensate" for any anthropogenic disturbances - a law without an equivalent in the U.S. The German LID policies also are distinct because of the breadth of the application of split stormwater fees metrics used to calculate stormwater fees on the basis of volume of impermeability and square footage, and the prevalence

of institutionalized financial tools such as loans and subsidies for LID. Green rooftops, in particular, are being installed in Germany with greater regularity. It is currently estimated that approximately seven percent of all new commercial and residential development in Germany has green roofs (Penn State University 2006).

*I.B. The United States*

In the U.S., LID also is a stormwater concept characterized by decentralized, on-site, naturally retained or conveyed stormwater systems that rely on a combination of on-site treatment of stormwater, landscape design, grade variation, vegetation and storage systems such as rain gardens, “green” roofs, “rain barrels,” and swale infiltration trench systems (EPA 2000). LID in the U.S. is distinct from conventional stormwater management approaches because it does not focus on the immediate collection and routing of stormwater through a centralized system of culverts, pipes, and off-site treatment facilities. In the United States, LID is a relatively untried concept for stormwater management, perhaps due to its recent emergence in this country (EPA 2000). Key features of LID in the U.S., such as “green” rooftops, bioswales, and constructed wetlands, started in Germany and has been practiced in the U.S. since the 1980s (Vymazal, 1998; Hager, 2003). The Washington, D.C. region is considered one of the pioneers in early applications of LID (EPA 2000:1). Northern Virginia, Washington D.C., and Prince George’s County, Maryland, have been especially innovative in the development and application of LID as a result of the environmental and economic challenges posed by the antiquated stormwater systems (DC WASA 2000: ES-1). Water quality in the Potomac and Anacostia rivers presents a health threat and violates U.S. federal clean water laws because of its unsuitability for primary

contact by humans (DC WASA 2000:ES-2).

In the U.S., there are no national spatial planning or nature protection laws compelling mitigation of anthropogenic land-use disturbances. Section 404 of the U.S. Clean Water Act mandates the development of National Wetlands Mitigation Plan, but this is confined to specifically designated wetlands sites and cannot be interpreted as comprehensive policy affecting other land uses promoting LID in the U.S. Three national laws have had some influence on the development of LID in the United States. These include the U.S. Clean Water Act Phase I and II, Section 303 (d) and Section 319 of the U.S. Clean Water Act. The U.S. Clean Water Act and Phase I and II of the Acts' "National Permitting Discharge and Elimination System" program (NPDES) call on U.S. communities to oversee and develop permitting programs for point sources of pollution, including municipal stormwater and combined sewer systems. Sections 303 (d) and 319 of the U.S. Cleanwater Act require each state to list impaired surface water bodies and to determine the maximum pollutant loads for pollutants such as sediment, nitrogen and phosphorous. Under these laws, state and local governments can receive grants on a competitive basis to address non-point source pollution, including the development of LID pilot projects, such as rain gardens, rain barrels and bio-swales.

The majority of LID applications are confined to local demonstration projects in a few U.S. cities (Natural Resources Defense Council 1999). Chicago and the Washington, D.C., region account for over three-quarters of the total green roof area in the United States - a total of approximately one million square feet (Greenwire 2006). In general, few U.S. cities have developed either parallel stormwater or financial policies supporting LID commonly found in

Germany. According to the Natural Resources Defense Council (1999), approximately ten cities in the United States have adopted split stormwater billing systems similar to those applied in Germany.

## **II. State of Transfer of LID From Germany to the U.S.**

The following table summarizes data from the interviews about the transfer of LID policies from Germany to the U.S. (principally, the Washington, D.C., region) between the period 2000 and 2006. The data are a combination of information and theories concerning outcomes and degrees of transfer from the reviewed literature. The table points to two transfers of hard elements at the regional and state-level. However, the transfer of soft elements consisting of ideas and inspiration predominates. The interviews also suggest that the practitioners were not aware of transfers of laws, codes and guidelines - particularly those involving land-use planning, nature protection or building policies. The few hard elements appear to have transferred as a result of policy entrepreneurs applying LID ideas from Germany within a relatively short-time frame that were “recombined” with existing domestic stormwater management efforts.

The table also suggests that transfers of LID from Germany to the United States were seldom goal-directed searches and applications. Practitioners were seldom motivated to travel to Germany to understand stormwater management practices on the basis of clearly coupled water quality challenges and information based on the performance of German water management policies. Problems were often ambiguous and preferences were ill-defined. With the exception of German natives who had prior understanding of German LID practices, there was little to suggest

a methodical review and comparison of alternative stormwater, planning or building policies in Germany and the U.S. The interviews also point to emulation and inspiration as the degrees to which policies transferred. General ideas and concepts of LID in Germany transferred to the U.S. But the interviews revealed nothing that could be considered a transfer of “copies,” or “combinations.” The interviews also point to crisis, such as leaking roofs, violation of federal clean water standards and high costs of water infrastructure maintenance as important catalysts affecting acceptance and implementation of LID practices imported from Germany.

**Table 5.2 - Summary of Practitioner Interviews (LID)**

<u>Practitioner</u>	<u>What</u>	<u>Hard or Soft</u>	<u>Anarchic or Rational</u>	<u>Degree of Transfer</u>
1. TT	Creation of U.S. Department of Interior Handbook “Water Resources Protection Measures in Land Development - (DOI, 1981)”;	Soft	Rational	Emulation
2. SB	Stormwater code for DC; Funds for 150 rain barrels	Hard	Anarchic	Emulation
3. DP	Development of “Technical Memorandum for Stormwater Management for Virginia,” with inclusion of concepts about green roofs, rain gardens and bio-swales from Germany	Hard	Rational	Emulation
4. UB	Designs and concepts for Anacostia Waterfront Initiative	Soft	Anarchic	Emulation
5. DC	90,000 square foot “green” rooftop for the National Park Service’s Center for Urban Ecology and rain gardens for the Rock Creek.	Soft	Anarchic	Emulation
6. JN	A “green” parking lot at Jones Point Park and a “green” rooftop at TC Williams High School and a	Soft	Anarchic	Emulation

	new watershed management plan for 4-Mile run			
7. GE	Clearer understanding of spatial planning and integrated land-use management	Soft	Anarchic	Inspiration
8. JN	A clear understanding of how to apply LID - especially on a regional scale.	Soft	Anarchic	Inspiration
9. MG	Images and information about German LID for a Northern Virginia Stormwater DVC	Soft	Anarchic	Inspiration
10. MK	Ideas about LID in the DC region	Soft	Anarchic	Inspiration

### III. Overview Of Practitioner Interviews

This section looks at the information gathered from the interviews and attempts to arrange the material in relation to the organizing propositions and key theories presented earlier. Part A gives attention to the rational and anarchic aspects of the search and review of information about German LID policies. Part B explores the role of key individuals and communities of experts in identifying and implementing information and knowledge from Germany. Part C identifies the outcomes and filters affecting the transfer of LID policies from Germany to the U.S.

***A. The voluntary transfer of LID policies from Germany to the U.S. is most often shaped by the absence of an informed, goal-directed and problem-focused search and utilization of imported information.***

The interviews suggest that the acquisition and use of information about German LID policies is seldom an informed, goal-directed and problem-focused process as suggested by Simon (1986). Some elements of bounded rationality emerge, as seen in the formation of a long-term partnership between two regional planning authorities which institutionally evolved to support

the exchange of information, lessons and policies. However, in general, there are few statements which suggest that the practitioners engaged in the process of collection and use of imported information in which problems were clearly defined, goals were identified, or a comprehensive review of policy alternatives was *incrementally* undertaken.

The responses to the question “*Why did you go to Germany?*” strongly suggest that random for these practitioners, invitations to travel to understand stormwater policies in Germany trumped goal-oriented problem solving measures. Typical responses included:

“I was invited by the Glynwood Center to tour “green” infrastructure projects in Germany;” and,

“I was invited by the U.S. Embassy in 2001 to tour LID projects in Germany,”

Focused reviews of alternatives, such as exploration of LID projects in other countries, or critique of LID policies in Germany, were seldom mentioned. This is consistent with characteristics of what Kingdon and Mossberger consider anarchic practices.

Responses to the question “*What information sources did you use in order to understand LID policies in Germany and what about German LID policies did you know of prior to your visit,*” speak to notions of an uninformed, un-systemic, random search for information about Germany LID policies. In six of the ten interviews, no or very general understanding of German LID policies was expressed. Common responses to these questions included:

“I was totally unfamiliar with German LID policies prior to visiting Germany;”

“My understanding consisted of a short briefing prior to my visit Germany;” and,

“I saw some powerpoint presentations, some word-of-mouth, some journal articles that came across my desk about ‘green’ roofs and general stormwater management with

periodic references to LID projects abroad.”

It does not appear that much information about negative or positive performance of German LID programs was obtained by these U.S. practitioners. A German-born and educated landscape architect and an American-born planner who had studied in Germany, did provide what could be considered application of formal methodologies to review and interpret information about LID policies from Germany. However, for the most part, chance encounters about foreign LID policies in journal articles or reports were common, corresponding with Wolman’s (1992) observations that un-systemic searches and reviews characterize the transfer process among local governments. The practitioner’s responses also go along with Mossberger’s notions that the search, while anarchic in its beginning, adopted a more formal structure, as ideas and problem streams merged. This is evident in the presence of the aforementioned formal partnership between two regional planning authorities in Germany and the U.S., which created a variety of contexts in which information could be exchanged over the long-term.

Although travel to Germany was at first random and unplanned, the partnership between the German and American regional planning commissions seemed to provoke a more goal-oriented search and learning process and evolution of rational information-gathering and review transfer process. The partnership was institutionalized through a formal arrangement that called for the exchange of information and data. Each planning authority agreed to exchange ideas, information and practitioners on a range of subjects, including spatial planning, and environmental protection. Exchanges between each authority in 2002 focused on a range of environmental topics, including open-space planning, and gave the U.S. practitioners the opportunity to view a range of German

LID techniques, including “green” roofs, bio swales, and rain gardens. The exchange involved technical and political practitioners, which aided in the implementation of LID techniques in areas such as Four Mile Run. Participation of political officials also was credited with aiding in the implementation of “green” roofs in two cities. However, in spite of the participation of political officials, there were not signs in the interviews that could be considered politically or ideologically motivated, as suggested by Rose (1991).

Although rational elements may evolve during the transfer process, particularly during the search and review of information, the interviews suggest a transfer process affected by crisis, opening “windows” of opportunity for practitioners to match solutions with problems - notions consistent with Kingdon’s observations of policy streams merging together and affecting policy agendas. This was clearest in the construction of “green” rooftops in Virginia and Washington, D.C. in which a senior stormwater official from the U.S. Federal Government returned from Germany to leaking roofs in his building and worked with his senior management to procure funds to build a “green” roof in Washington D.C. Crisis and other “pivotal moments” characterize another case in which violation of Federal Clean Water Laws was used as a justification to reform guidelines for a Washington D.C. stormwater code that incorporated LID. However, in both cases, there were few signs of a methodical search or even duplication of German LID codes or laws. Rather, it seems to be more a process of emulation in which general ideas behind German LID programs were adopted.

Concerning the assertion of Bennett (1991), that there is a distinction between the knowledge of a program and utilization of that knowledge and adoption of the program, the

evidence gathered from the interviews concerning transfer of LID policies, suggests something unique was happening. This was that transfer proceeds with even vague knowledge of a foreign program and its function, and that this vague knowledge can result in implementation. The interviews pointed to the value of travel to Germany and the role of knowledge gained through field trips. Some general ideas of a policy, however vague, were often enough to be incorporated into a tangible result. For example, “green” rooftops and rain gardens were built or included in regional master plans on the basis of several short-term visits to Germany. Despite a vacuum of information concerning codes or the effects of German LID policies, some LID notions transferred to the U.S. - looking rather like the phenomena of “incomplete transfer” as theorized by Dolowitz and Marsh (2000).

***B. The voluntary transfer of LID policies from Germany to the United States depends heavily on the role of key individuals and communities of experts to identify, interpret and implement information and knowledge from Germany.***

These interviews do not allow one to point to clear roles for networks of technical experts aiding with the gathering, review or testing of information on German LID policies as described by Haas (1992) and Rose (1993). In fact, comments about the absence of networks to foster the importing of information and practitioners were common. There is consistent with Kingdon’s notions about the role and the influence of policy entrepreneurs and their effect on “policy streams” - especially during the collection and application of information about German LID policies.

With respect to the roles of networks, particularly during the application of LID policies from Germany, comments included:

“There is a lack of a high-level network of experts in the U.S. with a shared vision (for LID);” and,

“There is a need for a list-serve of exchange experts between the United States and Germany”;

Nevertheless, the interviews contain suggestions that communities of practitioners were useful for transferring some ideas about LID from Germany - particularly during the implementation of German LID policies. The interviews also agree that the transfer process could be characterized by an almost “gradual accumulation of knowledge” (Kingdon 1995) that was not necessarily linear. Ideas and tacit knowledge about German LID policies returned with the practitioners and recombined through a variety of contexts and fora over time.

Three of the ten interviews mentioned that networks of cosmopolitans, specifically those including German nationals working in the Washington, D.C. area, played an important role in the information sharing and application of German LID policies. This is consistent with Kingdon’s notions of “issue networks” and Rose’s (1993) observations of the importance of cosmopolites.

Here it can be seen in the following interview response:

“I had an internationally sophisticated network in Washington to share ideas.”

Kingdon’s (1995:20) observations about the role of policy entrepreneurs investing time and “their resources in pushing their pet proposals or problems” and Roger’s (2003) observations about the role of opinion leaders, are reinforced by what these practitioners said - particularly entrepreneurs’ persistence. Consider comments such as:

“My role as special assistant to the Mayor gave me contact to a range of senior officials and offices;” and,

“I worked in the Washington region to organize workshops, conferences, presentations, talks that included references to German ‘green’ infrastructure.”

“I used the support of the Regional Administrator for applying LID in the Washington region.”

The question “*What organization or institution or individuals were essential in helping to overcome these obstacles during the transfer,*” received the following responses:

“The staff on the Washington D.C. Government and the Anacostia Waterfront Development Corporation;”

“The Mayor and senior officials in the Washington D.C. Government such as “SB” were instrumental in adding LID concepts.”

Three of the ten practitioners made remarks hinting at a movement from an anarchic to a more rational process in the use of imported information about LID from Germany. Use of town meetings, reports, community groups, and elected officials was cited in eight of ten interviews. The responses of four of the ten practitioners interviewed supported Kingdon’s (1995:55) observations of the importance of persistence and the “softening up of policy communities.” during the transfer of soft and hard policies. This is seen in comments such as:

“I used a ‘brick-by-brick’ approach to communicate tools and concepts and lessons from Germany;”

“I was going to keep talking about these ideas even if it is only an idea;”

“I relied on a ‘wear them down’ approach, by consistently including ideas and thoughts of LID into major policy initiatives affecting LID in the city”;

“I had a modest budget in which to help organize workshops and conferences in which to spread message and bring together senior policy officials;” and,

***C. The voluntary transfer of LID policies from Germany to the U.S. tends to be more of a local***

*nature consisting of ideas, concepts and attitudes, rather than national-level codes, laws and regulations. This emanates from the unique complex environmental and urban planning policies in Germany that differ from those in the United States.*

Responses to the question “*What about German urban environmental and planning policies were you able to transfer and apply after your return to the United States?*”, pointed toward mostly soft elements, however, a few “hard” elements of German LID policies transferred to the United States. Hard elements that transferred were such things as a long-term control plan for stormwater for the District of Columbia and development of a stormwater manual for the Commonwealth of Virginia. Soft elements transferring included implementation and construction of “green” roofs (nine in one city), inclusion of LID principles into a major urban redevelopment plan, “green” parking lots, provision of rain barrels, and rain gardens.

Soft elements transferring were confined to ideas and inspiration, and are reflected in comments such as:

“I took back insight into social change and not just planning and design and found relevancy that mirrored my own personal ideas and vision;”

“I took back inspiration and ideas about green rooftops regional landscape planning, low-impact development, and the built environment.”

“The European experience has provided us with new concepts or expanded set of ‘tools’ that can be applied during the development of a site.”

Both the literature and the responses of the practitioners did not include comments about national-level transfers of codes or laws. No detectable elements of German national nature protection or spatial planning laws transferred from Germany to the U.S. Information from the interviews points to the uniqueness of the national policies supporting LID in Germany and

political and cultural impermeability in the U.S. to imported ideas such as governmental involvement in land-use planning. These opinions would lend support to Rose (1993), Kayden (2003) and Lipset's (1996) notions of "American exceptionalism" and a political culture in the U.S. that rejects national-level governmental intervention in environmental and land-use policies. Six out of ten of the LID interviews mentioned the presence of a political and cultural bias in the U.S. which makes Americans reluctant to embrace national influences over environmental policies and land-use planning. The same responses suggest a general impermeability of American culture to importing ideas from abroad. The interviews also suggest that the practitioners were moved by perceptions of Germany as an environmental pioneer offering lessons to U.S. This can be seen in comments from the interviews to the question "*What obstacles did you encounter during the transfer process?*":

"There is a need for more national-level spatial planning laws and holistic approaches like Germany's;" and,

"There is an absence of U.S. government support for regional planning and land-use to promote coordinated efforts;"

"Many people are reluctant to make an effort to understand international work. Too often, international work is associated with boondoggles;"

"Practitioners in the U.S. think only about U.S. examples;"

"German stormwater management practices are highly regulatory, with high stormwater fees;" and,

"There is a need to make national-level changes to the Clean Water Act and for greater concentration on land-use and conservation."

Other obstacles affecting the transfer of hard elements of LID policies from Germany to

the U.S. included lack of “education” among the American public about LID in general, but about German and other international LID environmental policies in particular. This touches on Dolowitz and Marsh’s (2000) common sensical notions of failed transfer due to lack of information. The above remarks also are consistent with Beatley’s (2000:228) observations about “a traditional engineering mentality” in the U.S. serving as a filter for some notions of German urban environmental planning - such as landscape planning to address stormwater management.

The dearth of indications of transfer of hard elements also is consistent with Mossberger and Wolman’s (2003) observations about policymakers gaining impressionistic and not analytical understanding of policies in the exporting country. Mossberger and Wolman explain that policymakers endeavoring in policy transfer seldom identify or understand the conditions necessary for transfer to succeed. General concepts, attitudes, ideas or approaches are borrowed instead of precise elements or results from a specific program design.

The interviews appear to concur with observations by Kingdon about inspiration as a characteristic of the agenda-setting stage while a mixture of emulation and even synthesis emerged during the policy formulation stage. For these practitioners, it appears that transfer was often a case of “policy oriented learning” involving the random acquisition of knowledge that evolved into a more methodical utilization of that knowledge.

#### **IV. Review**

The interviews, supporting literature and materials leave one with a picture of voluntary transfer of LID policies from Germany to the U.S. as not so much a process of informed, goal-

directed and problem-focused searches and utilization of imported information, but rather a more anarchic process involving random collection of acquaintances and information. In the transfer of LID policies from Germany to the Washington, D.C. region, there can be seen a picture of a problem minus a clear definition and then a movement toward search and understanding. The effort to learn and apply LID policies most often was characterized by random invitations to travel to Germany or sporadic contact with literature and journal articles about LID (or other environmental policies) in Germany. However, after accessing and reviewing information about German LID policies and programs, solutions were formed by certain practitioners who linked them to problems created by crisis and/or opportunities - such as leaking roofs, polluted waterways, and existing regeneration plans. The interviews also showed signs that rational processes evolved as implementation of ideas about LID from Germany took root and spread. Sometimes formal partnerships manifested a rational evolution of information gathering that could be sustained over the long-term. However, in general, the application of LID involved very little selection of goals and seldom comparisons to alternatives. The interviews and other data also suggest that the voluntary transfer of LID policies from Germany to the U.S. was shaped as suggested by Rogers' (2003) and Jaenicke's (1997) notions of laggards looking to pioneers for ideas and concepts. Although the contact with information about LID policies in Germany was generally unplanned and uncoordinated, a general notion of Germany as an environmental pioneer seemed present here.

The information from the interviews also gives an unclear picture of the role of communities of experts involved with the transfer process. The interviews did not lead one to

believe that there was a community of experts in the U.S. who searched and reviewed information about LID policies in Germany. However, domestic networks of peers already working with LID concepts come into the picture during the implementation process. The interviews and other resources suggest that the voluntary transfer of LID policies from Germany to the United States rests heavily with cosmopolite “policy entrepreneurs” with the characteristics observed by Rogers (2003) and Rose (1993) for implementing information and knowledge from Germany.

The information from the interviews also suggests that the voluntary transfer of urban environmental policies from Germany to the U.S. tends to be more of a local nature consisting of labels, ideas, concepts and attitudes, rather than national-level codes, laws and regulations, due to the unique complex environmental and urban planning policies in Germany. The interviews also are consistent with observations that American cultural ideology and reluctance to embrace national environmental or spatial planning laws act as powerful filters on the transfer of national-level LID policies from Germany to the U.S. This concurs with Lipset’s notions of “American exceptionalism,” particularly with reference to the concerns of Americans about the involvement of the federal government on matters concerning environmental policy. The information did not suggest that LID policies from Germany to the U.S. were directly copied or that hybrids of laws or policies evolved as observed by Dolowitz and Marsh (2000) or Rose (1993). In this study, emulation and the transfer of ideas behind the policy or program and inspiration where policy in another jurisdiction inspires policy change, but where the final outcome does not actually draw on the original, predominate the process of voluntary of LID from Germany to the U.S.

Analysis of the interviews support claims by Rogers and observed by Mossberger that transfer

of LID is a process of reinvention. Finally, the interviews did indicate that parallel political ideologies and geography are not as relevant as suggested by Bennett (1992), Rose (1993) and Wolman and Page (2002).

## CHAPTER VI

### CASE STUDY #2 - BROWNFIELDS

#### **I. Brownfields Policies in Germany and the United States**

##### *I.A. Germany*

In Germany, the general policy concept of brownfields redevelopment (*Brachflaechenrevitalisierung*) is defined as the “economic and environmental reuse and reincorporation of lands which have lost their former function or uses through planning of environmental and economic policy measures” (Ingeniuertechnischer Verband Altlasten 2006). Brownfields redevelopment in Germany is characterized by a broad range of polluted land redevelopment polices affecting small lots, such as local gas stations and large multi-hectare lignite coal mines. In post-reunification Germany, it is currently estimated that there are over 360,000 contaminated sites requiring remediation (German Federal Environment Agency 2006).

Like most environmental laws in Germany, brownfields redevelopment policies are guided at the federal level by framework laws that establish general parameters for cleanup but delegate the specific details of administration, enforcement and clean up to the individual states (Klapperich 2003). Two federal framework laws with special relevance for brownfields redevelopment in Germany are the Federal Soil Pollution Act (*Bundesbodenschutzgesetz*) of 1998, and the Federal Waste Management Law (*Bundes Abfallrecht*). The Federal Waste Law works in tandem with the Federal Soil Pollution act by governing the liability aspects of soil and groundwater contamination (Ulrici 1995). Specifically, the Federal Soil Protection Law regulates

the protection and restoration of the functions of the soil through the introduction of uniform federal standards (Kohls 2006). Together with the Federal Planning and Nature Protection laws, the Federal Soil Protection Law creates the process by which assessment and development of remediation plans is based on potential site-specific land-uses (Kohls 2006; Ulrici 1995; Klapperich 2003). The German Federal Soil Protection Law created uniform standards for site-specific redevelopment based on future or anticipated land-uses of the sites. Moreover, the German Federal Environment Ministry declared that between 2006 and 2020, federal land-use and environmental policies will focus on limiting the consumption of open space from 129 to 30 hectares per day (Einig 2005:48).

Implementation of German brownfields redevelopment policies is operative at the state level. Among the German states, North-Rhine Westphalia (NRW) is considered pioneer, particularly through the work of the International Building Exhibition Emscher Park (*IBA Emscher Park*), which has drawn considerable attention from U.S. brownfields practitioners engaged in brownfields transfer efforts to the United States. The brownfields redevelopment efforts in North-Rhine Westphalia are considered a model among German states for its large population (18 million residents), industrial history, the numbers of brownfields sites (over 35,000) and for the work of the IBA Emscher Park (Kushner 1999:860). The IBA Emscher Park is situated in the Ruhr Valley, an urban conglomerate with approximately 5.8 million people spread out among 11 major cities and 42 major communities. The collapse of the coal and steel industries in the 1980s saw unemployment levels reach 20 percent in some communities of the Emscher region (Kushner 1999:860). In 1988, the state government of North-Rhine Westphalia

embarked on a 10-year program to redevelop the Ruhr Valley economically, socially, and environmentally and created the IBA as the institution to lead the redevelopment. Structurally, the IBA combined the functions of a real estate management company, regional redevelopment and spatial planning functions (Kushner 1999:860). In tandem, the organizations purchased and redeveloped brownfields sites throughout the 500-square kilometer region. In the context of the 300-square kilometer Emscher Landscape Plan, brownfields and other sites have been converted into preserves for open space or redeveloped for new commercial uses (Schilling 1998:4). Between 1988 and 1998, North-Rhine Westphalia spent approximately \$5 billion to purchase and redevelop over 400 industrial sites in the region (Schilling 1998:4). A key means of redevelopment was the creation of the 300 square kilometer Emscher Landscape Park, and the revitalization of the Emscher and Ruhr watersheds.

For U.S. brownfields practitioners, German brownfields policies are unique because of the fusion of national environmental and planning goals that have been established for the protection of open space and redevelopment of brownfields and promoted site-specific assessment practices. The state of North-Rhine Westfalen is a particularly unique example of brownfields redevelopment because of the size and scale of the redevelopment efforts and the regional focus of the efforts.

### *I.B. The United States*

The United States Environmental Protection Agency characterizes brownfields sites as “abandoned, idled, or underused industrial and commercial facilities where expansion or

redevelopment is complicated by real or perceived contamination” (U.S. EPA 2001:1). It is estimated that there are between 500,000 and one million brownfields sites in the United States (Kaiser and Bennett 1999:53). Brownfields can be classified as sites as small as small abandoned gas stations on one-acre plots, or as large as multi-hectare steel manufacturing operations (Davis and Margolis 1997:5). Brownfields in the U.S. emerged as a result of a variety of factors, including court decisions that raised the fear of liability associated with federal and state laws, poor understanding of science and of risks linked to redevelopment or contaminated property, and competition from development on greenfields (Davis and Margolis 1997:7-9).

Redevelopment of brownfields in the U.S. is guided by a variety of environmental and economic policies. One law in particular has had a major effect on brownfields redevelopment: the national Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. CERCLA was created to address the most severely polluted and hazardous sites in the U.S. The law created a mechanism through which sites could be assessed for inclusion in the National Priorities List (NPL), making them eligible for federal funds. “Retroactive” and “joint-and-several” liability clauses of the CERCLA law have created a “mind-numbing” cloud of confusion with respect to assessment of liability and handicapped redevelopment of polluted sites in the U.S. (Davis and Margolis 1997:9). It is currently estimated that approximately 3,000 of the nation’s hundreds of thousands of contaminated sites are listed on the NPL (Davis and Margolis 1997:9). The legal concerns over liability, additional up-front development costs associated with possible contamination, and the easy access to development on greenfield sites in the United States, have created an unequal “playing field” between brownfields and greenfields

redevelopment (Davis and Margolis 1997:9). In 2002, the “Small Business Liability Relief and Brownfields Revitalization Act” was passed to address many of the liability concerns introduced by CERCLA and formalize EPA’s brownfields pilot program. The law provides liability protection for prospective purchasers, contiguous property owners, and innocent landowners and authorizes increased funding for state and local programs that assess and clean up brownfields. The legislation also provides relief from CERCLA liability for small business owners who sent waste or trash to waste sites, protecting innocent small businesses while ensuring that polluted sites continue to be cleaned up by those most responsible for the contamination. The law did not address land-use planning at either a national or sub-national level.

The U.S. states from which the interviewed practitioners were drawn - New York, New Jersey and Maryland - have created their own equivalent of liability, contaminated land redevelopment, financing and brownfields redevelopment programs. Maryland has the “Brownfields Voluntary Cleanup and Revitalization Programs”, which merged voluntary cleanup and financial aid packages (Carey and Arnold 1997:433). Maryland also instituted one of the first national Smart Growth programs to integrate land-use planning and brownfields redevelopment through the state. Until 2002, New York lacked specific brownfields legislation and promoted redevelopment of contaminated properties through a “Voluntary Clean-up Program (Murphy 1997:532). However, in 2005, New York developed the New York Brownfields Cleanup Program (BCP), and is notable for its three tax credits, specifically: 1) redevelopment tax credit ranging from 10 to 22 percent for all site preparations costs; 2)

remediated brownfield credit for real property taxes, linked to job creation; and, 3) environmental remediation insurance credit for lesser of 30 percent or \$50,000 of premiums paid (State of New York 2006). New Jersey also relied on voluntary clean-up programs to address brownfields redevelopment (Motiuk and Monaghan 1997:518). Additionally, New Jersey also is one of the few states to have developed a comprehensive spatial planning effort to integrate brownfields redevelopment on a long-term regional basis. The 2002 “New Jersey State Plan” was the state’s first attempt to coordinate spatial planning and regional redevelopment to promote brownfields redevelopment.

**II. State of Transfer of Brownfields Policies From Germany to the U.S.**

The following table summarizes information from interviews with ten practitioners from the U.S. involved with the transfer of brownfields policies from Germany between the period 1997 and 2006, particularly from the IBA Emscher Park program. The table indicates that mostly soft elements transferred in relatively anarchic processes. The interviews pointed to some outcomes of emulation, as characterized by Dolowitz and Marsh (2000), but there were no indications of copying or synthesis. The interviews also suggest very few hard transfers of laws, codes or guidelines. The table points to few rational efforts of goal-directed, incremental searches of information and lessons. Finally, information from the interviews suggest that brownfields policies appear to have merged or were ‘recombined’ with existing activities - such as ongoing neighborhood redevelopment initiatives and comprehensive regional and land-use plans.

**Table 6.1 - Summary of Practitioner Interviews (Brownfields)**

	<u>What</u>	<u>Hard or</u>	<u>Anarchic</u>	<u>Degree of</u>
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<u>Practitioner</u>		<u>Soft</u>	<u>or</u> <u>Rational</u>	<u>Transfer</u>
1. CB	Ideas about options for brownfields redevelopment as less a litigious process	Soft	Anarchic	Inspiration
2. JL	NY state established risk-based standards. NYC Parks Department has moved to a greater approach to accept sustainable design and efficiency.	Hard	Anarchic	Emulation
3. J LAB	Promoted information exchange; published journal articles and made presentations	Soft	Anarchic	Inspiration
4. LS	Articles, re-licensing of Niagara Power to obtain funds for regional greenway, created Niagara Heritage Area based on experiences in Germany	Soft	Anarchic	Inspiration
5. RS	NYS brownfields law and new standards for re-use. 197-a plans for Williamsburg, Greenpoint, Sunset Park and West Holland; Greenway trail for Williamsburg,	Hard	Rational	Emulation
6. SW	Area-wide assessment for South Baltimore	Soft	Anarchic	Inspiration
7. TW	Ideas for state plan for New Jersey	Soft	Anarchic	Inspiration
8. BY	Ideas 'about scale' for regional planning for NY/NJ region	Soft	Anarchic	Inspiration
9. TD	Master Plan for Niagara Falls, Master Plan for Niagara Heritage River Corridor	Soft	Anarchic	Inspiration
10. JS	Ideas for Buffalo	Soft	Anarchic	Inspiration

### III. Overview of Practitioner Interviews

This section reviews the information gathered from the interviews and is arranged in

relation to the organizing propositions and key theories presented in Chapter One. Part A focuses on the rational and anarchic nature of the search and review of information brownfields policies from Germany. Part B focuses on the role of key individuals and communities of brownfields experts identifying and implementing information from Germany. Part C attends to the outcomes and filters affecting voluntary transfer of brownfields policies from Germany to the U.S.

***A. The voluntary transfer of brownfields policies from Germany to the U.S. is most often shaped by the absence of an informed, goal-directed and problem-focused search and utilization of imported information.***

These practitioners lead one to believe that for them, acquiring and reviewing information about German brownfields policies was not an informed, goal-directed and problem-focused process as suggested by Simon (1986) and Rose (1993). The interviews suggest traits associated with opportunism and anarchy as suggested by Kingdon (1995), Mossberger (2000) and Wolman (2001). In response to the question “*Why did you go to Germany and what objectives did you have in going?*,” five of the ten responses pointed to opportunistic opportunities to travel to Germany. This is reflected in responses such as:

“I was asked by a board member of the German Marshall Fund to take part in an international exchange of brownfields practitioners in Europe.”

“As a German Marshall Fund fellow, I wanted to look at environmental restoration and brownfields/urban redevelopment in Germany.”

“I was invited by The U.S. Embassy to study brownfields redevelopment in Germany for a week.”

“I was invited by the Toronto Waterfront Regeneration Trust as part of their

international brownfields exchange program.”

Responses to the question “*What information sources did you receive in order to understand brownfields policies in Germany and what about German brownfields policies did you know prior to your visit,*” reinforces notions of an uninformed, un-systemic, random search for information about Germany’s brownfields policies. Trips and information gathered during trips to Germany to study brownfields provided the most useful information about German brownfields policies. Follow-up conferences, meetings, and workshops provided additional information used by the practitioners about brownfields policies in Germany. Common responses included:

“Not very much,”

“very little;” and,

“nothing.”

Although the practitioners indicated a general lack of knowledge of German brownfields policies before their travel to Germany, there were some indications of goal-directed efforts for traveling to Germany. Five of the ten practitioners clearly indicated an interest in learning more about Germany’s brownfields policies. But the interest appears to reflect a stimulated curiosity rather than a rational search ignited directly by domestic brownfields challenges. Many practitioners involved with brownfields redevelopment also shared opinions of Germany as an environmental leader with lessons for application in their work. The following were common responses to the question concerning goals and objectives about working with Germany.

“I was interested in finding lessons and techniques that I could apply to my work with brownfields redevelopment in the U.S.”

“I wanted to return with lessons for my work with brownfields and open space redevelopment efforts in New York City. I went to Germany with the expectation of bringing back ideas, particularly how to turn negatives into positives vis-a-vis brownfields redevelopment.”

“I went to Germany because I was generally aware of Germany’s substantial work in the area of sustainable brownfields redevelopment. I was interested in Germany’s approaches to brownfields and the lessons of how they could fit into our work in Buffalo.” and,

“I had heard that Germany was ahead of the U.S. in brownfields redevelopment and was interested in seeing development on a regional scale.”

Additional elements from the interviews also suggested that the transfer of brownfields is slightly more rational than opportunistic mergers of policy streams, but less than a problem-focused search. Eight of the ten interviews revealed that the search for lessons abroad extended to countries other than Germany. The Netherlands, Canada, Spain, Italy, Japan, Denmark, and the UK were mentioned as countries visited and studied for brownfields lessons. Moreover, six of the ten responses to the question “Why did you go to Germany,” pointed to an interest among the U.S. practitioners to learn more about Germany’s experiences with brownfields development because of specific challenges that they had confronted in the U.S. and information about best practices that they had encountered - however vague - from Germany. Responses typically included:

“The main purpose of going to Germany was to see how the country was grappling with brownfields redevelopment. I was interested in finding lessons and techniques that I could apply to my work with brownfields redevelopment in the U.S.”

“The primary purpose of my travel was to learn how open space programs in Germany

were applied in the reclamation of derelict industrial sites” and,

“I wanted to learn about Germany’s lessons and how they applied to my work.”

One interview in particular offered an unusual exception to the anarchic trends characterizing the search, review and introduction of brownfields policies from Germany. It is worth highlighting RS’s exceptional experiences for two reasons. The first is that, although an exception to what the other practitioners experienced, his work reflect the dual notions of the rationality’s emergence during the search and use of information, and Kingdon’s notions of the influence of policy entrepreneurs who work persistently outside the system to introduce concepts of sustainability. RS was an urban planner from New York City who pursued ideas, information and knowledge about European and German urban development and brownfields-related policies for over 40 years. RS relied on his contacts of urban planners from Europe and New York and his position as the director of a design and planning college to share knowledge, information and lessons. Through his personal travels, training as a planner, and introduction to a Transatlantic community of planners, his understanding of German brownfields policies evolved over a 40-year period. RS’s personal interest in applying German brownfield practices that apply “planning, the arts, sciences and vision,” drove his vision for redeveloping neighborhoods and brownfields in the New York City region. Since the 1980’s, and through his network of European planners, RS was able to develop information and practitioner exchanges between U.S. and European (but specifically German) brownfields experts. RS’s long-term pursuit suggests strong elements of incremental collection and use of imported information. In response to the

question “*Why did you go to Germany and what objectives did you have in going?*,” RS asserts:

“In the 1980's, I was contacted by the Salzburg Congress for Urban Planning and Development (A European-based urban planning Congress), to participate in some speaking events. It was from Peter Slonicki that I was exposed to my first work about brownfields in the Emscher region of Germany. That led to two exchanges with the support of the German Marshall Fund. It started a networking process that continues to this day. There has been a tremendous amount of cross-fertilization between both continents and both countries to this day.”

RS's experiences and his cooperation with European and German urban planners, seems to comport with Mossberger's (2000) and Kingdon's (1995) notions that the search for ideas, while anarchic at its start, can mature and “rationalize” as it merges into the policy stream.

There were signs in the interviews that the use of imported information from Germany was not necessarily influenced by politics, as hypothesized by Rose (1991) and Dolowitz and Marsh (2000). In other words, the search was not motivated because of parallel political philosophies between Democrats in New York state or German Social Democrats and Greens. The interviews did indicate the filters of culture at work during the use of imported information that parallel Robertson's (1991) observations. For example, several practitioners lamented that they could never interject information about German or other European examples because of fear of condescension from peers.

***B. The voluntary transfer of brownfields policies from Germany to the United States depends heavily on the role of key individuals and communities of experts to identify, interpret and implement information and knowledge from Germany.***

Information from interviews hints at ambiguous influences of informal networks of technical and policy experts during the search and application of brownfields. Mintrom and

Vergari (1991) and Stone (2003) all affirm that policy networks consist of a group of actors with shared interests. Seven of the ten interviews perceived an absence of a network of experts with a shared interest in understanding and transferring brownfields policies from Germany to the U.S. Responses to the question “*Were any specific networks, organizations, institutions, or individuals essential to sharing information or overcoming obstacles to the transfer process*” usually included:

“There are not too many professional networks helping with information exchanges.”

“There were few networks of which I was aware that made information available about German urban environmental policies prior to my trip”; and,

“There is a need for more vehicles to promote exchanges abroad and to build networks”

Although the interviews suggest that networks played a modest role in the search and review of information concerning brownfields policies, there were indications that the implementation of brownfields policies from Germany in the U.S. benefitted from the presence of communities of brownfields experts in the U.S. The interviews also point to patterns consistent with Kingdon’s (1995) notions of issue networks and Rose’s (1993) observations about the role and the influences of cosmopolitan policy entrepreneurs working through networks of experts to share interests affecting “policy streams.” The interviewed practitioners also manifested characteristics of Roger’s (2003:4) change agents in the sense that the practitioners returned from Germany and worked to “obtain the adoption of new ideas” deemed desirable by a change agency. Kingdon’s (1995) observations about the influence of policy entrepreneurs investing time and resources to push pet proposals also are consistent with the

responses of the practitioners in the brownfields interviews. RS in New York City embodied the elements of a cosmopolite “opinion leader,” trying to develop the need for change within his community by providing information and advice on brownfields policies from Germany. The German Marshall Fund could be considered the equivalent of the “change agent”, enlisting the U.S. practitioners, and RS could be the equivalent of the opinion leader. In response to the question “*What organization or institution or individuals were essential in helping to overcome these obstacles during the transfer,*” it was common to hear responses such as:

“The network formed during the exchange to Germany was very helpful. JC is now part of Mayor Bloomberg’s staff;” and,

Mayor Ilya was very helpful and supportive of my efforts (to transfer brownfields policies from Germany). Councilman Dyer also was helpful, perhaps due to his past experiences of living abroad.”

“I was able to push my ideas in my position as Deputy Director for state planning,”

“Through my position on the New York Planning Commission and through my work with the Pratt Institute,”

Through my position as Assistant Commissioner I was able to push my ideas (about risk-based standards); and,

“My role as a professor and my work with community groups in Buffalo helped me push my ideas through.”

***C. The voluntary transfer of brownfields policies from Germany to the U.S. tends to be more of a local nature consisting of ideas, concepts and attitudes, rather than national-level codes, laws and regulations. This emanates from the unique complex environmental and urban planning policies in Germany that differ from those in the United States.***

Eight of the ten responses to the question “*What about German brownfields policies were you able to transfer and apply after your return to the United States?*” indicated that, generally,

the soft elements of ideas and inspiration rather than the hard elements or policy design about brownfields policies in Germany transferred to the United States. The soft elements which transferred included the inclusion of regional planning ideas into the New Jersey State-plan from the Emscher Park model and the creation of a regional greenway in the Buffalo/Niagara Falls region.

The practitioners put it this way:

“I have tried to share with the U.S. brownfields community ideas from Germany about how things can be done less litigiously;”

“I brought back the idea of an area-wide assessment for South Baltimore.”

“I was able to share ideas about the importance of planning brownfields regionally in NJ. I took this idea and brought the state brownfields task force to the state planning office rather than have it parked in the Department of Environmental Protection.”

Two interviews pointed to hard elements of German brownfields policies transferring to the U.S. Both involved development of risk-based standards in New York State’s contaminated land legislation. Otherwise, the interviews yielded no signs that national-level brownfields policies (in the form of laws or codes) or of elements of public finance, heritage protection, building or spatial planning laws transferring from Germany to the U.S. The interviews support notions of Rose (1993) and Kern (2001) that national-level filters and complexity, such as German national brownfields and spatial planning policies inhibit transfer to the U.S. Specifically, the key political and cultural barriers in the U.S. evident from the interviews comport with Kingdon’s (1995) notions of a political culture in the U.S. that is affected by a certain philosophy which values the virtues of the private sector and vilifies the role government.

Seven of the ten of the brownfields interviews indicate the presence of a cultural bias in the U.S. against national governmental influences over environmental policies and land-use and the import of ideas from abroad. Comments from the interviews to the question “*What obstacles did you encounter during the transfer process?*” were typical:

“In the United States, there are notions that the Germans have more funds to redevelop brownfields and that a centralized government structure supports brownfields redevelopment;”

“The litigious approach to the U.S. brownfields system is an obstacle;”

“American’s obsession with liability is an obstacle;”

“It is rarely helpful in New York City to say that ‘this is how they do it in Europe.’ A former Commissioner once walked out of a discussion because of comparisons between New York City and another European City;”

“Germans seem more comfortable with accepting institutional controls in brownfields redevelopment,” and,

“The U.S. lacks the strong planning authorities that emerge from the top, which is present in Germany.”

Ironically, a key difference observed by U.S. brownfields practitioners distinguishing German from U.S. brownfields policies was the dominance of U.S. national-level liability laws. The same seven interviews indicated that the single greatest obstacle precluding transfer of German brownfields policies was national liability legislation in the U.S. The interviews also suggest that soft elements and labels void of specific policy content transferred due to the complex characteristics of the brownfields policies. For example, the vague concept of ‘industrial heritage’ transferred from the ideas gathered at sites visited in the Ruhr Valley to regional master plans for the Buffalo/Niagara regions. Although the Buffalo/Niagara regional plans contained

references to industrial heritage, they did not actually contain key elements of the building codes and design policies from the German state of North-Rhine Westphalia.

Finally, the interviews suggest that neither ideology nor common political perspectives between U.S. and German brownfields practitioners initiated the search or introduction of brownfields policies from Germany to the U.S. as suggested by Rose (1993) and Dolowitz and Marsh (2000).

#### **IV. Review**

Results from the interviews offer support for the proposition that the voluntary transfer of brownfields policies from Germany to the U.S. is seldom an informed, goal-directed and problem-focused search and use of imported information. The practitioners participated in a process that appears more often to be characterized by an anarchic process involving random collection and use of information and contacts. The effort to learn and apply brownfields policies most often was characterized by random invitations to travel to Germany or sporadic contact with literature and journal articles about brownfields (or other environmental policies) in Germany. The interviews show that in some cases, for example, the voluntary transfer of brownfields policies from Germany to New York started with a general lack of defined problems but matured into something resembling rationality. Even short-term anarchic searches for lessons to German brownfields programs witnessed the conversion of some ideas into implementation and sometimes even policies. Practitioners returning from Germany with vague notions of heritage and open space wove them into existing regional brownfields, open space and regional revitalization efforts. The interviews suggest that even casual experiences and some limited

exposure to German brownfields practices by U.S. practitioners can lead to some implementation. Opportunity and timing characterized the search for policies, evidence and lessons from Germany. The interviews offered vignettes of communities of experts playing a weak role during the search and review of imported information about brownfields policies from Germany. In general, it was uncommon to hear about networks of U.S. and European planners involved with exchanges of information, policies and practitioners. A key exception was a policy entrepreneur who had worked for 40 years to develop exchanges and harvest lessons and policies for application in the U.S. This speaks to the value of the informal networks that professionals create around themselves. The interviews suggest that communities of experts were insufficient in providing information about German brownfields policies, they can be instrumental in implementing ideas and lessons from Germany. Key policy entrepreneurs demonstrated ‘cosmopolite’ characteristics with parallels to Rogers’ (2003) “opinion leaders.” There was little material in the interviews about “policy windows” opening through crisis or international agreement.

Information from the interviews also support notions of processes of voluntary transfer of brownfields policies from Germany to the U.S. producing predominantly local outcomes in terms of concepts and implementation rather than national-level codes and laws. For these practitioners, critical filters affecting the transfer include the unique and complex characteristics of German brownfields policies. American political and cultural reluctance to embrace German national-level spatial planning and government-supported financing programs were commonly cited as the key barriers affecting transfer of brownfields policies. The interviews did not elicit

examples of copying or hybridization as mentioned by Dolowitz and Marsh (2000). Inspiration and emulation predominate the brownfields policy transfer process. Outcomes such as changes to New York state's brownfields policies, reflect what Kingdon observed as an opportunistic joining of policy streams rather than problem-focused application of alternatives. The application of brownfields policies also was much like the widespread circulation of policy ideas through many channels and resembled what Kingdon observed as a stream of solutions looking for problems. The interviews also contained examples of reinvention. Ideas, concepts and notions traveled from Germany to the U.S., were introduced to existing U.S. brownfields policy development efforts, and emerged as concepts different from what the importers intended to transfer and what the original policy contained.

Finally, the interviews offered examples of the operation of what appears to be a tacit knowledge factor. It appears that transfer was often a case of "policy oriented learning" involving the random acquisition of knowledge that evolved into a more methodical utilization of that knowledge about policies during the domestic application process. Although the practitioners may have had just "impressionistic" rather than an analytical understanding of German brownfields policies, a general concept or approach still transferred resulting in the incorporation of some program designs. One can see this as congruent with Wolman's (1992:37) observations that identifying "differences in policy settings is easier than gauging their effect," which could account for the transfer of attitudes and concepts rather than general mechanisms.

## CHAPTER VII

### CASE STUDY #3 - OPEN SPACE PLANNING

#### **I. Open Space Policies in Germany and the United States**

##### *I.A. Germany*

In Germany, planning and open space protection policy is characterized by the “counter-current principal” (*Gegenstromprinzip*) - a top-down and bottom-up policy process in which the federal government and individual German states (Laender) coordinate spatial planning (Kunzmann 2001; OECD 1999). Although ultimate authority controlling the details of open space protection rests with the states and their local authorities, the German constitution empowers the federal government to develop framework laws in which basic parameters for land-use, transportation and nature protection are established. In the context of these framework

laws, the German federal government prescribes basic guidelines for state and local open space planning. Each individual German state is obligated to fill in the legislative details and oversee enforcement of land-use plans down to the local level (Rose-Ackermann 1994; Kunzmann 2001). Rose-Ackerman (1994:1603) has argued that some elements of German environmental policy contain “examples of excessive centralization.” This observation is valid for Germany’s open space planning policies and may account for the absence of urban sprawl around most German cities (Beatley 2000:57).

Two federal laws especially shape open space planning policies in Germany: The Federal Nature Protection Law (*Bundesnaturschutzgesetz*) and federal spatial planning law (*Raumordnungsgesetz*). The union of these two laws compels the sixteen individual German states to identify, classify and establish protected areas via state-level land-use plans (*Landschaftsplaene*) which are integrated into broader national planning processes. This broader planning process is coordinated between the Federal Government and individual states (German Federal Agency for Nature Protection 2002:7). Specifically, the German federal regional spatial planning law obligates the German federal government to prescribe general guidelines for each individual state that extend down to each local authority. The guidelines demand a system of boundaries around urban centers by compelling states to prepare a large-scale and integrative system of open space plans in advance of all new development - including well-defined greenbelts (Lefcoe 1979:47).

The law states that “such lands as specially suited for agriculture use shall be planned for other use only when absolutely needed for other purposes...and landscapes adjoining population

concentration areas shall be preserved” (Lefcoe 1979:47). Under the German Federal Planning law, private lands in these agricultural and forested areas “can be placed by state authorities in such categories as nature parks, landscape protection areas, or nature reserves. The owner of land so classified is barred from developing or using the land in any manner inconsistent with the protection order unless the state authority withdraws the land from the protected zone” (Lefcoe 1979:47). The law has been especially effective in creating “green” boundaries (*Gruenzaesuren*) between municipalities and prevents urban regions from merging together. The law also has been effective in forming landscape networks for habitat and species conservation between urban regions throughout all sixteen German states (Haaren and Reich 2006:3).

The German Federal Nature Protection Law mandates that each state develop regional landscape and nature protection plans (*Landschaftsrahmenplaene*) in tandem with the development of state-wide land-use plans (*Landesentwicklungsplaene*) (German Federal Agency for Nature Protection 2002:7). The Federal Nature Protection Law outlines the hierarchy of landscape planning efforts each state must take for the identification and classification of open space and protected areas down to the local level. Each plan must contain specific assessments of the existing and anticipated condition and uses of landscapes. These plans must assess the anticipated outcomes of development, and avoid, reduce or eliminate adverse effects emanating from development. In virtually every German state, building permits are generally issued after the completion of an environmental assessment that defines impacts and identifies strategies for mitigation (Keeley 2004:4). The seriousness with which these plans are taken is reflected in the German government’s 2002 national policy to reduce the daily consumption of land from 129

hectares per day to 30 by the year 2020 (Einig 2005:48).

Baden-Wuerttemberg and the work in the Stuttgart region are considered models among German states and regions for open space preservation and regional greenscape networks. Under the Baden-Wuerttemberg state-wide Infrastructure Development Plan (*Landesentwicklungsplan*), 13 regions within the state must assess and coordinate open-space and landscape planning efforts. The Stuttgart regional planning authority (*Verband Region Stuttgart*) has the responsibility for development of the “Regional” and “Landscape Framework” plans for the entire 250 square kilometer Stuttgart region and for coordinating its integration into the Baden-Wuerttemberg State Land-use Development Plan. The Verband also is empowered to oversee that the local authorities work to integrate their local land-use plans (*Bebaungsplaene*) and landscape plans (*Landschaftsplaene*) into the overall legally binding regional landscape and land-use plans (Verband Region Stuttgart 2002). In that context, the Verband has the authority to *reject* local land-use and landscape plans developed by individual cities that it interprets to conflict with regional interests. The outcomes of this planning process are unique. Einig (2005:52) reports that Baden Wurttemberg has experienced reductions of land consumption from 3.9 to 2.5 percent since 1996.

An exceptional aspect of open space planning in the Stuttgart region is assessment of the affect of transportation and buildings on climate and air flows from the surrounding forests (Spirn 1985). The landscape plan for the Stuttgart region identifies how air quality and climate are affected by the intrusion of any new development -particularly buildings exceeding 22 meters (City of Stuttgart 2006). The phenomenon of planning open space to facilitate air flows also has

been observed in other German cities, such as Freiburg (Beatley 2000:219).

*I.B. United States*

The United States lacks a national spatial and landscape planning system that integrates federal, state and local land-use and nature protection efforts. As Kayden (2001:446) claims, land-use planning at the level of the state is the exception rather than the rule. In the U.S. there is no equivalent of Germany's national framework laws for spatial planning or the coordinated exchange of plans found in the principal of the "counter current." Open space planning is generally voluntary and falls under the purview of U.S. states and local governments. Nelson (1995:20) adds that approximately half of all U.S. states require local governments "to adopt comprehensive plans with at least some minimum content specifications," but adds that "While the U.S. Department of Commerce's Standard State Enabling Act seems to require local comprehensive plans, the courts in most states have interpreted the act's rather vague language as requiring no more than a comprehensive zoning map." The open space plans of the two states represented in the interviews Virginia and Oregon, are discussed briefly below.

*Oregon.* Oregon was among the first U.S. states to impose growth management controls by restricting development within defined urban growth boundaries. The 1973 state-wide growth management law - the Oregon Land Conservation and Development Act - was pioneering in its establishment of a state agency with oversight of state-wide planning goals and guidelines (Nelson 1995:22). The act requires every city and county to prepare and coordinate long-range growth plans that comply with specifically adopted state goals, set urban growth boundaries, and protect forests, farmlands and open space. "To limit urban sprawl, the urbanization goal requires

cities to delineate urban growth boundaries, beyond which municipal water and wastewater services will not be extended” (Nelson 1995:22). In Oregon’s original legislative proposal, coordination of local plans was to be accomplished by regional agencies. Nineteen state-wide land-use planning goals were developed, including Goal 5, which established a process for inventory and evaluated a dozen natural and cultural resources, including fish and wildlife.

*Virginia.* In the Commonwealth of Virginia, there is no code specifying protection of open space or urban growth boundaries. Virginia Commonwealth Code 15.2-2223, specifies that each municipality develop “a comprehensive plan for the physical development of the territory within its jurisdiction” (Commonwealth of Virginia, Code 15.2-2223). In that context, local governments elect, but are not obligated, to prepare open space plans defining limits to growth or protection of open space in the comprehensive plan of local authorities. The Virginia Code adds that the planning commissions of each local authority are to prepare comprehensive plans for review and approval of the “governing body” (Commonwealth of Virginia, Code 15.2-2223). The Virginia Code specifies that the comprehensive plan “be *general* in nature, in that it shall designate the *general* or approximate location, character and extent of each feature shown on the plan and shall indicate where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed, abandoned or changed in use as the case may be.” The Virginia Code also adds that each plan “may include, but need not be limited to the designation of areas for various types of public and private development and use, such as different kinds of residential, business, industrial, agricultural, mineral resources, conservation, recreation, public service, flood plain and drainage, and other areas” (Commonwealth of Virginia, Code 15.2-2223).

Most jurisdictions in Virginia lack an open space plan equivalent to most German states. Instead, Virginia has an interwoven set of policies that may be construed as open space planning. Most of these interlinked policies fall within the environmental, land use, park and recreation components of the comprehensive plan. However, when implemented these policies are rarely coordinated, and as a result most open space planning is not conducted in a coordinated and comprehensive manner.

## **II. State of Transfer of Open-Space Planning From Germany to the U.S.**

The following table reviews data from the interviews about the transfer of open space planning policies from Germany to the U.S. (principally the Northern Virginia region and Oregon) between the period 1974 to 2006. The information from the interviews is presented in relation to theories of policy transfer, outcomes and degrees. The table indicates that few hard elements of land-use policy showed up as being transferred from Germany to the U.S. The table also indicates that mostly soft elements of ideas which transferred, and that inspiration was the predominant degree of transfer. The interviews also do not provide examples of national-level transfers of laws, codes or guidelines.

The table highlights that the transfer of both hard and soft elements open space planning policies from Germany to the U.S. was mostly a rational process, with some anarchic characteristics. Goal-directed searches and applications were more evident in the search for information about German open space policies. Problems were less vague (invariably concerns about consumptive land-use patterns and sprawl) and preferences better defined searches for efforts to control urban growth. The interviews also suggest inspiration and some emulation as

the degrees to which the policies transferred. General ideas and concepts of open space policies transferred from Germany to the U.S., but the interviews did not include anything that could be considered “copies.”

**Table 7.1 - Summary of Practitioner Interviews (Open Space Planning)**

<u>Practitioner</u>	<u>What</u>	<u>Hard or Soft</u>	<u>Anarchic/Rational</u>	<u>Degree of Transfer</u>
CG	A paper on land-use planning	Soft	Anarchic	Inspiration
GL	“I spent a decade on city and county planning commissions. <i>I cannot point to a single idea, law, or code I transported from my German studies.</i> ”	Soft	Rational	Inspiration
MG	Books, papers, articles, ideas	Soft	Rational	Inspiration
MGBb	Traffic calming practices, ideas of wind corridors, “green” rooftops, real-time transportation signage and Prince William County’s open-space plan.	Soft	Rational	Emulation
MT	“I worked with the property owners and County to change the 2001 land-use plan for inclusion of more open space and compact development.”	Soft	Rational	Emulation
DR	“The German experiences of land-use controls offer illustrative lessons and experiences for the U.S. This was demonstrated in Oregon in the 1970s with Tom McCall and the Oregon-state wide growth management law.”	Hard	Rational	Emulation
SC	“There is an emphasis on car-free solutions and car-free cities that we have seen transferred into the northern Virginia region.”	Soft	Rational	Emulation
SP	“I returned with the inspiration that a few people, driven by ideas, can make a difference..I came away with an appreciation for the importance of regional planning and regional governance”	Soft	Rational	Inspiration
TS	Nothing	Soft	Anarchic	Inspiration
CK	Articles	Soft	Anarchic	Inspiration

GC	Green buildings and ideas for regional bike paths	Soft	Rational	Inspiration
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### III. Overview of Practitioner Interviews

This section looks at information gathered from the interviews. The information is organized in relation to the propositions and key theories presented in Chapter One. Part A explores the rational and anarchic nature of the search and review of information about open space planning policies from Germany. Part B explores the role of key individuals and communities of open space planning experts identifying and implementing information from Germany. Part C reviews the outcomes and filters affecting voluntary transfer of open space planning policies from Germany to the U.S.

***A. The voluntary transfer of open space planning policies from Germany to the United States is most often shaped by the absence of informed, goal-oriented and problem-focused search and utilization of imported information.***

The interviews suggest that acquiring and reviewing information about German open space planning policies by U.S. practitioners was generally an informed, goal-directed and problem-focused process much as described by Simon (1986) and Rose (1993). Approximately eight of the ten interviews revealed relatively goal-oriented qualities in which the search for lessons from Germany could be linked to problems - typically urban sprawl. In response to the question “*Why did you go to Germany and what objectives did you have in going*”, responses included:

“The grant (to the Conservation Foundation) examined land-use practices and policies in four European countries, including zoning, sprawl, good environmental and management

practices and financial support mechanisms - with over \$1million, it was the German Marshall Fund's largest grant in this area.”

“I have been to Germany countless times since the 1960s to study land-use planning. My first substantial introduction was through a German Marshall Fund Conservation Foundation study of comparative land uses and environmental law in nine countries (1974-1976). In my opinion, German cities are the best planned in the world. My first aspiration was to learn how the Germans achieved this.”

“I was part of a team studying land-use in Germany and six other countries in the 1970s. With the Conservation Foundation project, for Germany in particular, we were interested in studying land-use planning practices, particularly in Bavaria.”

“I visited Germany in the summer of 2000 as a participant in a sister-region partnership between the Northern Virginia Regional Commission and the regional planning authority of Stuttgart, Germany. The focus was to learn about open-space and transportation planning and other aspects of regional development.”

The \$1 million made available to the Conservation Fund by the U.S. German Marshall Fund speaks to a stronger than average presence of rationality. Concerns about sprawl and erosion of open space initiated a search for growth management tools that was well-financed and focused. It included a multi-country, multi-year search for information about solutions that could be applied to address the erosion of open space in the U.S. Even if the problem of sprawl and growth management controls was ambiguously defined, there was hardly any sign of satisficing via short cuts of culture or geography. The presence of a formal partnership between a regional planning authority in Northern Virginia and Stuttgart that supported long-term exchanges also are more in the nature of a rational, problem-driven search process rather than an opportunistic mergers of policy streams.

Some responses speaking to anarchic opportunistic elements were present. For example, a regional planner from the Washington, D.C., region commented that “My wife was in the

Foreign Service, stationed in Duesseldorf. I had just completed graduate school with a masters in planning and had heard of a consulting position at the County Government (*Regierungsbezirk*) in Duesseldorf that involved comparisons of regional planning practices among six major urban regions around the world.” This practitioner rather randomly found work as a consultant comparing regional land-use development practices of Germany and the U.S. However, more often, the search for lessons about open space planning from Germany was goal-oriented.

Notions of a rational pursuit and use of information are reinforced in responses to the questions: “*Did you consider any other countries other than Germany?*” and “*What information sources did you receive in order to understand open space and landscape planning policies in Germany.*” Eight of the ten practitioners indicated efforts to search and apply lessons about open space planning policies from countries other than Germany. Primary information sources included multiple and long-term trips over decades to Germany and other countries to gather information about open space planning. Follow-up conferences, meetings and workshops provided additional information through which the interviewed practitioners gained insight about open space planning policies in Germany. A variety of books, journals, conferences and other publications concerning open space policies learned from Germany over 30 years, see it differently than Mossberger (2000:37), who observed that “much of the information that diffuses does not permit rational analysis of what would be needed for policy success in the new setting.”

The highest levels of local, state and national government were involved in the review of information and experiences concerning German open space planning policies. This included the involvement of officials from the White House, state governors, and senior policy officials at the

U.S. Department of Transportation and the U.S. Environmental Protection Agency.

The interviews with open space practitioners do not necessarily comport with observations by Jaenicke (1997) and Kerns (2001:11) that cross-national environmental policy transfer is “tipped by large, populous and economically leading countries” with the influence to “affect policy changes through multilateral fora.” Although there were repeated references to Germany as a leader in the realm of land-use planning, there was no indication suggesting that global fora such as United Nations or another multilateral organizations influenced the search or transfer of open space planning policy ideas from Germany to the U.S. (or from any other country).

The interviews also give little indication that the transfer of open space policies from Germany to the U.S. was politically or ideologically motivated, as hypothesized by Rose (1993) and Dolowitz and Marsh (2000). Reviews of secondary information sources point to a balanced political make-up of the practitioners involved in the transfer process and that balanced numbers of Republican and Democratic politicians participated. A practitioner from Northern Virginia even stated directly that political ideology played little or no role in the search for regional planning policies from Germany.

***B. The voluntary transfer of open space planning policies from Germany to the United States depends heavily on the role of key individuals and communities of experts to identify, interpret and implement information and knowledge from Germany.***

The interviews present a picture of an ambiguous influence of networks of technical and policy experts involved with the transfer of open space policies from Germany to the U.S.

Seven of the ten interviews referred to the role of the U.S. German Marshall Fund as an important catalyst during the transfer process - patterns consistent with Kingdon's notions of issue networks and Roger's observations of "change agents." The U.S. German Marshall Fund served as the principal change agent through which information about German land-use and open space policies was passed and resources were provided for review in the U.S. The grant by the German Marshall Fund to the Conservation Foundation and the partnership between two regional planning organizations point to two additional concrete examples highlighting the influence of change agents. Five of the ten responses also indicated an absence of communities of experts that handicapped the transfer of information and data about German land-use policies to the U.S. In this context, responses to the question "*Were any specific networks, organizations, institutions, or individuals essential to sharing information or overcoming obstacles to the transfer process?*" usually included:

"I received no help from professional networks or associations such as the American Planning Association or the American Institute of Architects;"

"There were no specific networks that come to mind. For information about Germany, I relied on colleagues at the Northern Virginia Regional Commission;"

"There is a need to create a network of practitioners with a shared vision of green infrastructure."

The practitioners also gave responses which reinforce Rose's (1993) observations about the role and influence of cosmopolitan policy entrepreneurs for sharing ideas and concepts affecting "policy streams." In response to the question "*What organization or institution or individuals were essential in helping to overcome these obstacles during the transfer,*" the

following are representative of supporting Rose's (1993) observations:

“The best combination of people to involve in a project are realistic leaders with vision and experience who are responsible for the outcome and technical experts who can focus on the details.”

“People who lack the experience of learning from abroad tend to have a hard time appreciating the value that can come from getting to know other cultures and practices. I observed that most of the people open to cooperation had in their background some experience with other countries either through study, visits or exchange, such as former Peace Corps Volunteers,”

“We brought our elected officials along with us. There is no substitute for traveling abroad, seeing the work take place and touching, seeing, feeling the sites. Our elected officials always praise the trip and are changed when they return. At the local level, the role of Democrat or Republican is not important.”

“Russell Train, my boss at the White House, was interested in international work and lessons from abroad, which he considered to be important.”

The open space case study speaks to a strong presence of change agents endeavoring to orchestrate a relatively rational search and review of information and serving as “bridges” between mildly heterophilous communities.

***C. The voluntary transfer of open space planning policies from Germany to the U.S. tends to be more of a local nature consisting of ideas, concepts and attitudes, rather than national-level codes, laws and regulations. This emanates from the unique complex environmental and urban planning policies in Germany that differ from those in the United States.***

The majority of the responses to the question “*What about German open space planning policies were you able to transfer and apply after your return to the United States?*” pointed to a predominance of ideas and inspiration rather than hard elements or design of Germany policies that transferred to the United States, as suggested by Bennett (1991) or Wolman (1992). Three

of the ten interviews said that nothing transferred. Responses included:

“Nothing! Most ideas from Germany would not translate into the day-to-day work in the U.S. Germany’s experiences with preserving open space and land-use is much different than the U.S.”

“I spent a decade on city and county planning commissions. I can’t point to a single idea, law or code I transported from my German studies to Los Angeles city or county.”

Six of the ten interviews pointed to transfers of ideas that were applied affecting the development of land-use plans in Northern Virginia, Oregon and Maryland. Examples from the interviews included:

“There has been much that has been transferred and applied in Northern Virginia from Germany over the past six years. Traffic calming practices, LID concepts, “green” rooftops, and real-time transportation systems. Prince George’s County’s open space program was a direct consequence of a recent exchange with Stuttgart - the planning approaches, design, art - were all modeled after Stuttgart and its surroundings. We have had ideas transfer about “clean air corridors,” we have made DVD’s after German LID programs.”

“I worked on the "Moorefield Station" project and was able to affect the land-uses of the project by avoiding 600 one-acre lots - my visit to Germany informed me this would be a mistake. In my capacity as a member of the Loudoun County land-use committee, I helped work with the property owners and the County to change the 2001 land-use plan for inclusion of more open space and more compact development.”

“The German experiences of land-use controls offer illustrative lessons and experiences for the U.S. This was demonstrated in Oregon in the 1970s with Governor Tom McCall and the Oregon state-wide growth management law (Oregon Land Use Act) requiring every city and county to prepare a long-range growth plan and set urban-growth boundaries. Tom McCall was a board member of the Conservation Foundation and traveled to Europe. The past and present challenges to Oregon no-growth areas have highlighted the importance and need for consensus-driven land-use planning, particularly as courts appear reluctant to protect growth limits.”

“I have been able to take the idea of clear edges between the German cities and countryside and apply it in Talbot County, Maryland. The County is preparing an open-

space plan and I have aided the concepts of a green buffer zone between Easton and St. Michaels. I took the idea of clear edges between urban regions from Germany.”

The interviews did not indicate that the practitioners were aware of any national-level open space or land-use policies in the form of laws or codes that transferred from Germany to the U.S. In general, the interviews go along with Rose’s (1993) and Kern’s (2001) notions about the role of national-level filters of complexity, particularly national spatial planning policies in Germany. Specifically, the interviews comport with Kingdon’s notions of a political culture in the U.S. that is dominated by an attitude suspicious of national-level government involvement in general, and land-use planning in particular. Eight of the ten of the interviews alluded to the presence of a cultural bias in the U.S. against national land-use planning and impermeability in the U.S. to the import of ideas from abroad. In reply to the question “*What, as far as you are able to tell, are the differences between German and U.S. open space polices,?*” the following responses were typical:

“From what I gather informally, issues of historic preservation, urban design quality, public transport, the use and preservation of open space (especially forests) and architecture resonate more deeply with the typical German voter than his or her U.S. counterpart, with some notable local exceptions in the U.S. When it comes to open space, for instance, German national identity is rooted in a romanticism that idolizes the forests and fields as national treasures. Germans use their forests. Land-use planning in the U.S. is predominantly a local affair, and more ad-hoc than we would like to admit. Land-use planning in the US tends to be the work-product of the most local governments, driven by the demands on local politics.”

“Germans put a premium on open space planning, perhaps because of land constraints that they confront. There appears to be little sprawl and urban demarcation is very clear. In Germany, the system is all top-down and in the U.S., it is all bottom-up. In Virginia, it is nearly impossible to purchase open space and the tools are not as strong to protect it.”

“Germany has successful open space policies and the U.S. struggles in this area. Germany

has a different legal system that operates under the presumption that you have to have permission for various land-uses. In the U.S., we operate under the presumption that you do what you want when you want to and that the government should not intervene. Germany also has accorded a higher-level of respect for land-use and merging transportation and land-use issues.”

“Land-use planning in Germany has been accomplished with serious regulatory laws with bite. The notions "Aussenbereich" and "Innenbereich" in German land-use planning are especially good examples. The Germans don't try to stifle growth, but have created strong public consensus for land-use controls. Other major differences between German and U.S. land-use include the reluctance of U.S. courts to sustain controls on lands set aside for forestry and agriculture. In Germany, these (land-use controls) are simply not issues. The highest German court once ruled that a land-owner could not develop his plot because it contained sacred grove of trees. A general weakness of the American land-use system is the reluctance of the American public to support land-use restrictions and controls.”

“Germans have much more authority and laws to get things done. The U.S. is a property-rights nation with protection of private property a priority. In Germany, there is more authority to do long-term regional planning and to get involved with land-use Virginia in particular is a Dillon Rule state, meaning that local government is assumed to have no authority except that which is granted to them by the state. Enabling legislation is required for the adoption of zoning and land-use laws. The regional authorities in Virginia lack the teeth for guiding land-use and regional coordination that is seen in the regional authority (Verband) in Stuttgart.”

“The biggest difference that I discovered was that in the U.S., we buy land to protect it. In Germany they regulate it. There is a large emphasis in the U.S. on voluntary programs rather than regulatory. In Germany you see the immediate effect of their land-use programs. Frankfurt ends and it is clear for anybody to see that you are in the countryside.”

The interviews and supporting information provide a clear picture of well-developed and structured land-use laws in Germany, that extend to the local level, as critical filters affecting transfer of environmental and planning policies from Germany to the U.S. In his assessment of land-use rules between the United States and European countries such as Germany, Nivola (1999) asserts that “the laws passed by even the most aggressive state legislatures (*in the U.S.*)

are still feeble in comparison with the stricter rules abroad. It may also be because the master planning efforts of the American states lack the reinforcement of supplemental, if unrelated, policies that elsewhere have helped dissuade local owners of undeveloped land from building on it” (Nivola 1999:29). Lefcoe (1979:7) observes similar phenomena in his comparisons of U.S. and German land-use development policies. Lefcoe asserts that “private landowners in the United States have traditionally enjoyed a legal right to develop or redevelop their properties that is not enjoyed by their Dutch and German counterparts.”

Other national-level and cultural filters emerged in the interviews consistent with the observations from other studies of German land-use policies. Bruegmann (2005) argues that the success of German open space efforts can be attributed to strong national land-use planning laws and relatively steady population growth. Lefcoe (1979) and Beatley (2000) assert that a unique difference between American and German planning policies is the large percentage of land owned by German municipalities.

The interviews around the open space protection case study also suggest that while little direct copying or policy content actually transferred, there also were few hard elements actually transferring. The interviews as well as supporting literature produced almost no indicators that German legal mechanisms supporting concepts such as “counter current” planning, “clean air”, “outer” or “inner region” planning actually transferred to the U.S. It appears that the complexity and the highly integrated concepts of planning in Germany confronted too many cultural barriers in the U.S. This matches Kern’s (2001:11) observations that “comparative studies have shown that problems of long-term degeneration, consumption of resources and land or the

contamination of groundwater are often accompanied by the high social status of the agents of the polluters and lack of standard technical solutions. In such cases, the rapid diffusion of environmental policy making seems unlikely.” The above observation was reflected in the interviews in comments such as:

“Generally, the obstacles are political. The winds of change blow, a new crisis hits and people’s and governments’ focus changes - often necessarily so. It’s not so much about culture as it is about politics - small ‘p’ politics. When you look at the big picture, it’s too hard to follow through with some of the ideas that people came back with. Land-use is a long-term proposition, not short-term. There are so many issues in some of these cities, and the ideas from Europe simply could not continue to always run against the stream.”

Finally, these interviews suggest that ideology nor common political perspectives between U.S. and German open space practitioners were a factor in initiating the search or introduction of open space policies from Germany to the U.S. as suggested by Rose (1993) and Dolowitz and Marsh (2000). The presence of Republicans and Democrats during the transfer processes, particularly in the exchanges to Germany involving practitioners from Oregon and Northern Virginia, help to substantiate this observation.

#### **IV. Review**

The interviews around open space protection suggest that the voluntary transfer of open space policies from Germany to the U.S. was at times, a relatively goal-directed and problem-focused search for information and policies from Germany. The interviews included examples of two significant long-term efforts with relatively substantial resources and expertise to study open space planning policies in Germany. Short-term anarchic searches for lessons about German

open space policies were observed in the interviews, but harvesting lessons from Germany about open space planning was notable for the scale and commitment of resources and the pursuit of solutions to match with existing problems. Also noteworthy was the presence of stronger-toned observations about the differences between German and American approaches to land-use and the existence of strong national state support for land-use controls. Even if “impressionistic” rather than analytical understanding emerged, ideas and notions transferred across the Atlantic to the U.S. A well-funded research effort sometimes had as much effect as a single policy entrepreneur traveling to Germany, equipped with only modest understanding of differences in policy settings and even less about the effect of German open space policies.

The interviews point to communities of experts playing an ambivalent role during the search and review of imported information about open space policies from Germany. In general, the German Marshall Fund was an example of a “change agent” and developing a context for the search and review of information about land-use policies in Germany. The German Marshall Fund also provided the primary mechanism through which opinion leaders with cosmopolite qualities could emerge during the transfer process. However, the interviewees seemed to not be aware of networks of experts working to exchange information, policies and practitioners between Germany and the U.S. The absence of information through traditional urban development and planning bodies emerged in several interviews. The interviews did not speak of “policy windows” opening through crisis or international agreements.

The interviews also suggest that voluntary transfer of open space policies from Germany were more likely to result in state or local outcomes. The interviews spoke to American political

and cultural conditions creating reluctance to embrace German national-level spatial planning and are seen as key barriers to a transfer process. The practitioners did not offer examples of voluntary transfer of open space policies involving copying or hybridization, as postulated by Dolowitz and Marsh (2000). Most often, the transfers these practitioners were familiar with resulted in the transfer of inspiration and ideas behind the policy or program.

## CHAPTER VIII

### DISCUSSION AND RECOMMENDATIONS

This chapter will consider commonalities and differences among these case studies pertaining to the voluntary transfer of urban environmental policies from Germany to the United States. This chapter also will attempt to draw some conclusions related to the three propositions which guided analysis of the primary data sources and related to lessons for planning practice. There are six parts to this discussion. The first part looks at the rational and anarchic elements of voluntary policy transfer as they appear in the interviews, particularly the search and use of imported information and the connection to the development of a “knowledge trail.” The second part discusses the role of policy entrepreneurs and communities of experts involved in the transfer process. The third part discusses the outcomes associated with voluntary policy transfer. The fourth part offers some thoughts about the movement of urban environmental policies from Germany to the U.S., lessons for urban planning practice, and the ties between implementation of domestic planning-related policies and movement of urban environmental and planning policies from Germany. This chapter concludes with observations about limitations and possibilities for further study.

From the bewildering array of information that emerged from these case studies, some strands concerning voluntary policy transfer of German urban environmental policies emerged and merit discussion. One set of strands has to do with the relative anarchic means through which information about urban environmental policies from abroad is accessed and disseminated

in the U.S. Another set would be the role of determined policy entrepreneurs bridging environmental and planning communities in Germany and the United States. Also of interest is the apparent predominance of soft elements as outcomes along with this dilution of policies during transfer to the U.S. due to the complexity of German urban environmental planning policies and programs. A final set of strands that are of interest is the similarity between the challenges of transferring urban environmental and planning policies from Germany and the implementation of domestic planning-related policies in the U.S.

***I. Proposition 1: The voluntary transfer of urban environmental and planning policies from Germany to the U.S. is most often shaped by the absence of an informed, goal-directed and problem-focused search and utilization of imported information.***

Elements in these case studies suggest that awareness of German urban planning policies trumps a goal-driven and problem-focused need for information and understanding about German urban environmental and planning policy content. These case studies also hint at incidents of anarchic elements characterizing the search and utilization of information about urban environmental policies from Germany. However, it became apparent, particularly in the open space case study, that rational processes are also operative during the search for information from abroad. The rational elements affecting the importation and use of information from abroad can be seen in such things as long-term evaluations and studies of problems to correspond with potential solutions from Germany. Nevertheless, organized anarchy, particularly the role of chance encounters between change agents and practitioners, generally characterized the transfers in these case studies.

The presence of anarchic elements during the search and use of imported information is seen in the general absence of “cause-and-effect” models developed or applied by U.S. practitioners to study the fungibility of German environmental or planning policies in the U.S. Moreover, the U.S. practitioners working to determine the scale of change resulting from the adoption of a German urban environmental or planning program did not compare alternatives to goals, explore the interdependence of programs, or thoroughly study the equivalence of resources between German or U.S. urban environmental and planning policies. With the exception of two relatively well-structured searches in the open space case study, most practitioners pointed to a lack of funds as an impediment to a sustained importation and review of information about German urban environmental and planning policies.

The intuition of the U.S. practitioners, rather than a rational, orderly and critical review of data, appears to have informed decisions and judgments during the transfer process. The practitioners may have compared their own conditions to other countries, as observed by Kingdon (1995:19). But the comparison appears often not to have been undertaken by defining problems through a formal assessment of performance about German urban environmental and planning policies. In other words, these practitioners did not appear to engage in “blueprint” emulation (Jacoby 2000), in which transfer was considered by Americans on the basis of review of German urban environmental policies and their results.

In short, these case studies do not consistently fit in with Rose’s (1993) notions of policy transfer, especially in a cross-national context, in which transfer emanates from a rational or purpose-driven process. Crisis may be a key catalyst in which implementation of some ideas

or elements of policies imported from Germany occurs. This was observed in the inclusion of ideas, policy elements, or knowledge into actual construction of rain gardens or policy concepts for master plans. However, the process of importing and applying is more erratic and less systematic than Rose (1993) has suggested. These case studies did not offer an abundance of examples in which, as Rose (1991:3) suggests, the practitioners undertook “prospective evaluation of what would happen if a programme already in effect elsewhere were transferred in the future.”

Most of the interviewed U.S. practitioners in these case studies expressed perceptions that the United States lagged behind Germany in the development and application of stormwater, contaminated land redevelopment and open space preservation policies. However, the sense of lagging and comparison seems grounded in notions, opinions and observations rather than an orderly evaluation of relationship of the German or U.S. environmental and planning-related policies. The sense of lagging also seems to be grounded in observations gained from site visits to Germany. Moreover, the U.S. practitioners appear to have matched preconceived solutions to broadly defined problems observed in Germany and the United States. These observations also comport with Dolowitz and Marsh’s (1996:347) notions that policy transfer can be driven by perceptions grounded in vague assumptions about the core root of policy failure.

While it appears that the U.S. practitioners in this study often relied heavily on descriptive data and opinions to make judgments about the differences between German and U.S. policies, it seems inappropriate to suggest that no critical evaluations took place. The search and contact between German and American urban environmental and planning practitioners appeared

to mature and evolve in the course of formal partnerships, despite geographic, language and other cultural hurdles. In the context of site visits, images drawn from conferences and workshops, or extended contact with environmental and planning counterparts in Germany, multiple U.S. practitioners within each case study worked with their own tacit knowledge to interpret the functions and adaptability of German urban environmental policies. The practitioners' experiences and observations of German urban environmental policies, however vague, moved them to undertake a transfer effort that resulted in some significant outcomes.

These outcomes included encouraging the construction of “green” roofs in Washington, D.C., and Northern Virginia and creating land-use plans for housing developments in Loudoun County, Virginia. The practitioners involved in these examples often did not seek codification of the general mechanisms of German land-use or stormwater policies. However incomplete the knowledge of options or data about the performance about German urban environmental policies, the practitioners managed to take fairly complex concepts from Germany and apply them to their domestic efforts with relatively tangible outcomes. However, codification was not absent. The inclusion of concepts about German site-specific contaminated land risk assessment practices into the development of new legislation concerning contaminated land clean up in New York is another example.

The phenomena of transferring German urban environmental and planning policies to the U.S. looks to be more than just “plain dumb luck.” This is particularly evident in the efforts of practitioners such as “RS” (brownfields), “GE” and “TT” (LID), and MG (open space) over many years, sometimes decades, to secure information - often descriptive but sometimes about

performance - concerning German urban environmental policies and to transfer them to New York City, Washington, D.C. and Northern Virginia. Working with change agents such as the German Marshall Fund, the U.S. practitioners collaborated with domestic planning and environmental communities, developed case studies, or organized peer-to-peer exchange efforts that can be viewed as a transfer process less formal than bounded rationality, but more structured than organized anarchy. Similar bounded rational attributes emerged in the LID case study in which practitioners indicated a sustained and long-term effort to apply German stormwater lessons in the U.S. “TT”, a German landscape architect, worked for over 30 years to transfer his understanding and knowledge about German stormwater policies to U.S. regions such as the Washington D.C. area.

The presence of rational elements affecting the search and review of German urban environmental and land-use policies were especially noticeable in the open-space case study. Three practitioners worked within the context of a well-funded (\$1 million in 1976 dollars), multi-year, sequential set of efforts to secure information, match problems to goals and compare alternatives between planning practices in Germany and the U.S. The formality of the information exchanges included searches for information about open space policies from multiple countries, and the stationing of a full-time attorney in Germany for four years (see Leonard 1983:xv). The formality of the search also was noticeable in a “continuous interaction” effort through a formal partnership between two regional planning authorities. The region-to-region partnership established to study long-term exchanges of information, regional political leaders and practitioners also pointed to the presence of rationality in the transfer process. Goal-focused and

problem-oriented searches evolved over years to facilitate transfer and to move beyond simple “piecemeal” or “single moment” transfer episodes.

Little information emerged from any case study suggesting that “satisficing” during the search for information and lessons from Germany was motivated by political agendas or by an effort to mollify political pressures, as suggested by Bennett (1991) and Robertson (1992). In other words, there were few indications in these case studies that Democratic (or Republican) politicians in from the U.S. were motivated to learn from Germany’s experiences because of shared political sympathies with national or local German political counterparts (such as U.S. Democrats lured to their Social-Democrat counterparts or Republicans to their Christian Democrat counterparts). One practitioner from the open space case study even commented that political affiliation was irrelevant in approving a partnership and exchange between regional planners in Northern Virginia and Stuttgart, Germany.

These case studies contained multiple expressions reflecting the notion of the U.S. as a culture of provincialism resisting active searches and learning from other countries. Responses to the question in these case studies, “What changes are necessary to facilitate the transfer of policies from Germany to the U.S.?”, often indicated opinions concerning the need to create a more formal and active exchange of lessons with urban environmental planners from pioneer countries such as Germany. Responses to the same question also suggested that only an extreme environmental “crisis”, such as continued loss of open space, polluted stormwater, or increases in the number of toxic properties, would enhance more formal searches for ideas and lessons from Germany (and other countries) for potential transfer to the U.S. This touches on Eyestone’s

(1977) observations that cross-national policy transfer may first reflect efforts to emulate virtue rather than efforts moved by necessity.

Finally, the theories of bounded rationality as they relate to policy transfer would suggest that Americans look first to Canada, the UK, or even Australia for lessons about urban environmental planning. Nevertheless, the information from these case studies indicates that despite a lack of a shared border, language, or common political and environmental culture, some concerted efforts were undertaken by American environmentalists and planners to understand and apply range of lesson and ideas from Germany - although often in tandem with searches for lessons from Canada and the UK.

On the basis of the information from these case studies, one could conjecture that the voluntary transfer of urban environmental and planning policies from Germany to the U.S. is initiated by perceptions that Germany is an environmental and planning pioneer with lessons to offer the U.S., perceptions of deficient environmental and planning policies in the U.S., chance encounters and policy entrepreneurs working to import information and knowledge (explicit and implicit) that ultimately weave into domestic policy discussions.

***II. Proposition 2: The voluntary transfer of urban environmental and planning policies from Germany to the United States depends heavily on the role of key individuals and communities of experts to identify, interpret and implement information and knowledge from Germany.***

These case studies suggest that random contacts initiated by change agents played a more

substantive role than organized communities of experts during the search and utilization of information imported from Germany. Opinions about the absence of dedicated networks of global urban environmental practitioners to share information about German urban environmental and planning policies appeared often in these case studies. The comments from the interviews also suggest that the absence of international networks of planners may be attributed in part to a national culture in the U.S. that resists the active importation of information from abroad. Many practitioners from the case studies frequently discussed the lack of information about the processes and structures of German urban environmental and planning policies from formal networks or organizations of American environmentalists and planners. However, while more formal national networks were missed, the information from these case studies points to the influence of local and regional-level networks, as observed by Walker (1969), through which policy entrepreneurs worked to integrate their knowledge and information about German urban environmental and planning-related policies. This was especially the case after contact by the policy entrepreneurs with information about German urban environmental and planning policies, especially after travel.

These practitioners also seemed to manifest a relative lack of awareness of international networks and epistemic communities to aid with purpose-driven and goal-oriented identification, analysis and dissemination of information about German urban environmental and planning policies. There appear to be few communities of experts from governmental, non-governmental, and academic sectors working together to harvest information from abroad. Information from these case studies points to signs that cultural barriers of “American exceptionalism” may

account for the relative absence of governmental involvement in the formation of these international communities and epistemic networks.

Information from these case studies points to the role of some change agents, such as the German Marshall Fund and the Glynwood Center, as important links between communities of German and U.S. urban environmental experts. The change agents served as “bridges” to opinion leaders through which information about German urban environmental planning might not ordinarily have been exchanged, transferred or applied. The chance encounters between change agents, policy entrepreneurs and practitioners mirror Granovetter’s (1973) observations about the key influence of ‘weak ties’ as bridges between two mildly heterophilous environmental and planning communities during the transfer process.

The information from these case studies suggests that the majority of change agents acted at the local level. The German Marshall Fund of the United States, with an institutional presence in both North America (Washington, D.C.) and Europe (Berlin), appeared to be one of the few change agents with a genuinely cross-national presence. It also was the predominant funding source for the majority of the exchanges and transfers. Some of the other change agents (for example, the Glynwood Center or the Toronto Waterfront Regeneration Trust) had well-established local connections, but lacked the institutional presence in Germany of the German Marshall Fund of the United States. In other words, ideas appear to spread through random contacts between mostly local German urban environmental specialists and individuals associated directly with, or funded by, the U.S. change-agent organizations. These case studies point to few national-to-national level contacts between German and U.S. urban environmental and planning

practitioners.

Information from these case studies also speaks to the relevance of domestic local-level and regional-level networks and communities of experts in relation to the voluntary transfer and adaptation of urban environmental and planning policies from Germany, particularly during the implementation of transferred policies. Going by these interviews, one might see reflected the wisdom of Rogers' (2003) observations about the critical role change agents play in passing information to policy entrepreneurs who work among domestic environmental and planning networks. After accessing and reviewing information concerning German urban environmental policies, policy entrepreneurs would work within their domestic networks to disseminate impressions, data and information that they had collected about German urban environmental and planning policies. These networks often consisted of faculty and students at colleges and universities, environmental and planning organizations, other advocacy coalitions, and local and regional authorities, a highly varied mix of persons.

These case studies also are in harmony with Kingdon's (1995) notions that policy entrepreneurs frequently work progressively in the problem, policy and political streams by utilizing "focusing events" through which to push their policies. The focusing events through which policy entrepreneurs and networks worked in the LID case study included crisis of leaking roofs and violation of the federal clean water laws. The focusing events for brownfields included the development of new state-level contaminated land redevelopment laws and sales of vacant derelict properties. An important focusing event in the open space case study included intense development pressures in Northern Virginia (such as Loudoun County).

Furthermore, one might speculate that political and policy entrepreneurs recognized focusing events and incrementally incorporated notions and impressions about German urban environmental and planning policies into their networking activities. After travel to Germany or contact with information about German environmental and planning policies, the policy entrepreneurs worked with mayors, commissioners from local authorities, and senior governmental administrators to share ideas and knowledge from German brownfields, stormwater, and open-space protection policies. The process can be seen as exemplifying Kingdon's observations of "problem" and "policy streams" merging to form the "primeval policy soup." The process also relates to observations by Robertson and Waltman (1993:28) about how specialists in each particular case study from within and beyond the government kept abreast of the "arsenal of possible solutions," ready to offer ideas and solutions when the "portentous alignment of problems and political circumstances came about."

The roles that policy entrepreneurs play in softening up the process by coupling new ideas, proposals and problems also are in evidence in the case studies (Kingdon 1995). Instead of just "dumb luck," cross-national voluntary policy transfer can be seen as enhanced by policy entrepreneurs with "cosmopolite" qualities, and equipped with a strong determination to pursue transfer. One U.S. practitioner summarized the policy transfer from Germany to the U.S. as a process in which, "where there is a will, there is a way." The coming together of determined opinion leaders and crisis appears to accelerate the transfer and application of German urban environmental policies to the U.S., even if success is measured by short-term transfer of soft elements.

The persistence of policy makers also appeared to have been essential in overcoming the barriers of complexity and regulation during the implementation of ideas and notions tied to German brownfields policies. This is particularly evident in New York City, home to some of the most “arcane permitting processes” affecting land-use and development in the country (May 2004:7). The persistence of the brownfields policy entrepreneurs in New York was critical for the building of consensus that ultimately helped penetrate some of the local, state, and national regulatory complexities affecting contaminated land laws. The brownfields case study, and the sustained work of policy entrepreneurs in changing New York state laws on risk and the development of the 197a plans, mirrored successful efforts to inspire local confidence and overcome the “commitment conundrum” in the face of heavily prescriptive national and state environmental mandates (Burby and May 1998:107).

The brevity of political entrepreneurs’ tenure was a frequent factor that emerged as a filter limiting transfer efforts. Brevity of political entrepreneurs’ tenure was particularly evident in the open space case study. Information from the interviews suggests that the longer and more sustained the focus by the opinion leaders, the stronger the chances that general policy mechanisms might transfer to the U.S. One could speculate that the political complexities of managing land-use planning in the U.S., as observed by Robertson and Waltman (1993), limit short-term political solutions for broad-scale topics such as open space planning.

Although these case studies indicated multiple impressions of Germany as an environmental and planning pioneer ahead of the U.S., few signs emerged that the practitioners engaged in blind copying or “bandwaggoning” observed by Kingdon (1995:161). On the basis of

the information from these case studies, it is difficult to speculate that the U.S. practitioners transferred policies from Germany out of fear of looking like laggards. Comparisons between German land-use, stormwater and brownfields policies may have been made, but it does not appear realistic that “ideational competition” drove the transfer process. Information from the interviews does suggest that awareness preceded the need for data and lessons from Germany. Even in the cases in which the search and review of imported data from Germany matured and “rationalized,” it is difficult to speculate that the U.S. practitioners reached a “tipping point” while adopting German policies which was driven by “keeping up with the Joneses” (or the Schmidt's).

Perhaps the apparent absence of “bandwaggoning” can be tied to the generally vague goals and expectations of the U.S. practitioners and the indirect start that most took to obtaining information from Germany. The fact that importers, prior to their exposure to German urban environmental and planning policies, had only a vague awareness of these policies, may have prevented a “tipping” phase from occurring. The absence of “bandwaggoning” may further be linked to weak international networking. The weakness of international networks may then, in turn, have prevented conference of legitimacy on either the harvesting or implementation of lessons from Germany (Elkins and Simmons: 2005:40).

***III. Proposition 3: The voluntary transfer of urban environmental and planning policies from Germany to the U.S. tends to be more of a local nature consisting of ideas, concepts and attitudes, rather than national-level codes, laws and regulations. This emanates from the unique complex environmental and urban planning policies in Germany that differ from those in the United States.***

Taken together, these case studies do not offer a large quantity of examples of hard elements of national German brownfields, stormwater or open space by policies transferred to the U.S. in the form of laws, codes or regulations. Only five times was it mentioned that hard elements of policies transferred into the form of a law, code or rule from Germany to the U.S. Included in those were two transfers from the LID case study, one from the open space case study and two from the brownfields case study. In each case study, there was ample mention of inspiration and emulation as the predominant elements of the transfer process. A much larger volume of transfer results from Germany to the U.S. consisted of soft elements in the form concepts and ideas from Germany that merged with existing brownfields, open space and stormwater programs in the U.S.

The filters of complexity and culture in the case of voluntary transfer of urban environmental and planning policies from Germany to the U.S. seem to be conspicuous for what was diluted rather than what was added. This comports with Masser's (1986:168) observations about complexities and differences between planning cultures in countries resulting in elements being "jettisoned" during the transfer and implementation process.

This contrasts with Mossberger's (2000) observations about how there was much in the way of additions to the original general policy concepts of enterprise zones during their transfer from the UK to the U.S. In these case studies, it appears that the breadth, scope and complexity of German urban environmental and planning policies - particularly at the national level - were very relevant filters contributing to the predominance of soft transfer outcomes. These observations comport with Rose's (1993) and Rogers' (2003) notions that the degree of

fungibility is related to the complexity of the transferred policy and that variations and differences in policy and legal cultures will impede cross-national policy copying.

In each case study there were examples of incremental and small-scale approaches taken by policy entrepreneurs to overcome the barriers of politics and complexity affecting transfer. Several public officials from Northern Virginia, working to transfer regional land-use planning approaches from Germany, commented that the politically realistic approaches to transfer started with simple, non-complex concepts. When confronted with the unrealistic challenge of short-term, immediate transfer of hard elements of German open space and regional planning policies, several elected officials chose long-term incremental approaches with immediate tangible outcomes, such as creating a regional bike path network.

All three case studies, but particularly the open space case study, consistently offered examples about outcomes of transfer affected by a national culture which rejects national-level government involvement in environmental protection and land-use issues. This goes also with Kingdon's (1995) suggestion that national culture or dominant ideologies affect different policy arenas differently (although "not simply"). It may also account for the lack of hard transfers of open space policies to the U.S. in the face of a relatively rational study of German programs.

Faludi (2002), Kayden (2002), Beatley (2000) and Nivola (1999) all observe similar cultural phenomena in the U.S. about the suspicion of the influence of "distant central government" and involvement of federal and state governments in matters affecting land-use. However, just as Rose (1993) and Jacoby (2000) claimed, it is at his peril that the policy analyst overstates the impermeability of culture. Despite the absence of general mechanisms of German-

style land-use planning laws that transferred, notions, concepts, ideas and inspiration about land-use planning gained by site visits, peer-to-peer contacts and meetings aided in the transformation of zoning codes for specific projects in regions such as Northern Virginia. The notion of clean-air corridors from Stuttgart was taken so seriously by one practitioner from Northern Virginia that a regional planning authority will apply for funds from the Virginia state government to study applications of “clean air corridors” in the Northern Virginia region.

In the face of this suspicion and perceptions of overly prescriptive federal and state government involvement in local matters detected in these case studies (especially the brownfields and the issues of liability), the presence of any outcomes at all, but especially at the local level, seems related to the efforts of policy entrepreneurs overcoming the “commitment conundrum” (Burby and May 1998:96). Overcoming local authorities’ lack of “will to take on environmental problems” in light of these suspicions about governmental roles appears to have been accomplished through policy entrepreneurs building comprehensive constituencies resulting in high-quality local plans.

The brownfields case study pointed to a curious deviation and difference between Germany and the U.S. concerning the intrusion of the national government into environmental and urban environmental policy. In the U.S., national-level laws concerning *joint-and-several and retroactive liability* of contaminated land cleanup were often cited as a major barrier affecting redevelopment of brownfields in the U.S. The absence of similar liability laws in Germany was often perceived by the U.S. practitioners as an enhancement of contaminated land redevelopment in Germany - particularly with the application of landscape design strategies in regions such as

the Ruhr Valley. German liability policies affecting contaminated land have some national-level parallels in the U.S. (see Kohls 2006), but are generally considered to be far less stringent than past or current U.S. liability practices. Most U.S. practitioners consider the combination of lax German liability laws and site-specific risk assessment practices to have been important incentives affecting the “success” of German brownfields redevelopment.

Finally, despite some of the largest bilateral trade and investment relations in the world between Germany and the United States, (see Hamilton 2006), few indications emerged from these case studies that the transfer process was either limited or accelerated because of Germany’s or the United States’ market volume or stature (see Tews 2005).

#### **IV. Conclusions and Lessons for Practice**

Taking an “aerial” view of these case studies and the supporting literature for this dissertation, there emerges a suggestion of a transfer process less linear than Rogers’ diffusion model - one might even describe it as a *radial* one. Even in the absence of thorough understanding of core elements of German urban environmental and planning policies, law or regulations, the practitioners who were engaged in transfer activities appear to have taken powerful impressions gleaned from short-term visits to Germany and applied those impressions, however vague, to projects resulting in significant outcomes. Indeed, there are several examples of outcomes with a significant effect on urban environmental and planning processes in the U.S. In the case of brownfields, a sustained dialogue between U.S. and German urban practitioners resulted in constant changes and refinements to a variety of U.S. master plans in New York City, Buffalo, and Niagara Falls. In the case of open space, a one-week tour to urban forest initiatives in

Stuttgart and other German cities resulted in changes to regional planning approaches via the development of bike paths in Northern Virginia.

The information from these case studies suggests that policy transfer sometimes occurs in unintentional contexts and contrasts with Evans and Davies' (1999) arguments that policy transfer should be studied in the context of intentionality. The information from these case studies also suggests that the transfer of ideas often aids with outcomes and implementation of relevance that extend beyond hard transfers of laws, codes or rules. In view of the information from these case studies, Rogers' innovation-decision model might be re-structured to appreciate more these chance or accidental and intuitive learning activities. A revised model, perhaps labeled the "knowledge trail," might start with acquisition of information, proceed straight to implementation, and ratchet back and forth between confirmation and decision.

For example, in the LID case study, in the absence of German-style stormwater codes or laws, practitioners still proceeded to build and construct rain gardens, "green" roofs and other German LID concepts after short-term visits to Germany and generally vague notions of German nature protection or stormwater policies. Parallel to the construction and development of LID projects in their cities and regions, some practitioners worked in a continuous dialogue with local networks of practitioners on the development of formal LID guidelines, codes and enhancements to the existing LID projects.

The author's experiences during the research for this dissertation evoke a transfer process and "knowledge trail" strongly influenced by continuous accumulation of tacit knowledge. In the development of his "innovation-decision" model, Rogers (2003) outlines five "sequential stages"

characterizing the diffusion of innovations which are highly dependent on temporal analysis. Rogers' model and the particular focus on timing of adoption suggests a linear process, one characterized by "a physical process in which particles move from areas of high concentration to areas of lower concentration" (Jacoby 2000:6). Latour (1986:268) also has observed highly mechanistic and linear traits in diffusion models in his analysis of knowledge and power transfers and charges that these models are unable to account for the diversity of "continuous transformation" or reinvention.

It appears that U.S. practitioners who compared their experiences to German urban environmental and planning practices on the basis of site visits, images from presentations and discussions with counterparts found that these activities were as relevant as any more conventional sources of information about policy design and performance. This may be related to what Polanyi (1967) had in mind about tacit knowledge when the U.S. practitioners involved with transfer of German environmental and urban policies knew, understood and applied more about German policies than they were able to express in the interviews. Much of the tacit knowledge seemed evoked by site visits and activities with counterparts in Germany. From this, the practitioners seemed to value these as much as, or more than, conventional sources of information, such as lectures or articles.

The experiences of the brownfields practitioners applying German site-specific risk assessment methodologies into contaminated land legislation, appears to be an example of the work of tacit knowledge. The example of the inclusion of German site-specific assessment practices into New York legislation concerning contaminated land redevelopment appears to be a

demonstration of Etheridge's (1983:45) observations about "intuitive learning," whereby governmental officials who confront a lack of hard data and facts rely on intuition to guide policy formulation.

A radial form of a knowledge trail and the union of tacit and explicit knowledge by policy entrepreneurs would fit in with some of Burby's (2003:35) notions about the importance of stakeholder involvement and the need for policy entrepreneurs to link goals to local conditions. In other words, these case studies point to ways in which policy entrepreneurs cleverly took ideas and concepts seen in Germany and massaged them into their local networks of stakeholders for approval or implementation - even in contexts in which the suspicion of governmental involvement at all levels was matched by suspicion of ideas from abroad. For example, on the basis of the interviews from the open space case study, it appears that the implementation of a new land-use plan in Loudoun County, Virginia, evolved from the combination of travel to Germany and steady outreach with business interests, county planning officials, and other practitioners by an official from the county (MT). After returning from a visit to Germany to study open space planning practices, MT worked to refine a new land-use plan for the county. MT's efforts to promote change, like those of several of the LID practitioners, included simultaneous outreach to the development and home-owner communities through meetings that included selective use of images from German development projects and MT's intuitive sense of local demands and limits.

Information from these case studies also suggests a range of policies, mostly soft elements of ideas, which were exported from the U.S. to Germany. These policies included notions about

the role and influence of private finance and non-governmental organizations in brownfields revitalization. A sustained exchange of urban practitioners and elected officials appears to lead to a testing of constantly renewing ideas, resulting in the incremental changes to policies. The exchange of ideas between practitioners such as RS (brownfields), Mgb (open space), and their counterparts in Germany (and other European countries) can be seen as examples of Bandura's (1977) notions of social learning and Beatley's (2000:14) observations that European and American urban planners are engaged in a learning process of "co-evolution." The two-sided and mutually beneficial transfer of urban environmental and planning policies between Germany and the U.S. suggest that the roles of borrowers and lenders changes. That lenders can be borrowers and borrowers lenders during policy transfer does not comport with the observations of Robertson (1991) and Robertson and Waltman (1992) that the roles of importers and exporters are static.

## **V. Applications of a Knowledge Trail and Lessons for Practice**

These case studies contain some useful lessons in which a knowledge trail within voluntary policy transfer can be applied in ways that might improve understanding of change and implementation through planning-related policies in the U.S. The relatively small occurrence of hard transfers, even in the context of what might be interpreted as some rational, purposeful efforts, makes one suspect the operation of dual filters that simultaneously inhibit the importation of foreign planning policies from Germany and the implementation of domestic planning-related policies. These case studies appear to demonstrate some convergence between the cross-national policy transfer and domestic planning theories and point to ways that transfer

and implementation of urban environmental and planning policies from Germany can be enhanced.

The information from these case studies supports several shared observations from cross-national policy transfer and domestic planning research. It has been suggested that voluntary cross-national transfers, particularly for cases in which policy makers undertake problem-focused and goal-oriented efforts, are slowed or impeded because of one of three factors (of the union of all three): 1) because importers lack sufficient information about the imported policy or institution (*uninformed transfer*); 2) because importers fail to observe essential political, cultural or economic elements critical to the function of the imported policy in its domestic context (*inappropriate transfer*); or, 3) because importers remove or exclude critical components from the imported policy (*incomplete transfer*). Elements of these factors have been observed to affect the implementation of domestic planning-related policies in research by domestic planning theorists.

#### V.A. *Informed Transfer.*

The practitioners regularly offered opinions that suggest cross-national voluntary transfer of urban environmental policies is constrained because importers in the U.S. lack information about German urban environmental and planning policies. The practitioners often shared opinions that transfer and implementation of German brownfields, LID and open space policies could be accelerated with greater access to and dissemination of information about performance and context of Germany urban environmental and planning policies. The practitioners also shared opinions about the value of accessing and sharing detailed information about the performance of German urban environmental policies when combined with field visits to German

brownfields, open space and LID projects. Moreover, repeated opinions were expressed about the lack of effort by mainstream U.S. planning and environmental organizations (such as the American Planning Association or the American Institute of Architects) to make available information on the performance of Germany's (and other countries') urban environmental and planning policies or to support travel to Germany (and other countries). It would be useful to encourage these organizations to value and support long-term efforts to harvest information about German and other countries' urban environmental and planning policies for application in the U.S.

The hard transfers from these case studies, as few as there appear to be, seem to have emanated from the goals of the importers and the steady work and long-term efforts of policy entrepreneurs acquiring explicit knowledge about German policies from articles, case studies, reports and implicit knowledge gained through site visits to specific projects in Germany (and other countries). Thoughtfully drawing from the combined information sources, policy entrepreneurs built coalitions around their specific issues. Policy entrepreneurs from these case studies often claimed to have relied on images of "green" roofs tops, industrial sites converted into parks, and greenbelts from German regions for presentations in "value neutral" (Burby and May 1998:107) contexts to persuade public opinion about the merits of implementing specific domestic projects or policies.

Again, in order to emphasize, long-term acquisition of data concerning performance was invariably enhanced by site and field visits abroad - in this particular case, to Germany. The reliance by the policy entrepreneurs on diverse information sources consisting of performance of

German urban environmental policies and site visits, are very consistent with Rogers's (2003) portrayal of opinion leaders operating during the persuasion phase of the innovation-decision model. They also comport with Masser's (1996:171) observations about the value of site visits abroad by planners triggering "lateral thinking" among the traveling practitioners.

The presence and importance of an informed public has been cited as an important factor affecting the implementation of domestic planning policies. These three case studies reflect Burby's (2003:44) observations that the implementation of domestic comprehensive plans that "matter" occurs when policy entrepreneurs strengthen broad-based stakeholder participation. Policy entrepreneurs must tap into local knowledge and avoid dominance of discussions by technical experts. The construction of "green" roofs, raingardens, or inclusion of "cultural heritage" into neighborhood master plans were implemented or approved by authorities because informed coalitions evolved that encouraged their implementation. These informed coalitions were often shaped and educated by policy entrepreneurs who relied on mixtures of information from their travel and policy documents that they accumulated. These observations are consistent with Burby's (2003:33) study of planning implementation which includes a focus on the critical role of information and how it is gathered and applied to build broad-based public participation. These observations based on information from the case studies also comport with Burby's (2003) assertions that plans "matter" when governments act on the issues the plans were intended to address through a diverse, engaged and informed public. The construction of "green" rooftops in Alexandria, Virginia, and the conversion of polluted industrial sites into parks in New York City mirror these efforts.

The notions of rational-choice embedded in many aspects of voluntary policy transfer and planning theory are based on the concept that more imported information automatically triggers or accelerates transfer and implementation. The implication seems to be that information about performance alone suffices to initiate and complete transfer - especially in cross-national contexts. As indicated, the information from these case studies does not necessarily support this notion. Although the practitioners often opined that more information about German urban environmental policies was needed, the relative lack of information and anarchic patterns used to harvest information about German urban environmental and planning policies seem to have been compensated by the practitioners' travel to site visits in Germany. The combination of trips, site visits, sustained links with counterparts in Germany merged with the practitioners' efforts as policy entrepreneurs (i.e., elected officials) to implement local change of stormwater, brownfields and development of local planning policies. In other words, data about the performance and context of the imported policies is useful and aids U.S. practitioners to consider merits of transfer. More is not necessarily enough, and may even be a detriment when speaking of volume of information. The quality and the context in which the information is acquired seem to matter more. Finally, cross-national transfer appears to be equally enhanced by site visits and tacit knowledge.

Perhaps the delicate effort necessary to link explicit and tacit knowledge from abroad, building informed coalitions from the "iron triangle" and barriers of language, distance and networks, operates to restrict voluntary cross-national transfer of urban and environmental planning policies to the local rather than the national level. As with the experiences of enterprise

zones discussed earlier, cross-national transfers can often be watered down to vague labels.

The anarchic strands detected in these case studies that actually resulted in implementation of some ideas (such as green rooftops), cast doubt on whether the introduction of more formal and rational strands, particularly the inclusion of additional information about imported policies, will increase the quality of the intended outcomes. Masser (1986) asserts that in the planning profession, it is the exception rather than the rule for governments to consciously decide to import planning lessons and experience from abroad. Nevertheless, Masser (1986:170) still notes the very real and impressive planning outcomes and transfers occurring in Japan during Meiji Restoration in 1868. For two decades Japan deliberately looked for the “best institutions in the world” for transfer and adoption. This included urban planning policies from Germany. Japanese planners were trained and dispatched to Germany to evaluate the strengths and weaknesses of German planning practices, particularly land readjustment techniques used to consolidate fragmented agricultural land holdings. Masser (1986) and Rose suggest that a relatively rational and purpose-driven harvesting of urban planning lessons from Germany to Japan resulted in the change of Japan into a modern and more urban country. The experiences of Meiji Japan support notions raised relatively regularly throughout this dissertation that balanced exchanges of explicit and tacit information, led by dedicated policy entrepreneurs and within the proper networks, yield extraordinary outcomes.

#### V.B. *Appropriate Transfer*

It has been suggested that inappropriate transfer occurs when policy makers overlook essential political, cultural or economic elements necessary in the operation of the imported

policy in its domestic context. These case studies identified some instances in which the perceived differences between German and U.S. urban environmental planning policies were considered too great to overcome to result in direct implementation - particularly of spatial planning laws. As referenced earlier, an important distinction between environmental planning policies in Germany and the U.S. is the highly integrated national, regional and local planning efforts found in Germany. Spatial planning in Germany, particularly at the regional level, is horizontally and vertically structured, codified and enforced in a context with few U.S. counterparts. In Germany, general goals and objectives are set in coordination between national, regional and local authorities, with the specific details of implementation left to the individual local regional and local governments - but always in coordination among the regional and federal authorities.

In general, the planning policies in the U.S. states considered in this dissertation are planning policies that might be characterized as less structured and vague compared to German standards. These case studies offered many opinions among the practitioners that planning authorities in states such as New York or Virginia are inadequate. For example, among many land-use practitioners in Virginia, it was common to hear opinions from the practitioners that local authorities in Virginia are constrained from exercising full control over land-use issues because of "Dillon's Rule." Other practitioners, particularly in the open space case study, indicated that implementing comprehensive regional land-use issues on the scale practiced in Germany in states such as Virginia is not feasible because local authorities in the U.S. lack the institutional and legal controls to manage or control land-use. The practitioners from the open

case study suggested that U.S. planning laws are unable to match the structure and effectiveness of German planning laws - particularly the powers to limit and control land uses, their high design quality, and multiple decision makers involved with the planning process. The practitioners from Virginia believed that German national and state-level planning, with its vertical and horizontal consistencies, is a “square peg” incompatible to U.S. states’ “round hole” planning mandates. The following quotation was common in this regard:

“Virginia in particular is a Dillon Rule” state, meaning that local government is assumed to have no authority except that which is granted to them by the state. Enabling legislation is required for the adoption of zoning and land-use laws. The regional authorities in Virginia lack teeth for guiding land-use and regional coordination.”

However, the work of Richardson (forthcoming 2007) in this context is informative because it highlights the work necessary to address uninformed and inappropriate voluntary transfer efforts - particularly of urban environmental planning policies from Germany into U.S. states such as Virginia. Richardson (2007:14) asserts that there are enormous differences “between law and policy, implementation and practices and the rhetoric” concerning authorities of local governments in Virginia to plan and manage land uses. Richardson adds that local authorities in Virginia actually maintain strong levels of autonomy over land-use decisions. Richardson’s research and the opinions of the local authorities in states such as Virginia, comport with Dolowitz and Marsh’s (1996:347) notions about the power of perceptions which drive the domestic planning policies and the voluntary transfer of planning-related policies from abroad.

#### V.C. Complete Transfer

Information from these case studies touches on notions that both cross-national policy

transfer and implementation of domestic planning practices can be affected by the removal or unavailability of critical policy components from the exporting country. The slowed transfer and implementation of some brownfields, stormwater and open space policies from Germany may be tied to the inabilities of the importers to include complex elements of the German planning policies, such as the horizontal and vertical consistency of nature protection and spatial planning policies or the “counter-current principal.”

With respect to the land-use planning case study, it appears that adoption and implementation of German national planning legislation and coordination mechanisms, and the strong inter-linkages between German nature protection, spatial planning and housing policies at all levels, was far too complex for some U.S. states in the case studies, such as New York and Virginia, to include. It appears that the integrated German landscape and transportation planning programs were too complicated, and contained far too many authorities and decision points for the U.S. practitioners to adopt and apply wholesale. This comports with Burby and May’s (1997:81) observations suggesting that complexity, multiple decision points and actors inhibit implementation of many comprehensive plans in U.S. states. Burby and May (1997) add that implementation of comprehensive land-use plans occurs and complexity is overcome through the development of clearly worded mandates paired with enforcement measures that include persuasive tools (such as training and grants). The partial transfer of open space policies in particular, but other environmental and urban planning policies in general, may also be tied to the efforts of policy entrepreneurs (or advocates) able to develop and implement clearly worded and executable mandates (Burby 2003:38). Burby and May (1997:98) add that complex mandates

and unclear goals in U.S. states might be “compensated for in the design of legislation and through strong commitment by relevant agencies to reaching desired policy goals.”

Nevertheless, the case studies pointed to some interesting exceptions concerning the removal and unavailability of policy elements during transfer from Germany. It appears that the omission of some policy elements fundamental to German urban environmental and planning policies did not restrict or limit application and implementation in the U.S. For example, the construction of rain gardens and green roofs in Alexandria and other parts of Virginia occurred without the development or inclusion of split stormwater fee codes and laws used by over one-quarter of all German cities. Although information from these case studies indicated that several authorities were exploring the development and approval of stormwater codes and rules modeled from Germany, implementation of the German ideas was still occurring.

## **VI. Limitations**

Framing and articulating the implications of the interviews was an interesting challenge. The mixtures of global and local elements was particularly challenging. A tension permeated the process of finding meaning in the broad themes of policy transfer while simultaneously identifying relevant details. During the interviews new issues and information kept surfacing and integrating new information as it appeared and relating it to the theories was a puzzle imperfectly solved. For example, the phenomena of tacit learning which arose later in the analysis as a very relevant theme in need of more attention and exploration.

In the same context, the union of new information and time limitations constantly interfered with the author’s pre-existing understanding of the selected models, theories and

methodologies of voluntary policy transfer. This was especially apparent in the information that emerged from the open space case study in general and the influence of Bavarian land-use policies in Oregon in particular. Conflicting information emerged from several interviews conducted late in the research process concerning how German land-use planning policies transferred to Oregon during the 1970s. Checking and cross-checking the information via research into other secondary sources was an imperfect process.

More national-level policy actors might have been interviewed about their experiences with voluntary transfer of German urban environmental policies, especially officials and staff from the U.S. Congress. The large number of local, state and non-governmental practitioners interviewed gave valuable information about the process of voluntary transfer. Interviews involving officials and staff from the U.S. Congress could have added further useful insight into voluntary policy transfer.

## **VII. Suggestions for Further Study**

Several questions about voluntary transfer of urban environmental and planning policies from Germany, and other countries, to the United States, emerged over the course of this research that interest the author.

The current literature concerning diffusion and transfer, as seen in Rogers' decision-innovation and Dolowitz and Marsh's policy transfer models, relies heavily on rational and linear models to interpret the process. As these case studies have implied the search and testing of policies from Germany (and apparently other countries) appears not to confirm direct cause-and-effect linear movement. The most coherent logic models seem inadequate to predict the

sometimes remarkable results that emerge from rather anarchic processes. This calls more attention to the search for and identification of models or other knowledge trails that might more adequately include non-linear and more radial features of transfer.

This dissertation also encountered significant outcomes and implementation that did not fit easily into the existing policy transfer classifications. The absence of hard transfers might too easily be dismissed as failed transfer or conceal the substance of thoughtful ideas and concepts that made their way to actual implementation. Future research might look at a broader range of classifications for outcomes and degrees that extends beyond hard, soft, or copying, inspiration, and synthesis.

The powerful role that field visits, presentations and tacit knowledge play also cause one to wonder about the possibility of further research on the union between policy transfer, communications and visual imagery. These case studies also contained several comments about the power of several images about brownfields, stormwater and open space planning practices acquired through conferences and site visits to Germany. These case studies also made several references to the power of disseminating images and pictures about projects in Germany in the U.S. as policy entrepreneurs endeavored to build coalitions for implementation of their projects. Voluntary policy transfer also could benefit from research that further explores the role of tacit knowledge and the relationship to policy learning in general. One might wish for exploration into the development of new methodologies to identify the effects of tacit knowledge on policy transfer outcomes.

While conducting this research, the author encountered repeated references to the absence

of formal institutions in the U.S. to identify and analyze lessons from abroad. It could be interesting to explore in further detail the organizational and cultural filters that inhibit more formal and purposeful searches of policies from abroad by national-level urban planning and environmental organizations in the U.S. Organizations such as the American Planning Association, American Institute of Architects and International City/County Administrator's Association play important roles in domestic transfer of urban planning and environmental policies. Future research could explore obstacles and opportunities affecting cross-national importation of information among these and other national organizations involved in urban environmental and planning issues.

Finally, as has been suggested by Beatley (2000), despite observed cultural and political differences between Europe and the United States vis-a-vis environmental and urban planning, both continents are engaged in "co-evolution" transfer processes. Since it appears that cross-national voluntary policy transfer is a mutually beneficial and reciprocal process, future research could analyze in greater detail the outcomes associated with the continuous exchange of urban environmental and planning policies between both continents. Research questions could focus on whether more rational approaches to voluntary policy transfer, especially the search for imported information, enhance the outcomes linked to the intended consequences of the transfer.

### **VIII. Concluding Note**

As cities and urban regions in the United States are increasingly affected by the forces of globalization, urban planners will be challenged to respond and plan adequately for environmental, economic and social changes. The author believes that urban environmental

planners in particular will be compelled to rely on information, experiences and lessons from abroad to enable them to manage the dual pressures of urbanization and globalization. This paper has spoken of policy transfer into the U.S. as a blend of intentional searches, rationally-driven “cause and effect” analysis and “messy laboratories” of chance and accident. It is the author’s hope that despite the untidiness of cross-national voluntary policy transfer, urban environmental planners in the U.S. will appreciate slightly more the importance and benefits, however modest, to be gained by working to harvest lessons from countries with knowledge and experiences to share. The author also hopes that planners in the U.S. will not despair about the absence of perfect recipes guaranteeing the success of importing lessons from abroad. Rather, planners in the U.S. will hopefully draw inspiration from the few encouraging efforts explored in this dissertation that have demonstrated the modest transfers from countries such as Germany that have occurred, and which have helped heal the environment, the economy and community.

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## **APPENDIX - QUESTIONS GUIDING THE INTERVIEWS**

- 1) When did you go to Germany, how long were you there, where did you go, what sites did you visit?
- 2) Why did you go to Germany and what objectives did you have in going?
- 3) Did you consider any other countries other than Germany - Why?
- 4) What about German \_\_\_ policies did you know prior to your visit?
- 5) What information sources did you receive in order to understand \_\_\_\_\_ policies in Germany and how would you characterize the acquisition and use of information about German environmental and planning policies?
- 6) What, as far as you are able to tell, are the differences between German and U.S. \_\_\_\_\_ policies?
- 7) What about German \_\_\_\_\_ policies were you able to transfer and apply after your return to the United States?
- 8) How were you able to transfer \_\_\_\_\_ policies from Germany to the U.S.?
- 9) What obstacles did you encounter during the transfer process? What restricts the application of the \_\_\_\_\_ policies from Germany to the U.S.?
- 10) How did you overcome these obstacles and what context made it possible to transfer policies about \_\_\_\_\_ from Germany? Were any specific networks, organizations, institution or individuals essential in helping to overcome these obstacles during the transfer?
- 11) What changes are necessary in the U.S. to facilitate the transfer of \_\_\_\_\_ policies from Germany to the U.S.?
- 12) Are you aware of any ideas or policies about \_\_\_\_\_ that have transferred from the U.S. to Germany?

# **CURRICULUM VITAE**

## ***Dale Garner Medearis***

### **WORK EXPERIENCE**

**U.S. Environmental Protection Agency, Washington, D.C.,** Program Manager, Western Europe/Middle East, September 2005 – Present

**U.S. National Park Service/National Capital Region, Washington, D.C.,** River Navigator, Potomac American Heritage River Initiative, August 2003 – August 2004

**Office of International Activities, U.S. Environmental Protection Agency, Washington, D.C.,** Program Manager, IUCN and UN Programs, January 2003 – August 2003

**Office of International Activities, U.S. Environmental Protection Agency, Washington, D.C.,** Program Manager, International Urban Environmental Programs, September 1995 – January 2003

**Alexander Von Humboldt Foundation, Bonn, Germany,** Federal Chancellor Fellow, August 1994 - August 1995

**Office of International Activities, U.S. Environmental Protection Agency, Washington, D.C.,** Program Analyst, Ukraine, Baltics, Caucasus, July 1992 - July 1994

**Office of International Activities, U.S. Environmental Protection Agency, Washington, D.C.,** Program Analyst, May 1988 - July 1992

### **EDUCATION**

**Virginia Polytechnic Institute and State University, College of Architecture and Urban Studies, Alexandria, VA**

Doctor of Philosophy in Environmental Design and Planning (May 2007)

**George Mason University, Department of Geography and Earth Systems Science, Fairfax, VA**

Master of Science, Cartographic and Geographic Science, December 1999

**University of Pennsylvania, Fels Center of Government, Philadelphia, PA**

Master of Government Administration, May 1988

**University of Redlands, Redlands, CA**

Bachelor of Arts, International Relations, BA History, May 1986

### **AWARDS**

**European Union Visitor's Program,** Urban Environmental Fellow, October 2005

**Fulbright Commission,** Member, 2001 Fulbright German Studies Seminar on Urban Planning, June, 2001

**Quant Foundation,** Member, "7<sup>th</sup> Transatlantic Forum" March, 2000

**EPA Bronze Medal,** 1999

**Aspen Institute Berlin,** Member, "Young Leaders" Transatlantic Study Group, 1997

**American Council on Germany,** John McCloy Fellow (Urban Studies), Summer 1996

**Alexander von Humboldt Foundation,** Federal Chancellor Fellow, 1994