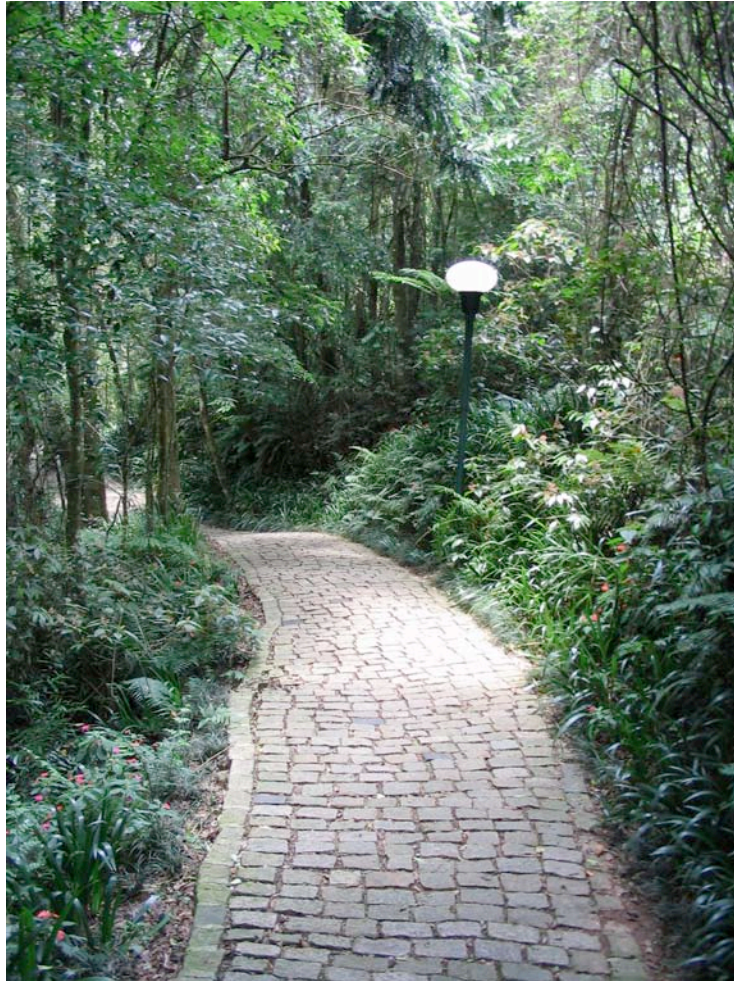


TOWARD A REGENERATIVE PSYCHOLOGY OF URBAN PLANNING



A dissertation presented to
the faculty of Saybrook Graduate School and Research Center
in partial fulfillment of the requirement for the degree of
Doctor of Philosophy (Ph.D.) in Psychology

by

Nicholas S. Mang

© May 2009 Nicholas S. Mang,
San Francisco, California,
all rights reserved.

This document is a revised copy of the original dissertation approved by faculty of Saybrook Graduate School and Research Center in fulfillment of requirements for the degree of Doctor of Philosophy in Psychology.

Dedication

I dedicate this dissertation to all stewards of the earth,
Who daily help to generate and regenerate the living world we call home.

Acknowledgments

The process of conceptualizing this dissertation has been in many ways a collective one. Just as the saying goes that “it takes a village to raise a child,” so goes a dissertation. Without the support, inspiration, and engagement from many amazing and remarkable people, this dissertation would not have come to fruition. While there are many more than can be named, I would like to take space here to personally acknowledge a few such people.

To my committee members, Joel, Jurgen, and John, each of whom personally helped guide me through this process and helped model for me a humanistic way of engaging and mentoring. Furthermore, to my chair Joel Federman, who as a true Bohmian, always created space for dialogue in which greater meaning and wholeness could emerge, thus continuously supporting and encouraging me to go deeper.

To the IDP community, and Charlie Krone in particular, whose relentless caring and profound vision for humanity and our planet has greatly inspired this work as well as my own personal commitment to continuously regenerate spirit in the world.

To members of the Regenesi/RCG community, Ben, Joel, Tim, Shannon, Bill, and Carol, whose immense dedication to healing the planet and the human psyche have helped to generate a creative and developmental learning environment in which to work and evolve on this path together.

To my parents, Bob and Pamela, who have never failed to believe in me and have provided me with immense tools and opportunities in which to unfold my life and life’s work.

Finally, and most importantly, to my wife Ashley, the love of my life, for whom words fail me in appreciating the gift and inspiration that she feeds in my life and work, who helps me grow daily the fire in my heart and the will to make this world a better place.

TABLE OF CONTENTS

INTRODUCTION	1
Context and Rationale	2
The Problem.....	2
The Potential.....	3
The Challenge	4
The Opportunity.....	7
Overview	9
Significance	10
 CHAPTER 1: TOWARDS A REGENERATIVE PSYCHOLOGY	 11
Four Distinct Psychological Paradigms	11
Overview.....	16
First Order: Psychologies of Adjustment.....	17
Second Order: Psychologies of Human Potential.....	19
Third Order: Living Systems Psychologies	21
Fourth Order: Psychologies of Spiritualization	22
Theory Summation.....	24
Beyond a Psychology of Human Potential	25
Chapter Conclusions	27

CHAPTER 2: THE REDISCOVERY OF PLACE & OUR HUMAN ROLE IN IT	29
Endangered Place	30
What is Place?	32
Place as Interconnected and Nested.....	34
Place as Bounded and Distinctive.....	34
Place as Value-Adding.....	36
Place as Concentrating and Enrichening	36
Place as Magnetic and Ordering.....	38
Place as Dynamic and Evolving.....	39
Conclusions and Interpretations.....	40
Our Human Relationship to Place	41
Conclusions and Interpretations.....	45
The Way We Inhabit Place: Four Nested Paradigms.....	46
Order 1: Operational Development and the Management of Hazards	46
Order 2: Self-Actualization and the Development of Being.....	49
Order 3: Living System Actualization and the Development of Value-Adding Processes.....	54
Order 4: Field Regeneration and the Development of Devotional Caring.....	58
Chapter Conclusions	61
 CHAPTER 3: REGENERATIVE PLANNING FOR THE HABITATION OF PLACE.....	 64
Evaluating Thinking in the Planning Field Today	65
Planning at the Psychology of Adjustment Level	66
Planning at the Psychology of Human Potential Level	71
Planning at the Psychology of Living Systems Level	74
Planning at the Psychology of Spiritualization Level	80
Potentials in the Field	82
Chapter Conclusions	84
 CHAPTER 4: A LEADERSHIP CASE STUDY OF CURITIBA, BRAZIL	 85
The Story of Curitiba.....	86
A Unique Approach to City Planning.....	92
Authentic Core Concept	94
Co-Responsibility and Solidarity.....	96
Urban Acupuncture.....	98
Infrastructure for an Evolving Legacy.....	109
Keeping the Story Alive.....	110
Critical Perspectives.....	111
Case Summary Analysis.....	111
Internal Success Factors	112
External Success Factors	114
 CHAPTER 5: A LEADERSHIP CASE STUDY OF NOISETTE, SOUTH CAROLINA	 116
The Story of Noisette	117
Growing a Holistic Organization, Vision, and Approach.....	122
Growing Realization of Community Potential.....	132

Developing the Community into an Attractor Site	144
Evolving and Propagating Learnings	151
Critical Perspectives	154
Case Summary Analysis	155
Internal Success Factors	156
External Success Factors	158
 CHAPTER 6: CONCLUSION	 160
Cross-Case Analysis.....	160
Key Internal Capacities.....	161
Key External Processes	167
Theory Development	169
Fourth Order of Work.....	170
Third Order of Work.....	173
Second Order of Work	176
First Order of Work.....	179
Critical Perspective.....	181
Recommendations for Future Research.....	182
Conclusion	184
 NOTES.....	 186
 BIBLIOGRAPHY	 201

LIST OF FIGURES

Figure 1. Basic Premise.....	9
Figure 2. Four Orders of Psychological Development	17
Figure 3. Orders of Magnitude for Psychologies of Adjustment	18
Figure 4. Orders of Magnitude for Psychologies of Human Potential	20
Figure 5. Orders of Magnitude for Psychologies of Living Systems Evolution	22
Figure 6. Orders of Magnitude for Psychologies of Spiritualization	24
Figure 7. Attributes of Place	33
Figure 8. Four Orders of Relationship to Place	62
Figure 9. Four Levels of Regenerative Planning	82
Figure 10. Orchestral Metaphor of Regenerative Planning	84
Figure 11. Satellite Maps.....	86
Figure 12. City Skyline in 2008.....	89
Figure 13. Pedestrian Mall in 2008.....	92
Figure 14. Rapid Transit Bus Tubes	99
Figure 15. Opera House	101
Figure 16. Forested Corridor.....	103
Figure 17. Natural Flood Control Park.....	106
Figure 18. Satellite Maps.....	117
Figure 19. Noisette Creek.....	120
Figure 20. Naval Yard Buildings.....	133
Figure 21. Noisette Creek Restoration Area	137
Figure 22. Noisette Eco-Industrial Park	146
Figure 23. Noisette Riverfront Park	155
Figure 24. Four Orders of Psychological Development	170

INTRODUCTION

How do you regenerate the collective psyche of a city? A city's structure can be rebuilt through legislative policy, economic funding, and building construction. But what gives a city life? Why do some cities feel more alive than others? Why in some cities do we feel our spirits lifted and rejuvenated, while in others we can feel more depressed, isolated and alone? People often talk about the soul of a city, but what does this mean? When does a city have soul? How is it grown? And when is it lost?

All of these questions grapple with issues of being and of the collective psychic being of a city. What gives a city life and what can regenerate this life should be central to any urban planner's work. Yet, quite often, the work scope of an urban planner gets reduced down to the development of solutions for strictly functional and material issues¹ (e.g., Does the new stoplight reduce traffic congestion on street A?). To successfully work on regenerating the collective psyche of a city requires more than the introduction of new stoplights, new transportation systems, and new civic buildings. It requires of civic planners the development of a psycho-spiritual understanding, caring, and vision for the city and its inhabitants.

This dissertation, therefore, explores the nature of mentation that is required for developing such a psycho-spiritual relationship to place. It explores what this nature of mentation holistically encompasses.

More specifically, it explores the development of a regenerative mental process, in which one hermeneutically envisions the city in being and spiritual, rather than strictly material, terms.

In addition, this dissertation examines what a *regenerative planning* process (i.e., a planning process that successfully re-inspires and re-harmonizes human settlements with the inherent patterns of socio-ecological place) involves. To do this, it examines the cases of two civic leadership teams that have been measurably successful at developing a regenerative planning process for their respective cities. Through this research, this dissertation seeks to develop a generalizeable understanding and theory of regenerative planning as a systematic process.

C ontext and Rationale

The Problem

Current world trends indicate that increasingly the health of our Earth and its inhabitants are inextricably tied to the future of our urban centers.² According to the United Nations, the year 2005 marked the first time in our planet's history that over half of the entire human population lived in cities.³ In western countries, this percentage is even higher, with 80 percent of the population living in urban areas. In addition, these trends of urbanization are on the rise, particularly in developing countries. Between 1990 and 1995, 263 million people were added to cities in developing countries.⁴ This is equivalent to the formation of a new Los Angeles or Shanghai every three months.

With such growth trends occurring in our urban settlements, it is disconcerting to consider the disproportionate impact that cities now have on our planet. Cities today take up only two percent of the world's surface, yet they consume 75 percent of its resources. Such trends are unsustainable, as urban areas cannot unilaterally continue to grow and support these patterns of consumption. The city of London, for instance, requires 58 times the land of its city to supply its residents with food and timber. To supply everyone in the world in the same way would require at least three more Earths.⁵

These statistics indicate that the environmental health and balance of our planet is increasingly linked to the relative sustainability of the lifestyles of our cities. Yet, the current story of our world's cities is largely a troubling one. It is one of unsustainable resource consumption and waste export, one of degenerative impacts on the health of their natural surrounds and on the natural health of their inhabitants, and one of increasing psychological and biological alienation between humans and the natural world upon which they ultimately depend.⁶ As one ecologist articulates it

Looked at as ecosystems most large cities are in a precarious state, dependent as they are on the outside world for their survival, with no built-in mechanisms for long-term sustainability. They are ecosystems in decay. Yet, most of the world's population now lives in urban areas and the growth of huge urban centers is a world-wide trend which will inevitably have profound environmental and social consequences – unless, that is, we can find ecological sound alternatives as a basis for city life.⁷

It is clear, therefore, that the way in which we organize and order our urban collectives is of dire consequence to the future livelihood of our planet and of our peoples in generations to come.

The Potential

While current trends indicate that cities, and the patterns of inhabitation which they support, are increasingly hazardous to the planet's health and well-being, they also are increasingly being recognized as great leverage centers for regenerating humankind's right relationship to the planet. Whereas Thomas Jefferson viewed them as “pestilential to the morals, the health and the liberties of man”⁸, Jaime Lerner—the visionary three-time mayor of Curitiba, Brazil, and a founding father of the modern green city movement—stated, “The city is not the problem, it is the solution.”⁹

To step beyond the Jeffersonian view of cities as “pestilent” and to see them in the positive light of Jaime Lerner's statement, it is helpful to look at the historical origins of the city and at the core role they have served for humanity throughout history.

According to historian Lewis Mumford, the social, psychological, and spiritual origins of the city existed before the first city was ever built. Cities, in their origins, were spiritualizing centers for cultural and religious congregation. In Mumford's words

Thus even before the city is a place of fixed residence, it begins as a meeting place to which people periodically return: the magnet comes before the container, and this ability to attract non-residents to it for intercourse and spiritual stimulus no less than trade remains one of the essential criteria of the city, a witness to its inherent dynamism... The first germ of the city, then, is in the ceremonial meeting place that serves as the goal for pilgrimage: a site to which family or clan groups are drawn back, at seasonable intervals, because it concentrates, in addition to any natural advantages it may have, certain 'spiritual' or supernatural powers, powers of higher potency and greater duration, of wider cosmic significance, than the ordinary processes of life. And though the human performances may be occasional and temporary, the structure that supports it, whether a Paleolithic grotto or a Mayan ceremonial center with its lofty pyramid, will be endowed with a more lasting cosmic image.¹⁰

The origins of the city, thus, is one of ceremonial place, of the sacred grottos and other land forms in which nomadic tribes cyclically congregated to trade, intermarry, and engage in religious practice.

Throughout history, cities have continued to perform this co-creative, spiritualizing role in the birth and rise of civilizations. They have been magnetic centers for cultural creation and exchange. The heights of artistic achievement have come about in relationship to the rise of cities. As ecologist Margaret O'Meara noted, "For millennia, cities have been the cultural centers and engines of creativity that advance civilization. They remain magnets that draw people and ideas."¹¹

As such, cities are centers of immense potential. They are a concentration of human power in relationship to the power of place. In O'Meara's words, "It is this concentration of human energy that allowed cities to give birth to human civilization—and that may ultimately save it."¹² As concentrated centers, cities are in a unique leverage position in the world today. According to journalist Leif Utne, "The modern city is perhaps the most effective unit of social change these days, small enough to marshal social cohesion for getting things done, yet large enough to be an engine of cultural influence on the wider stage."¹³ It is this leveraged position for influence on the world stage, combined with the concentrated power of human and natural resources, that gives cities such potential today for good or bad, for the destruction or recreation of our environments, for being degenerative or regenerative centers for humanity and the planet.

The Challenge

This tension between the city's degenerative impact and its regenerative potential has led increasing numbers of concerned people around the world to begin to envision the transformation of our urban centers into *green cities* (i.e., sustainable, life enhancing, and regenerative). According to ecologist Peter Berg

Municipal governments need to restructure their priorities so that long-term sustainability can become a feasible goal. With such a large portion of the population removed from the land and from access to resources, ways to secure some share of the basic requirements of food, water, energy, and materials will have to be found within the confines of cities. Cities need to become 'green.' They must be transformed into places that are life-enhancing and regenerative.¹⁴

Being sustainable, life-enhancing, and regenerative, therefore, are three core attributes of the green city vision. The first of these attributes, sustainability, deals with the functional elements of the city, with how it needs to function as a whole. It involves the development of sustainable consumption patterns through becoming less dependent on outside material resources and through putting wastes to use in ways that maintain the net resources of the larger ecosystem. For example, "rainwater and filtered wastewater are used to water gardens. Food scraps become compost that sustains the city's vegetable crops. Roofs are adorned with water tanks, vegetation, and solar panels."¹⁵

Sustainable technology, however, is only one aspect of the green city vision. As environmental educator David Orr put it, "The challenge of ecological design is more than simply an engineering problem of improving efficiency, ...of reducing the rates at which we poison ourselves and damage the world."¹⁶ Rather, Orr argued, "The success of ecological design will depend on our ability to cultivate a deeper sense of connection and obligation."¹⁷

To live up to Peter Berg's definition of a green city and realize its full potential, a city must not only become self-sustaining, but also "life-enhancing and regenerative." Such a transformation requires more than just good technology and good engineering. It requires a psycho-spiritual transformation as well. It requires connecting people back to the spirit of place in a way that they are vitalized by it and become intrinsically motivated to care for it.

According to Father Thomas Berry, Western Civilization's anthropomorphic conceptions of spirituality, in which the divine has been divorced from nature, have been a primary contributor to the creation of our current ecological crisis. As he stated

When we inquire into the reasons for this inefficiency in our spiritual traditions, we might observe that our identification of the divine as transcendent to the natural world makes a direct human-divine covenant relationship possible, but also we negate the natural world as the locus for the meeting of the divine and the human. The natural world becomes less capable of communicating divine presence. This makes possible the conception of the natural world as merely external object.¹⁸

Thus, it is the assertion of this author that the regeneration of cities is not merely an urban engineering problem or a political one, but rather also a psycho-spiritual one. Without the will for change, without the caring commitment of our citizens, and without a renewed connection to the natural world, no amount of good technology or political policies can bring about the transformation of our cities into places that are life-enhancing and regenerative.

It is the contention of this dissertation that central to the work of developing a regenerative city is the psycho-spiritual point of view. This involves the work of elevating the collective psyche of a city's people such that their collective dreams are elucidated and each individual sees the value-adding role that they can serve within this process. It involves developing a coalescing vision for the city as a whole that is rooted in the indigenous spirit of people and place.

As Jaime Lerner put it

People, they are not living in the city just for survival. You have to love the city. They have to have this relationship that has to do with identity, with a sense of belonging... There are some (ghettos) that don't have (great bus service or nice schools), and the people are happy. Why? Because their father lived there; and their grandfather lived there. There's a sense of belonging to a place.¹⁹

This sense of identity and belonging to place, therefore, is primary to enhancing people's sense of life in the city.

This notion of the power of place and one's connection to it is consistent with the experience of many spatial designers and artists. According to the renowned landscape architect, Lawrence Halprin, it is in fact the psycho-spiritual connection to place that inspires his designs: designs that speak to a community's collective dreams and lift the psyche of its people. In talking about one of his projects, Halprin described his work process as follows

The place isn't really mystical, but it has a quality. When we could get people to come together and work as a group to report on how it felt to them, we came up with a design which has worked and has inspired other people all around the world to try this kind of approach. This is the kind of design which generates a spirit all its own, which encourages the human spirit to soar. That's when real magic starts to happen.²⁰

According to Zen artist, Kazuo Matsubayashi, it is through the connection to place that people develop a sense of caring for it and a sense of renewed spirit in relationship to it:

Attachment to a place is a prerequisite for developing a sense of the spirit of the place. Caring evolves through attachment to place. As one puts down roots in a certain location and becomes familiar with the surroundings, one begins to distinguish subtle differences in even the most ordinary landscapes... Attachment results when people perceive the order of nature, feel its regularity and rhythm, and identify its spatial-temporal reference points.²¹

It is through this phenomenological process of experiencing and inwardly sensing the rhythm and pattern of place that people come to identify with and care for it. Halprin described this as a phenomenological experience with the land. "The people and the land seem to develop the same image which represents them; the people and the land are inextricably intertwined. The 'I' and 'Thou' of Martin Buber reaches out and becomes a oneness between people and land."²² It is when we truly experience the unique nature of living energies of a place that we come to understand it, appreciate it, and seek to enhance it.

In Jaime Lerner's terms, "you have to know your village and you have to love it."²³ Without this, one cannot fully develop a sense of "complicity with people," a capacity to "understand what are (people's) problems, what are their dreams." It is from this connection to place, that one can intuit a holistic vision and develop a plan that is strong enough and of high enough order to transcend the political and social divides of a city and coalesce people toward a common and unifying end. This is what Lerner described as the noble work of "interpreting a collective dream."

The Opportunity

A growing number of civic leaders today are searching for ways to concretely manifest a green city vision. In June of 2005, The United Nations dedicated their annual World Environment Day conference solely to the topic of green cities. During this conference, hundreds of mayors from major cities around the world convened to develop an ambitious blueprint for the green city of tomorrow. One journalist described this event as, "the moment when a quietly growing green-cities movement revealed itself to be a global phenomenon."²⁴

One city, in particular, that has been recognized as a visionary pioneer and role model for this effort is Curitiba, Brazil. Curitiba has consistently worked on developing its sustainable and regenerative capacities

as a city for the last thirty-five years. It is even considered by some to be the greenest city on earth today.²⁵ Curitiba has developed a multitude of creative civic planning policies that are now being replicated in different cities around the world. What has received less attention in Curitiba's storied success, however, is the unique place-based visioning process that their civic leaders developed.²⁶ It is the assertion of this author that this visioning process is as important, if not more, than the policies themselves in that it is what has enabled them to generate such creative and integrative planning solutions and to galvanize their citizens to become caring and committed participants in the regeneration of their city. Without this deeper insight into Curitiba's success story, cities will continue to try and adopt Curitiba's solutions without developing their capacity to generate processes for creating their own integrative, place-based solutions.

A second, more recent, city planning effort that has been recognized by many leaders within the sustainable development field as a visionary and pioneering model, is Noisette, South Carolina. Noisette has been called "the largest sustainable redevelopment project in the US" and "the largest and most comprehensive urban redevelopment project in the US."²⁷ As in Curitiba, the Noisette team has invested heavily in community engagement processes and in developing a core understanding of the place (meaning both natural and human) in which they are living.

Each of these cases indicates that the work of regenerating communities involves a reconnection to the historical cultural, ecological, and economic patterns of a place, and from this basis developing a shared vision for the future that authentically lifts people's spirits and gives them renewed hope for developing a better, healthier life for themselves, their children and grandchildren.

There is great import, therefore, for studying and understanding the regenerative planning processes that civic leaders in Curitiba and Noisette generated and for developing a means for translating this understanding into a developmental process that can enable other urban communities and their leaders to generate their own unique form of a coalescing, place-based visioning process.

Overview

Because the prevalent land development mindset today remains artificially trapped in a functional and/or human-centric approach to planning, most urban landscapes are developed in ways that increasingly separate human life from the natural and spiritual patterns of place. This leads to closed-system human communities that are increasingly disharmonious and degenerative to their environments, thereby diminishing the potential for contributing to sustainable and evolving habitats. The purpose of this study, therefore, is to develop greater understanding and insight regarding the design and implementation of regenerative urban planning processes that can successfully reintegrate human settlements with the inherent patterns of socio-ecological place.

Toward this end, this study has been organized on the basic premise that how we think both influences and is influenced by how we live and build within a place (see diagram below).

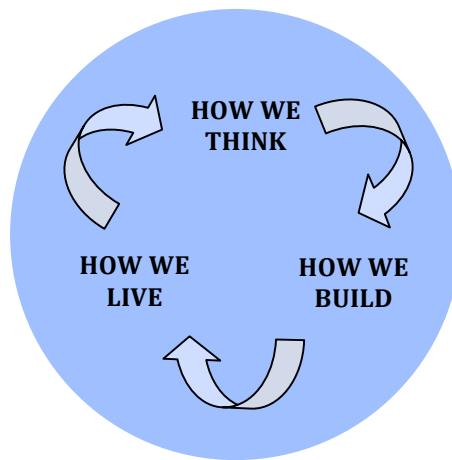


Figure 1. Basic Premise

Based off this premise, the first three chapters of this study explore the following topics: (a) how we think, (b) how we live within place, and (c) how we plan our built communities. In each case, the author explores what would be involved in a holistic, regenerative approach.

Building from this theory development, the next two chapters explore two comparative studies of preeminent, modern-day cases in regenerative planning. They are: Curitiba in Parana, Brazil, and Noisette in South Carolina, United States. Both cases were selected because of their ability to move beyond the conventional planning process to include a more comprehensive approach toward developing integrative solutions, civic co-participation, socio-ecological understanding, and the re-inspiring of place. The design processes and leadership capabilities of the core design teams were the focus of both case studies. The central research question pursued was: What are the critical internal and external success factors for implementing a regenerative planning process within an urban community? Data were collected through semi-formal interviews, archival document analysis and field notes.

The final chapter then provides a comparative analysis of these two case studies and uses these findings to reevaluate theory development in regards to a holistic, regenerative approach to urban planning.

Significance

Most urban planning case studies tend to focus on the physical design solutions that were generated and their success or failure (e.g., “What worked and what didn’t?”). The hazard in such a focus is that the creative process by which these solutions were generated is often overlooked, thereby leading to imported solutions that often don’t fit the unique contexts and places into which they are transplanted. Rather than looking for universal forms to solve our urban and regional planning dilemmas, this study seeks to develop understanding of more universal processes for generating and regenerating planning solutions within a given place. The findings from this study therefore are intended to offer insights into how to better design and implement regenerative planning processes within any given community. These insights, in turn, are intended to help open the door for a new field of study that bridges urban planning with a regenerative systems psychology (i.e., Regenerative Urban Planning). Additionally, this study lays the groundwork for identifying other regenerative planning cases that can be studied and used to further understanding and theory development within this field.

CHAPTER 1

TOWARDS A REGENERATIVE PSYCHOLOGY

This chapter examines how we think and mentally relate to our world as human beings. It will explore four distinct psychological paradigms and how as a composite they serve to form a more holistic perspective on the mind and psyche. We will begin with a brief historical overview to contextualize these four paradigms and then explore each paradigm in turn. Finally, this chapter will briefly discuss the implications for our western modern culture, when it loses sight of one or more of these paradigms.

Four Distinct Psychological Paradigms

What we call the science of psychology is not a new or novel concept. Psychology, in fact, is one of the most ancient sciences known to humans.¹ As long as humans have been able to observe themselves and their feelings, thoughts, and actions, psychology has been around. As psychologist James Baldwin states, “A history of psychology is nothing more nor less than a history of the different ways in which men have looked upon the mind.”² Every culture forms, to some extent, a psychology, an understanding of mind, of motivation,

and of cultural and individual sanity. Ancient civilizations, like the Egyptians and the Babylonians, developed very sophisticated psychologies.³ This is also true for different indigenous peoples across the globe.⁴ Likewise, Taoist, Buddhist, Vedic, and Sufi psychologies, to name a few, have all greatly influenced Eastern cultures in their understanding of mind.⁵ Even in what we call Western (i.e., European) civilization, psychology existed far before Freud was ever born. Western psychology can be traced back at least to the times of Ancient Greece with the works of such thinkers as Hippocrates, Socrates, Plato, Aristotle, and Protagoras.⁶

The lifespan of modern western psychology, therefore, is extremely short when viewed from this global and historical perspective. In this sense, modern psychology is less a process of invention as it is a process of rediscovery and regeneration of very ancient wisdoms and their evolutionary translation into modern times.

Modern psychology, as a designated arena of science, grew largely at first in the laboratory out of nineteenth century developments in anatomy and physiology.⁷ As an applied value-adding practice, however, modern psychology got its start largely through the arena of medicine, when medical doctors Josef Breuer and Sigmund Freud attempted to affect treatments for symptoms which medicine could not provide. This was due, in part, to recognition of mental illness as a growing phenomenon and concern within a rapidly modernizing, industrializing, and urbanizing society.⁸ In response to this concern over the past century and a half, many different schools of psychological therapy have formed in which many practitioners have sought to help individuals readjust and better manage the demands of living in an often stressful, modernizing world.⁹ Beyond the medical/therapeutic field, psychology also found a place in education, as the need to understand how the mind works and learns and how to assess mental capabilities became increasingly evident.¹⁰ In the corporate world, psychology found a value niche as business managers began to grapple with issues of how to best motivate their workers to be productive and how to best motivate customers to buy their products.¹¹ This describes but a few of the value-adding arenas to which psychology has contributed in our modern era.

In each of these cases, modern psychology has developed in tandem with the development of our modern society and societal needs. As such, psychology has served as an instrument for helping individuals, families, and organizations adapt, adjust to, and navigate the changing demands of a given society.¹²

In the 1950s and 1960s, however, a growing voice in psychology spoke to the need to move beyond a focus solely on adaptation and adjustment within society to that of developing ourselves as human beings with unique essences and greatly untapped potentials.¹³ Toward this end, Humanistic and Transpersonal Psychologies were developed and instituted. In therapy, education, and organizational management and research, to name a few arenas, this led to a revolution in how the professional envisioned his or her role. The professional was re-envisioned as a co-learner and mentor that would help “draw out” the potential of his or her client as opposed to being solely a knowledge expert and imparter.¹⁴

At the end of the 20th century and the beginning of the 21st, a new voice is growing in psychology, one that is once again re-envisioning psychology’s role in society and the world. This new voice, one that is still in the process of emerging and forming, is calling for the need to redefine the province of psychology itself.¹⁵ In the history of modern psychology, the definition of its field has, until recent times, largely been confined to the study of the individual psyche and its relationship to the social world.¹⁶ As such, modern psychology has been largely *self-centric* in its orientation. What is needed is a reconciliation of the artificial dualism that has been maintained between *psyche*, as it historically has been construed in western psychology, and *cosmos*.

In the face of vast and increasing ecological and communal destruction that our current self-centric human activities and developments are causing, there is a growing recognition of the need to work in harmony with the natural and cosmic systems of which we are a part. Such an aim requires the development of a different order of psychological capacities¹⁷ and a very different conceptualization of the psyche and mind.¹⁸ It requires seeing psyche and cosmos as one interrelated and evolving whole, what physicist David Bohm referred to as the *holomovement*.¹⁹ This emerging order of psychology is not in fact new but rather an evolutionary translation of a very old wisdom that is evident in many ancient and indigenous wisdom traditions.²⁰

Behind and interwoven through each of these three streams of psychology is a fourth psychology. This is a psychology that has often been referred to as the perennial philosophy, a universal wisdom and mentation that has existed throughout time.²¹ It has also been referred to as a spiritual psychology or more aptly, a spiritualizing psychology, for it is a psychology not about the spirit so much as about bringing spirit into existence.²²

According to J. G. Bennett

Man's noblest quality is the will to discover an imperishable Reality beyond the changes and chances of this mortal world. This quality is what I mean by "spiritual." Man's spirit is his will. This is what Thomas Aquinas taught and it is the secret of understanding our human nature. The soul is an artifact, the result of our life experience. It may be transient and it may be immortal, depending upon whether or not our will, that is, our spirit, has taken possession of it.²³

While this psychology of spiritualization has largely been couched in human terms within Western culture, it actually is one that pervades all existence and the relationship of the human mind and spirit to it.²⁴ In living systems, it can be seen in relationship to the act of *regeneration*. According to Krone, "What regeneration in reality does is produce the nature of energy field within which the improvement of living systems can take place."²⁵ It is this connection with the "imperishable Reality beyond the changes and chances of this mortal world"²⁶ that allows for the mundane world to continue to regenerate and bring new, higher-order life into existence.²⁷ Building from Krone, regeneration is defined for the purposes of this dissertation as an evolutionary process by which a living system, through the enfolding connection with its life source, rebirths into existence a higher order patterning for functioning, relating, and adding value in harmony with the whole.

Ultimately, in the opinion of this author, it is this fourth psychology that helps to speak to the larger spiritual questions of life, like 'what is the purpose and meaning of life?' According to Bennett, what such a psychology helps us do is none other than to serve our purpose as human beings in maintaining "the balance of energies in the Solar System and to help its spiritual evolution." As such, "we exist to serve Nature rather than to make use of Her."²⁸

It is the proposition of this dissertation that these three revolutions in modern psychology (the first being its impetus and establishment as a field, the second being the human potential movement, and the third being the current ecological/cosmological movement) and the underlying perennial psychology of spiritualization and life regeneration are each in their turn critical to the development of a holistic psychology, what this dissertation refers to collectively as a Regenerative Psychology. These four orders of psychology are explored in greater detail below.

Overview

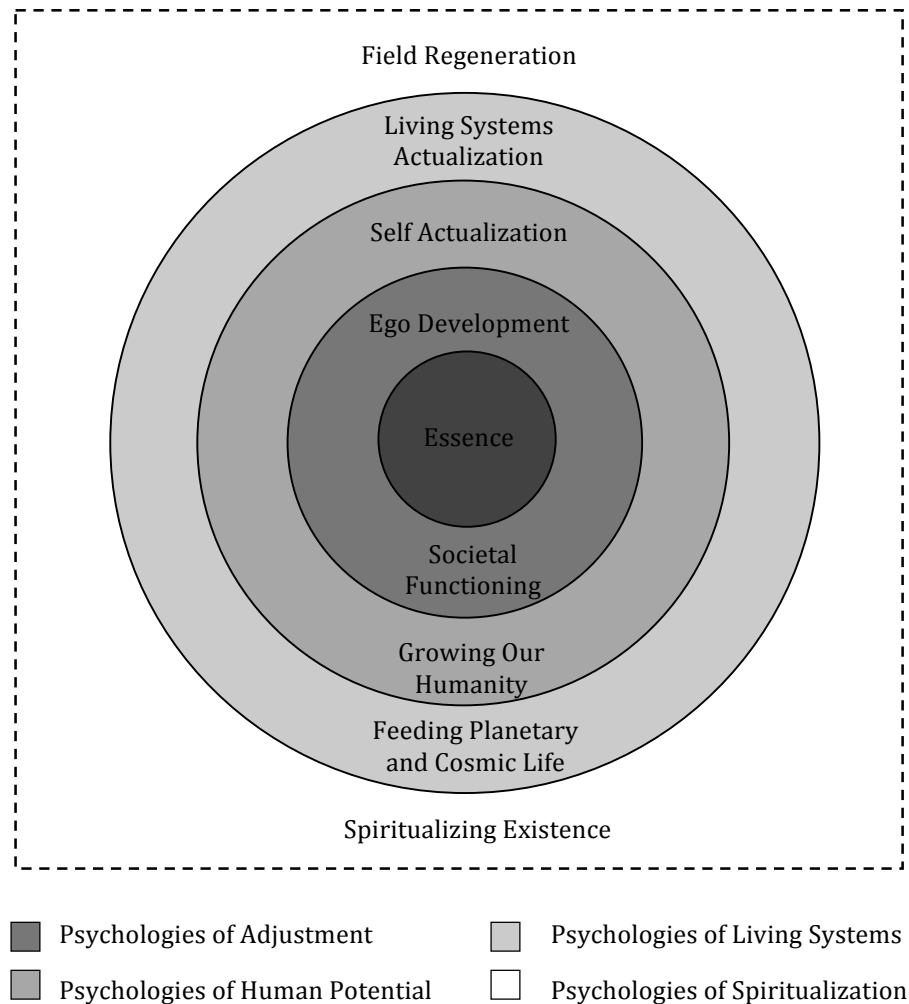
This dissertation proposes that psychology, as a value-adding field, can work toward different orders of aims. In this section, we will look at four distinct yet nested orders of aims toward which psychological development has and can be directed. While the compilation of these four orders has been influenced by the author's review of multiple hierarchical models in psychology²⁹, its main inspiration can be attributed to organizational systems consultant Charlie Krone's more generalized "levels of work" framework. Krone's framework looks at living systems as a whole and at the different orders of work in which any healthy and continually evolving system must engage. These four levels can be articulated as (1) operating, (2) developing and maintaining effect, (3) improving, and (4) regenerating.³⁰

Central to all four of these orders of psychological development is the premise that every phenomenon has a vital core that is unique to its particular way of being in the world. This has been observed in humans) as well as in places.³¹ This vital core will be referred to in this dissertation as *essence*.

In humans, essence can be distinguished from personality in that it is something with which we are born, whereas personality is something we develop in relation to the social settings of which we are a part (Nicoll, 1984). In this sense, essence can be referred to as the *ness* quality of someone or something. For example, a person named Jim would have a *Jim-ness* about him that at times may shine through more strongly in what he does. Artists are great exemplars for understanding essence. An artist may develop a particular style (i.e., personality) in their work, or they may transition through a number of different styles in their work through their lifetime (e.g., Picasso and his "blue period"). But, through each of these styles, a core identity can be discerned in all of the artist's works. This is the artist's stamp that develops with maturity, yet is present, however implicitly, in all of his or her works. We recognize a Picasso art piece both for his unique style but also for his stamp, his Picasso-ness that shines through the work of art.

These four orders of psychological development are holarchically depicted in diagram below (see figure 2). In respective order, they are: (1) Psychologies of Adjustment: Operational ego development and societal functioning, (2) Psychologies of Human Potential: Self actualization and the growing of our collective humanity, (3) Psychologies of Living Systems: Living systems actualization and the feeding of planetary and cosmic life, and (4) Psychology of Spiritualization: Field regeneration and the spiritualization of life on Earth.

Figure 2.
Four Orders of
Psychological
Development



Each of these orders is discussed, in turn, in the following sections.

First Order: Psychologies of Adjustment

At one level, psychology can work toward enabling individual entities (meaning individuals, families, and even societal organizations) to better function within society. This order of psychology focuses on cases of maladjustment to the norms of society and remediation techniques for readjustment. According to Freud, “In an individual neurosis we take as our starting point the contrast that distinguishes the patient from his environment, which is assumed to be ‘normal’.”³²

Health, at this order of psychology, therefore, is defined in terms of one's ability to function and fully participate in societal life and illness as that which impairs one's ability to do this. As the *Diagnostic and Statistical Manual of Mental Disorders* states it

Each of the mental disorders is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e. impairment in one or more important areas of functioning)...³³

In this dissertation, this order of psychology will be referred to as a *psychology of adjustment*. Its designated scope of aim is depicted graphically below.

Psychologies of Adjustment

Individual Entities
Adjust to and Learn to
Function within Societal Life

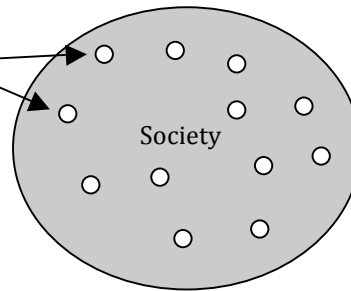


Figure 3. Orders of Magnitude for Psychologies of Adjustment

At one level, adjustment psychologies are beneficial in that they help people learn to cope with the society in which they live. Ideally, they help enable a person to develop a strong and healthy ego with which to manage and engage in their social environment.³⁴ At another level, however, adjustment psychologies can be detrimental to individual, societal, and planetary health if they are adamantly adhered to in a way that blinds people to the inherent developmental vectors within themselves and their world. In other words, adjustment psychologies help individuals maintain functioning capability within the current norms of existence but they do not, because of the very nature of their focus, tend to help enable individuals and their societies to develop new orders of potential and possibilities for existence.³⁵

One of the considerable dangers of adjustment psychologies is that they can help reinforce current societal norms and even label alternative (or outside of the box) cultural modes of behavior as *dysfunctional* in relationship to these accepted norms.³⁶ In such cases, they become tools for reinforcing existent normative prejudices within a society. A psychology of adjustment, therefore, when adopted alone as a closed-system

paradigm, runs the risk of reinforcing a maladjusted society (i.e. a society that is not harmonious with the natural health and development of its people and environment). According to Erich Fromm, “mental health cannot be defined in terms of the ‘adjustment’ of the individual to his society, but, on the contrary, that it must be defined in terms of the adjustment of society to the needs of man.”³⁷

Second Order: Psychologies of Human Potential

Societies themselves can be evaluated in terms of the degree to which they help enable their constituents to become more fully human, to become more compassionate, more reflective, and of greater integrity as human beings. This is what Maslow referred to as a psychology that focuses on development toward “the farther reaches of human nature.”³⁸

This second order of psychology works not toward the development of normalcy, but rather toward the excelling of individuals toward greater self-actualization and individuation.³⁹ According to Maslow, a person is healthy to the degree to which this actualizing force is enabled to flourish and unfold in his or her life. As he states it, “Perhaps we shall soon be able to use as our guide and model the fully growing and self-fulfilling human being, the one in whom all his potentialities are coming to full development, the one whose inner nature expresses itself freely.”⁴⁰

As people self-actualize, they become both increasingly unique and individuated, while at the same time becoming increasingly universal in the human values and virtues for which they live. This is what Maslow referred to as the meta-values which perennial philosophy speaks to through different eras, cultures and religions.⁴¹ Self-actualizing people become increasingly compassionate to their fellow brothers and sisters and to other forms of sentient life. They develop increasing faith in humankind and in the inherent benevolence of people. They develop hope for their brothers and sisters and for a world that allows all people to self-actualize and live truly from their inner selves. As such, self-actualization stands in service of human actualization, of actualizing our humanity, our human being-ness in the world. A person like Gandhi, for instance, is beautiful not only because he lived so much from his true self; he is beautiful because his life speaks to the true self that lies within each of us, he speaks to who we are and can be as human beings.⁴²

I have entitled this level of psychological aim, a *psychology of human potential*, as depicted below.

Psychologies of
Human Potential

Growing our Collective
Humanity through Self-
Actualization

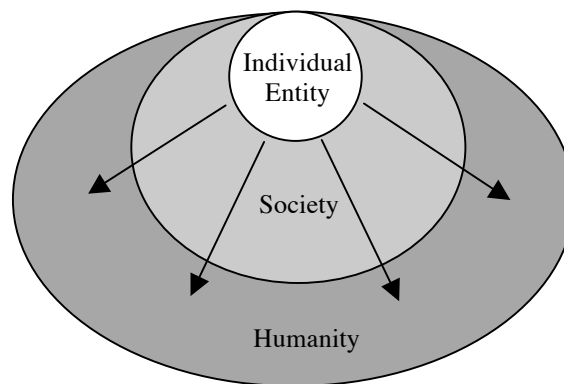


Figure 4. Orders of
Magnitude for
Psychologies of
Human Potential

Psychologies of human potential help enable people to become fully actualized individuals. As such, they are highly value adding to the world in which we live. However, just like with adjustment psychologies, a danger lies in encapsulating this form of psychology in a closed-system paradigm. Such a danger occurs when the focus on self-actualization becomes isolated from an understanding of the larger living systems we are a part of and have a value-adding role to play within.⁴³ Without this larger systems awareness, we act and perceive as independent entities without an inner appreciation or caring for the collective living systems that source us and bind us together.⁴⁴ To put it metaphorically, we strive to sing solo, but no longer with an ear toward the collective choir we are a part of and in need of being in harmony with. As James Hillman states

We still locate the psyche inside the skin. You go *inside* to locate the psyche, you examine *your* dreams, they belong to you. Or it's interrelations, interspyche, between your psyche and mine. That's been extended a little bit into family systems and office groups—but the psyche, the soul, is still only *within* and *between* people. We're working on our relationships constantly, and our feelings and reflections, but look what's left out of that. What's left out is a deteriorating world.⁴⁵

By focusing so strongly on the development and unfoldment of human potential, a psychology of human potential also runs the risk of becoming overly human-centric.⁴⁶ As such, we seek after the glory of humanity, of human creativity and ingenuity, while losing sight of humanity's relationship, responsibility and role with regard to the planet and the larger cosmos within which we live.

At such times we should ask ourselves: What are the fields and systems that support the self-actualization of life (both ours and others, both human and other-than-human) and how are we, as self-actualizing individuals, called to reciprocally serve and support their sustenance, growth, and ongoing

evolution? Without working at this order of questioning, we as humans are perpetually in danger of falling into a narcissistic dance of self and human actualization that is not holistic or reciprocally caring for the planetary and cosmic systems that feed our growth and wellbeing.

Third Order: Living Systems Psychologies

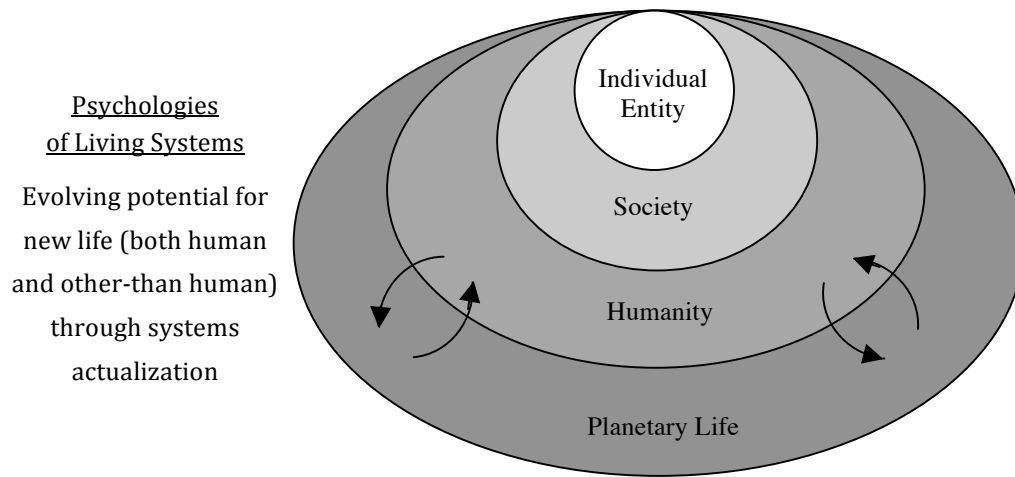
A third order of psychology moves beyond a focus on human actualization through self-actualization to that of seeing the greater systems of which we are a part, and for which we have a value adding role to serve. It relates to the capacity to co-evolve in harmony with, and care for, the greater living systems of which a person is a part.⁴⁷

This order of psychology continuously seeks to address the question: What, as human beings, is our evolving role in the larger planetary and cosmic systems of which we are a part? It works to address this question not through detached logic and philosophical intellectualism but rather through experience and understanding of natural living systems and their (and *our* as a part of them) capacity to grow life.⁴⁸ This involves the inner capacity to experience and develop understanding of the energetic and systemic patterns of life that are continuously generating living systems of interrelationship and reciprocal nurturance.

Its primary focus, therefore, is not on individual development, but rather on the evolution of life systems and the development of our capacity to be in service of these systems.⁴⁹ This does not preclude self-development by any means, but rather helps to extend it by lifting up the greater wholes we are seeking to be in service of and thereby further elucidating who we are called to be and become within these wholes. Metaphorically speaking, it is a shift from focusing on the growth of the tree to that of improving the health of the forest as a whole. By better understanding the greater systems of which we are a part, we can develop and evolve our value adding roles within these systems. Value-adding in this sense is defined as that which increases systemic capacity for vitality, viability, and evolution of life.⁵⁰

I have entitled this order of psychology, a *psychology of living systems*, because it aims to develop harmony between humans and the greater living systems of which they are a part.

Figure 5. Orders of Magnitude for Psychologies of Living Systems



A psychology of living systems helps to enable the reciprocal maintenance and evolution of life on this planet.⁵¹ As such, it is a critical modality of psychology that needs to be reintegrated into the field of modern psychology. However, just like with the first two psychologies, a danger lies in encapsulating this form of psychology in a closed-system paradigm. When systems-evolution becomes the highest envisioned potential for psychological development, there is hazard involved. This hazard can be summed up as one of working on actualization without spiritualization.

Fourth Order: Psychologies of Spiritualization

Embedded within each of these three orders of psychology is a pervasive fourth order of psychology. This fourth order of psychology aims toward the spiritualization and regeneration of life. It has previously been discussed that self-actualization cannot occur in a vacuum but rather must occur in tandem with the actualization of the systems of which the individual self is a part.⁵² Even systems-actualization, though, cannot occur in a vacuum but rather takes place within a universal field or plenum of life.⁵³ In other words, we live within a bath of energies that enable us to live and grow as individuals, as human societies, and as a planet as a whole.

Perennial philosophy teaches us that there is a oneness that unifies all of life in the universe.⁵⁴ This has been corroborated with recent findings in physics, which indicate that all systems and fields are part of a greater plenum of life that maintains and regenerates the coherent patterns of life systems. According to physicist Harold Puthoff, electrons orbiting atomic nuclei and our planets orbiting around the sun would both collapse into the center if it not for the continuous influx of energy from the zero-point field (i.e. the quantum vacuum energy field that fills all of cosmic space).⁵⁵ What this suggests is that the universe itself is in a process of continuous regeneration, sourced by a unifying field of energy.

Many indigenous traditions, similarly, believe that the systems they help to actualize need to remain open and coherently attuned to this universal source. According to Deloria

Much Indian knowledge involved the technique of reproducing the cosmos in miniature and invoking spiritual change, which would be followed by physical change. Hardly a tribe exists that did not construct its dwelling after some particular model of the universe. The principle invoked was that whatever is above must be reflected below. This principle enabled the people to correlate their actions with the larger movements of the universe. Wherever possible the larger cosmos was represented and reproduced to provide a context in which ceremonies could occur. Thus, people did not feel alone; they participated in cosmic rhythms.⁵⁶

When the systems we help to actualize lose touch or become out of tune with this universal source, misinformation and entropy occurs. This then leads to the hazard of actualization without spiritualization, of working to develop and grow supportive living systems while losing sight of the pleromic field that sources and regenerates life within those systems. Without this continuing renewal of spiritual will, what physicist David Bohm refers to as the supra-implicate, all living systems face entropy and eventual degeneration.⁵⁷

Throughout the ages and throughout different cultures, humans have continued to be drawn toward the creation of artifacts and ways of living that renew and breathe new life into the spiritual dimensions of existence. According to many different spiritual teachers across different cultures, the act of spiritualizing life comes not from us but through us. As such, we are not the source of spirit and godliness, but rather can become an instrument for this source and in so doing give back to it what it has given freely to us.

I have entitled this order of psychology, a *psychology of spiritualization*, which is depicted below.

Psychologies of
Spiritualization

Spiritualizing
all of life
through field
regeneration

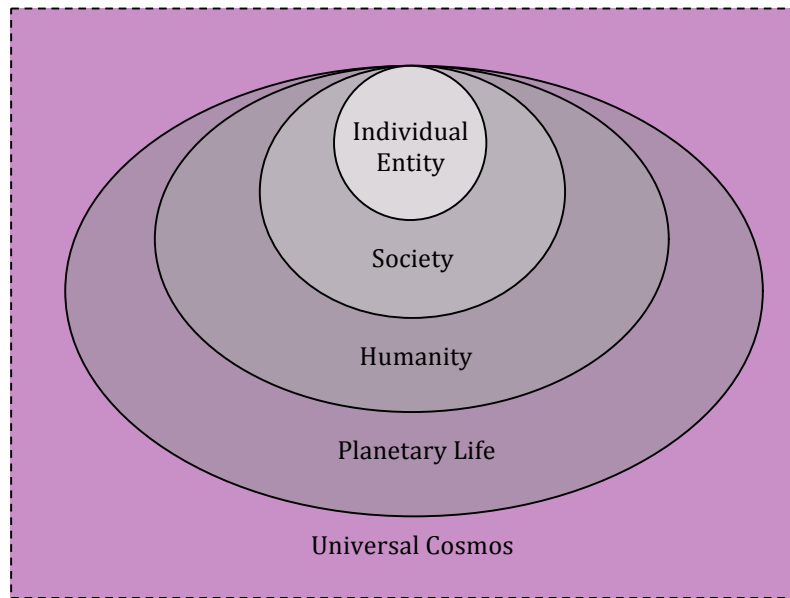


Figure 6.
Orders of
Magnitude for
Psychologies of
Spiritualization

Theory Summation

It is the assertion of this author that none of these orders of psychology is mutually exclusive, but rather each builds upon the other as nested orders of aims. In other words, each order of psychology is invaluable to the development and ongoing regeneration of our well-being. Human beings are social creatures and therefore must learn to live within their societies. This process of socialization, however, becomes unhealthy when it facilitates development of social personalities that are no longer in service to the unfoldment of our essences as unique human beings. It is only through such inner development and unfoldment that we can aspire toward the higher reaches of our humanity. Individual development, however, is ultimately dependent upon the larger planetary and cosmic systems of which it is a part. A beautiful forest that is teeming with life helps to feed us as human beings, both spiritually and physically. Therefore, beyond self-actualization lies our accountability in helping to enable the actualization of life within the greater systems of which we are a part. But ultimately, all planetary life exists within a universal field of energy. How then do we, as individuals and collectives, help to regenerate the life and spirit of this universal field, such that the systems we live within continue to spiritually evolve?

Beyond a Psychology of Human Potential

It is the assertion of this author that each of the psychological paradigms defines a different order of what it means to lead a good life. A psychology of adjustment defines the good life in terms of full participation and functioning in societal life. A psychology of human potential defines the good life more as the actualization of one's essence or true nature. According to the theory being put forth by this author, each level of definition of what it means to live the good life does not exclude or contradict the prior level. Rather, it incorporates it. For instance, for a person to successfully actualize their true nature, he or she must not only realize this true nature but also learn to reconcile it in some form or another with the society in which he or she lives. Reconciliation in this sense does not mean to compromise one's essence but rather to learn how to transcend the constraints of societal life and learn how to live out one's essence fully in a way that contributes to the society in which one lives. People like Martin Luther King and Mahatma Gandhi are good examples of this. What they lived for, who they were, and what they accomplished contributed greatly to the societies in which they lived and to humanity as a whole. They did this by standing up and choosing not to live by those societal constraints that prevented them and others from living more fully human lives.

Since the times of ancient Greece, however, most of Western civilization's dialogue has revolved around these first two orders of psychological paradigms. Aristotle, a thinker who profoundly influenced Western philosophy and thought, believed that *the good* existed within every person realizing his or her true nature. According to Aristotle, *summum bonum* (or the greatest good) was embodied in the collective social organization or state and was reflective of the degree to which each and every person within that society was able to realize his or her virtue to its fullest.⁵⁸

According to Professor Daniel Wildcat, a Yuchi member of the Muscogee Nation of Oklahoma, what has largely bounded this dialogue in Western thinking, is the defining of *greatest good* in largely human terms.

By excluding the many other-than-human persons of the natural world from active full participation in determination of the greatest good, ecological catastrophe seems guaranteed. Whether intentional or not the result of this single idea has been to create a worldview where humans are thought to be above the rest of nature.... (It is) an idea that has brought us to the brink of global ecological crisis by

reducing the question, the very idea, of the *summum bonum* to be about relationships among human beings.⁵⁹

In contrast to Aristotle and much of Western thought, indigenous peoples define *persons* that contribute to the greatest good as including not just humans but also other planetary members like plants, animals, and the physical elements of nature. Each has an inherent value or essence that contributes to the community or ecosystem as a whole. Therefore, society from the indigenous perspective includes humans and other-than-humans in a mutual interrelated dialogue.⁶⁰ Together, this dialogue co-creates the greatest good by continuously feeding life within the ecosystem and for the planet as a whole.

Interestingly enough, many scientists who are now working at the cutting edge of their fields are finding evidence and developing theories that corroborate this indigenous worldview. Quantum physics has demonstrated the irreducible link between the observer and the observed and the implicit and undivided wholeness of all matter.⁶¹ New Biology and ecological sciences have stressed the interdependence of all life forms and the evolutionary trajectory of living systems toward higher orders of complexity and richness of interrelationship, thereby creating potential for new life forms and greater bio-diversity on the planet.⁶² Transpersonal psychology and consciousness research studies have yielded impressive evidence regarding the effectiveness of telepathic and telesomatic information and energy transmission through the body-mind.⁶³

What all of these findings indicate is the seeding emergence of a new order worldview in science, one that is much more aligned and in concert with ancient and indigenous wisdom. In this, a new order of psychology and psychological aims is also emerging in Western society. Abraham Maslow foresaw this emergence of a new psychology, one that went beyond humanistic purposes: "I consider Humanistic, Third Force Psychology to be transitional, a preparation for a still 'higher' Fourth Psychology, transpersonal, transhuman, centered in the cosmos rather than in human needs and interest, going beyond humanness, identity, self-actualization, and the like."⁶⁴ Unfortunately, however, the field of Transpersonal Psychology (a field which Maslow helped to create) has to date remained largely couched in the paradigm of individual self-realization and transcendence to the detriment of a larger, ecological perspective.⁶⁵ As such, it has generally failed to move beyond a psychology of human potential to what in this dissertation the author calls a psychology of living systems. Again, to reiterate what has been stated before, each of these proposed levels of psychology organize and order around a different order aim, a different order conceptualization for what

constitutes the greatest good that psychological development is directed toward. For a regenerative psychology, it is the assertion of this author that the greatest good is one of being value-adding in and for the world. Value-adding in this sense is defined as that which increases systemic capacity for vitality, viability, and evolution of life.⁶⁶ In other words, to quote Andean anthropologist Frederic Apffel-Marglin, the aim of life is “to generate and regenerate the world and be generated and regenerated by it in the process.”⁶⁷

Chapter Conclusion

This chapter has sought to develop a map of the territory of psychology by laying out four distinct meta-aims toward which psychological development has--and can be--directed. Furthermore, it posits that each level of aim encompasses and informs the prior levels, thus forming a holarchy. As such, each level is critical to the development of a holistic psychology, what this author has entitled a regenerative psychology. A potential hazard, therefore, lies not in focusing on any one of these levels, but rather in losing sight of the interrelationship of all four. When we do so, we create a closed-system paradigm that loses touch with the holism of our existence.

This chapter also argues that Western psychology, since the time of ancient Greece, has largely encapsulated itself in the first two orders of developmental aims. As such, humanitarianism has come to be seen as the greatest good that we can strive for. What our current ecological crises is lifting up for us as a civilization and as a world, however, is the need to move beyond *humanitarianism* to *planaterianism* (i.e., care for the living systems that support and feed life on Earth as a part of universal whole).

It is toward this greater realization that a modernized regenerative psychology can be developed, one that draws from the emerging correlations between indigenous wisdom and the new sciences. Such a psychology seeks to develop our capacities as humans to engage not only in *autopoiesis*, or self-creation, but also in *cosmopoiesis*, or world-creation.

This jump beyond self-creation to world-creation requires a redefining of psychology itself. As James Hillman pointed out, what has been left out in our psychotherapy of self is our responsibility for the world around us. The implications of this are profound, both for the field of psychology, and for our culture as a

whole. By focusing so greatly on self-development and wellbeing, we as a culture have lost sight of our accountability to the life systems in which we live, breath, and eat. This is readily evident in the way in which we grow and harvest our food, in the way we develop land, in the way in which we organize our economic activities, even in the way in which we organize our cultural, social, and spiritual activities.⁶⁸ As such, we are only now waking up to the fact that we are living an unsustainable lifestyle as a culture and civilization on this planet. In beginning to realize the importance of *how* we live in this place called planet Earth, we are only now beginning to conceptualize and appreciate anew our possibility of developing a regenerative psychology of wholeness.

CHAPTER 2

REDISCOVERY OF PLACE AND OUR HUMAN ROLE WITHIN IT

This chapter explores the phenomenon of place and our relationship as humans to it. Toward this end, it will in respective order look at (1) The significance of place, (2) what place is, (3) our human relationship to place, and (4) How the modality in which we view life (i.e., our psychological paradigm) helps to determine the very way in which we inhabit and relate to place. The overall aim of this exploration is to develop a conceptual ground for understanding the nature of mind required to holistically engage in place-regenerating work.

It should also be noted that most of the academic literature on place comes from a distinctly Western point of view. As such, the phenomena of place and *place-making* tend to be associated largely with human-oriented endeavors.¹ This dissertation, in response, seeks to expand that horizon and show, from a living systems perspective, that place-making is actually a more universal phenomenon in which humans have a value-adding and co-participatory role to serve.

Endangered Place

In our rapidly modernizing and globalizing world, we are destroying the very places in which we live. In the name of modernization and globalization, we have increasingly homogenized the biological and cultural richness that supports life on this Earth.² One can go to just about any city in the United States and find a wide-laned street that runs past one strip mall after another, filled with chain stores that have the same internal layout and ambience design as any of its other stores across the country and world. One can step off a plane in China, Russia, or Brazil, and within minutes drive to a McDonalds that has the same (or very nearly the same) store layout and menu as anywhere in the United States. One can travel across the world and sleep in hotel rooms that look and feel the same the world over. One can go to a shopping mall, closed off from its environment, and go to shops that are relatively the same as hundreds and thousands of other malls. In Starbucks' cafes, which have multiplied exponentially across the country as well as internationally across the globe, one can hear the exact same songs played in every Starbucks.³

Connected to this cultural homogenization is the homogenization and degradation of biological and ecological place. The rate of species extinction today has increased roughly 1000 times the normal planetary rate.⁴ Large tracts of natural green spaces and ecological habitats, specific to a given region and supportive of particular species of animals and plant life, are bulldozed each day in order to put up town-size housing developments that feature the same basic building layout, structure, materials and design, regardless of its location. Ironically, many of these same housing developments are given such nature evocative names as Whispering Pines or Cypress Grove, when in fact no such trees exist in such developments, and sometimes never did.

The economic livelihoods of these local and regional places are also being destroyed in the name of international commerce. Local agriculture, technologies, arts, and crafts are all being undermined by cheap manufactured goods that are the same the world over. Farmers are encouraged to grow monoculture *cash* crops that no longer enable their families to feed off of the land or support the diversification of plant and animal varieties indigenous to their region.⁵

The detrimental effects of this trend are great. A fundamental ecological principle shows us that living systems grow in health and viability through increased bio-diversification, complexity, and richness of interrelationships within and between bioregions. Yet, this homogenizing trend in global development goes completely counter to this principle. The effects of this trend are apparent in the loss of health in our ecological systems, the degeneration of community identity and interconnection, and the loss of meaning and sense of accountability for one's livelihood's impact on place and planet.⁶

In counter-response to this homogenizing trend, however, a growing voice is rising that calls for the rediscovery of place and the value it contributes to our quality of life and livelihood.⁷ It is a call to rediscover what it means to be a native of place, to develop roots and community in the midst of a rapidly changing world. This is not to say necessarily that we should turn away from globalization, but rather that we need to learn to reconcile this expansive, homogenizing force called globalization with that of diversification and the concentrated refinement of the unique places and niches in which we live. How can we, like our indigenous ancestors, come to see the places in which we live as sacred and vital to our life on this planet, that places are not to be banalized and raped of their natural resources (both materially and culturally) but rather are to be cherished, cared for, and celebrated?

Historically, these two forces, of globalization and expansion on the one hand, and of place making and diversifying concentration on the other, have always contributed to the makeup of the American psyche. Novelist Wallace Stegner referred to these two forces as the *boomer* mentality and the *nester* mentality.⁸ The prior force is widely referred to as the frontier spirit, which has helped to make the U.S. what it is today. In their westward progression, Americans continuously sought success and newfound wealth through territorial expansion and a *gold rush* mentality. Much of the environmental and cultural exploitation that occurred resulted from this boomer mentality. In reaching the limits of expansion within the country's territory, American boomerism has now spread global wide, under the guises of liberation, modernization, and globalization.

The second force that Stegner identifies, that of the *nester* mentality, speaks to the dream of many settlers who came to this country to obtain a small plot of land with which to tend and support their families. This was the Jeffersonian vision for our country, "a free nation of authentically and securely landed people."⁹ These were the settlers who helped to found our communities and towns across this country. Their

livelihood depended on the earth and its continued sustenance and viability. It is this second force that has so greatly been depreciated in this modern era of expanded modernization and globalization. Many higher-educated professionals today leave their communities to seek further schooling and work opportunities, moving from city to city in their advancement through the corporate and professional world.¹⁰ They have entered a globalized economy, in which it becomes inadvisable to set deep roots in any one community.

The advantages of globalization have also been great. It has helped to interconnect a world economically, socially, culturally, and religiously in ways that were unthinkable before.¹¹ The challenge that faces us as a world today, therefore, is not how to end this globalizing march, but rather how to regenerate its counter-balancing force, that of growing and nurturing the diverse places on this planet that form the unique breeding grounds for life on Earth.

To regenerate the role of place in our culture, however, requires more than just good architecture and community planning. It requires first and foremost a *metanoia* (i.e., a fundamental change of mind) in how we as a culture view place, what its inherent value and role (economically, socially, culturally, and ecologically) is in the world, and what our ethical role as humans is in co-creating and evolving the places in which we live. This re-relationship to place will be explored later in this chapter, but first, let us look at what is meant by the word *place*.

What is Place?

What is the phenomenon of place? The word place is used in the English language to connote a number of contextual meanings. We speak geographically of places we have been to or visited. We also use the word place to speak of a state of order or disorder with such phrases as “putting things in place” or being “out of place” or even something being “all over the place.” Place also speaks to having a meaningful position and role in the world (e.g., “I have found my place in the world”). In this sense place also speaks to authenticity and naturalness, of being “in-place” in the world as opposed to “out of place.” Place also speaks to a distinctive quality and experience (e.g., “there’s something about this place”). In the literature on place, this is often referred to as “sense of place.”¹² In qualitatively experiencing places, we may find ourselves

attracted to some places and repelled by others (e.g., “I love this place” or “this place is creepy, let’s get out of here”).

Etymologically speaking, place stems from the Latin words *placea*, *platea*, and *planta*.¹³ *Placea* means a specific or localized spot. *Platea*, which is the same root for plaza, means courtyard, open space, or broad street. *Planta* means sole of the foot. In each case, place refers to a particular space in which one is situated, in which one plants one’s feet and stands.

In this section, we will look at place as a living phenomenon in the world. While there is an extensive body of literature on place¹⁴, which spans across numerous disciplines of study, this section will attempt to bring a unique and coalescing perspective to the subject matter by looking at the phenomenon of place through a living systems lens. Through an extensive research of this literature base, the author has synthesized findings to the question “what is place?” into six distinctive attributes. These attributes are: (1) Place as interconnected and nested, (2) Place as bounded and distinctive in its identity (3) Place as value-adding, (4) Place as concentrating and enriching, (5) Place as magnetic and ordering, and (6) Place as dynamic and evolving.

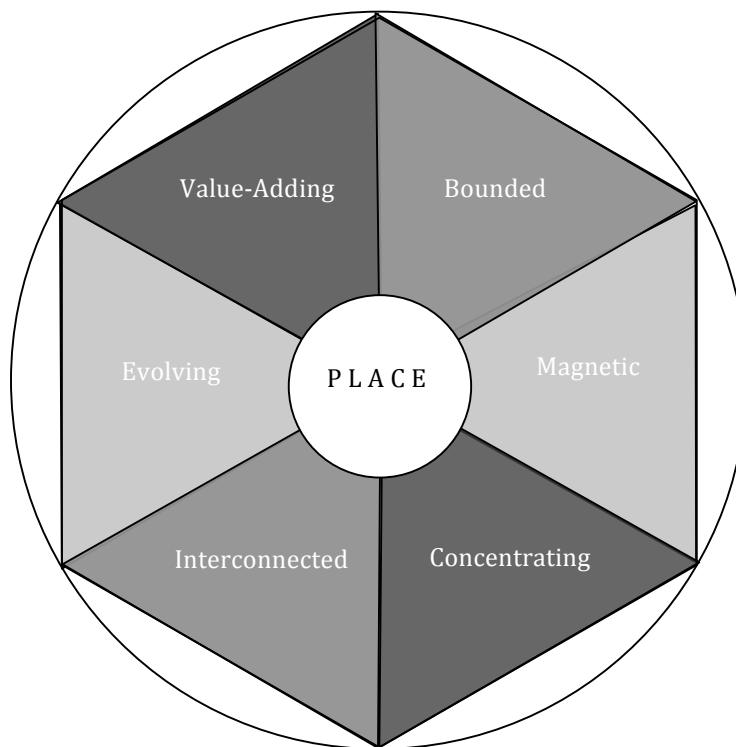


Figure 7. Attributes of Place

Place As Interconnected And Nested

Places occur at all levels of existence from the microscopic to the cosmic. The San Francisco Bay region is a place distinct from the Chesapeake Bay Region. Likewise, one person's neighborhood and home is distinct from another. The planet Earth is itself a place distinct from other planets in our solar system, which again is a place distinct from other solar systems. Phenomenologically within the body-mind, the heart is a place where people often say they feel the emotion of love. The gut is a place where one may feel an instinctive reaction to a challenging situation.

In each case, place relates to a distinctive spatial location. And each place is defined in its relationship to other places. According to Lukermann, one of the major attributes of place is that it is always interconnected by a system of spatial interactions and transfers with other places.¹⁵ Sometimes, by leaving a place and then being able to view it from a different vantage point, from a different place, one can learn more about the distinctive qualities of his or her home place. Foreign exchange programs, for instance, can help people learn more about their own culture and place through the experience of a different or distinctive culture and place.

Because place as a phenomenon exists at all levels, place is also a nested phenomenon. A family's home exists within a neighborhood, which exists within a community, which exists within a bioregion, and so forth. In this sense, no place is completely isolated, but rather is always and necessarily distinguished by the uniqueness of its relationship to other places both spatially and as nested wholes.

Place As Bounded And Distinctive

While places are interconnected, they also are bounded and distinct. The Spanish word, *plaza*, and the Italian word, *piazza*, in fact both stem from the same etymological root as the word place.¹⁶ In each case, what defines a plaza or a piazza is its boundedness by buildings, which creates a space with a unique identity and quality of experience.

Geographer Yi-Fu Tuan differentiated between undifferentiated space and meaningfully defined place: "Space is transformed into place as it acquires definition and meaning."¹⁷ As a space becomes a

meaningfully bounded region both physically and imaginatively, it becomes “a place with distinctive traits that set it apart from other comparable units.”¹⁸ Even in a place like Montana, where the sky seems to stretch forever, there are boundaries that define the place. In effect, the very distance of those bounds, of the sky meeting the horizon on a high elevation plateau, helps to create the place’s quality of openness and skywardness.

A house becomes a place, therefore, in part due to the meaningful bounding and structuring of space.¹⁹ One house may enclose space in small, cozy rooms, which leads to a particular quality of experience. Another house may have lofty ceilings and banquet size rooms, leading to a very different quality of experience. In each case, the bounded structuring of space helps to enable the creation of place. According to Heidegger, “A boundary is not that at which something stops but, as the Greeks recognized, the boundary is that from which something *begins its presencing*. That is why the concept is that of *horismos*, that is, the horizon, the boundary.”²⁰

Boundaries also help to define a place’s identity, what it is and what it is not. According to Geographer Edward Relph

The essence of place lies.... in the experience of an ‘inside’ that is distinct from an ‘outside’; more than anything else this is what sets places apart in space and defines a particular system of physical features, activities, and meanings. To be inside a place is to belong to it and to identify with it, and the more profoundly inside you are the stronger is this identity with the place.²¹

Every place has a unique and integral structure that defines what fits in place and what doesn’t. For instance, if a building were built not as an integrated structure, but rather as a hodgepodge of rooms that don’t create any coherent or distinctive quality of experience, then we would say that one’s experience of the building “is all over the place.” It has no distinct identity. As such, there is no cohering pattern that defines the space. Every place, in this sense, is unique.²² Absent this unique identity, a place becomes just another allotment of space.

In ecology, the natural edges between distinctive ecosystems are where biotic life tends to be most prolific.²³ What this suggests is that boundaries are very powerful elements in the creation and support of life-places. In the defining of what is and what isn’t, there is contrasting edge that creates for greater vitality of interactions.

Place As Value-Adding

To create place, to engage in place-making, is to locate oneself within a whole, to find one's place within a place.²⁴ Place, therefore, also speaks to one's value-adding role within a larger whole. The Earth has a place within the solar system. Every ecosystem has a role and place within the planetary life systems as a whole.²⁵ We know this when we degrade an ecosystem like the Amazon and discover the net results in the planet's atmospheric compositions.

Ecology teaches us that all species have a role within their ecosystem, and that each species' role and place within that system is unique. In the terminology of ecology, this place is called a *niche*. Niche can be defined as both the unique spatial "habitat a species needs for survival... [and] the ecological role of an organism in a community."²⁶ In ecosystems, each species tends to find a unique niche within the system such that it does not directly compete with, but rather is complementary to, the livelihood of its fellow species. When a niche is left vacant (for example, through human extermination of a species), other organisms tend to fill that position.

Place therefore, as a phenomenon, can speak to one's position within a larger system and one's value-adding role within that system. In human terms, people often speak of place in terms of having a valued position and role within their family, workplace, and community. "Finding one's place" involves a matching between one's inherent capabilities (what in ecology is referred to as its "fundamental niche") with the needs and opportunities that exist within a larger system (i.e., its "realized niche").

Place As Concentrating And Enrichening

Places are bounded fields of concentration that organize and order space into a value and meaning rich environment. Places are specific, not abstract. They are localized, not generalized. Edward Casey describes them as "the localities of our intimate lives."²⁷ As space is lived into, it has the potential to become an increasingly multi-dimensional and soulful place. In philosopher Gaston Bachelard's words, place (or lived space as he calls it) "concentrates being within limits that protect."²⁸ The immensity of space outside of a bounded (place) is received and transformed "into immensity of our inner being."²⁹

This concentrating process is what Casey referred to as *implacement*. Relating the phenomenon of place to the phenomenon of receptacle, Casey stated:

The receptacle thus furnishes what I have elsewhere called “in-gathering.” Thanks to its connection-making capacity, the precosmic Receptacle gather heterogeneous constituents into the arc of its Space, *giving place* to what otherwise might be depthless or placeless—thus allaying the most acute metaphysical anxiety. Its action creates *implacement* for everything in gathered within its encompassing embrace.³⁰

Bachelard spoke to this phenomenon, as that of transforming what is large into what is small.

“Values become condensed and enriched in miniature.”³¹

In ecology, an ecosystem becomes an increasingly multi-dimensional and enriched space for life to occur in, as greater numbers and orders of niches are formed.³² In this process, niches become increasingly miniature in scope yet increasingly immense and rich in their support of bio-diverse life forms and interconnections. “Biodiversity can generally be defined as the total composition of evolutionary units in a given environment.”³³ The overall health and viability of an ecosystem in fact is highly correlated with the level of biotic life that system is able to support. A rainforest, with its canopy, for instance, enables multiple levels of life to thrive over the same space of land.³⁴ A rainforest as a place, therefore, enables ever more unique and diverse patterns of life to grow within its lived space.

In viniculture (i.e., the growing and making of wine), this *implacement* process of concentrating and enriching life and quality of being is called *terroir*. “‘*Terroir*’ is a small rural area with recognized soil and natural conditions that characterize local specialties, with features considered to be place-specific.”³⁵ The *terroir* of a wine creates a particular organization, complexity, and concentration of taste and experience that becomes uniquely and irreplaceably linked with a particular region. Burgundy wine and Champagne are classic examples of *terroir*. If the vines from a vineyard in Burgundy are transplanted to California, for instance, the wine made from these same vines will take on a very different flavor and character, related to the new place in which it is grown.³⁶ This process of re-*implacement*, however, takes time.

Place As Magnetic And Ordering

Each place has a distinct field or ambient quality that distinguishes it from any other place. This ambience affects the pace, rhythm, and emotionality of life. New Orleans, for instance, has a very different quality of lifestyle and pace than New York City does. As we enter into a place, we are affected by this atmospheric field or culture of a place. As such, each place helps to organize and order the *energetic* interactions and interrelationships that occur within it in a way that creates a particular nature of coherence and wholeness of experience.

Some places, due to their interrelationship with their surrounds, become stronger centers of coherence than others. In a river, for instance, there are certain places, due to the configuration of rocks and flow rates that become organizing fields of interaction.³⁷ These patterns are given names like whirlpool, eddy, or standing wave. As such, they influence the flow of material that moves downstream. Eddies, for instance, create pockets in the river where nutrients slow down and cycle, thus creating richer habitats for fish to feed. As such, an eddy becomes a center for feeding within the matrix flow of the river.

Christopher Alexander described this phenomenon of centering as a core ordering aspect of place:

Most simply, a center is any sort of spatial concentration or organized focus or place of more intense pattern or activity... Whatever its particular nature and scale, a center is a region of more intense physical (and often experiential) order that provides for the relatedness of things, situations, and events.³⁸

Places as ordering centers create an organizing and ordering field of coherence and wholeness of experience: "The strongest centers gather what is apart and provide all the parts with a place to belong."³⁹ This is why New Orleans feels so differently than New York. All of the elements that interact to form each place do so through very different patterns of interrelationship, leading to a very different, though in each case coherent, experience of place and culture.

Places as such can be described as magnetic centers of resonance. Tuan described place as "a center of felt value."⁴⁰ Some people may be drawn to San Francisco, for instance, because of the resonance they experience between its liberating and creative pattern of lifestyle and the nature of life they are seeking to

live. Others may feel the reverse, in that they experience a dissonance between its liberal lifestyle and their own. Therefore, different places become attractors for different qualities of lifestyle, values and experience.

Place As Dynamic And Evolving

Places, like all living phenomena, are dynamic and evolving. No place stays the same through all of time, for everything in the world changes. Lukermann described one of the central attributes of place as being its continuous process of emerging and becoming.⁴¹ Place in this sense can be described as an evolving continuum of interrelationships and experience that is continuously in flux. Oklahoma, during the dust bowl crisis, for instance, was a different place to live in then it is today. Likewise, with global warming and the rising of the tides, many coastal towns and inlets will be very different places in fifty years then they are today.⁴²

Yet, despite the continuous change that places undergo, there also exists a cohesive and organizing continuum that helps to order this change into the potential for meaningful evolution. Places, like living systems, can grow and evolve into ever more complex orders of interrelationship and richness of diversity. In an ecological system, for instance, a barren landscape may attract pioneer plant species that help to regenerate the soil sufficiently for larger shrubs and bushes to appear.⁴³ This, in turn, helps create the environment for trees to take root and grow, thus transforming the environment once again. The trees in turn can grow into a forest, thereby creating an even richer environment and habitat for life to thrive in. If a forest fire wipes these trees out, this evolution in ordered complexity will occur again.

A different ecological system, for example a wetlands, will evolve toward different ends.⁴⁴ What this demonstrates is that places evolve toward a particular end. In complex systems theory, this is referred to as an attractor state. Lucas defined an attractor as, "A preferred position for the system, such that if the system is started from another state it will evolve until it arrives at the attractor, and will then stay there in the absence of other factors."⁴⁵ Even two forest systems, due to their unique place on the planet, will evolve toward very different attractor states. A forest in the Appalachian Mountains, for instance, has a different ambiance and supports a different pattern of interrelationship between species than a forest in the Sierra Nevada mountain range.⁴⁶

Because places are nested within places, places both evolve toward attractor states and are themselves points of attraction. A city that is evolving toward a particular and distinctive end-state, is itself made up of multiple centers of distinctiveness. In fact, as these centers within the city evolve toward their unique-end state, they in turn enable the city as a whole to evolve. For instance, the French Quarter in New Orleans is a center that in its qualitative distinctiveness contributes to the identity of New Orleans as a whole. Just think what jazz in New Orleans would be like without it. Places, as attractor points, therefore, are evolutionary agents in that they become points within a larger system in which new life and new distinct patterns of existence can emerge.

Conclusions and Interpretations

This section has explored the phenomenon of place by looking at six defined attributes of place. They are: (1) Place as interconnected and nested, (2) Place as bounded and distinctive in its identity (3) Place as value-adding, (4) Place as concentrating and enriching, (5) Place as magnetic and ordering, and (6) Place as dynamic and evolving.

These attributes can further be explored by looking at them as three series of dyads. Dyads are complementary forces that together help lead to balance within a living system. Furthermore, as Bennett points out, when a sustained imbalance occurs between these complementary forces, illness tends to occur within the system.⁴⁷

The first two attributes form a dyad between interconnection on the one side and bounded identity on the other. When a place becomes too bounded and closed off from its surrounds, it becomes a closed-system that according to general systems theory leads to increasing entropy and decay. Likewise, if a place becomes too open to its environment, it loses its distinctive boundaries and identity. In such a case, there is no defining of the place as distinct from any other place. Likewise, this can lead to decay and ill health within a living system.⁴⁸

The third and fourth attributes of place form a dyad of value-adding to a larger whole on the one side and self-concentrating and enriching on the other. When places become too self-focused in their orientation, there is a tendency to create isolationism and separatism. As such places have a tendency to become

increasingly irrelevant, parochial and even obsolete within the larger systems they are a part. On the other hand, places that have become too globalized, too fast, tend to lose touch with their own roots. As such, these places become in a sense replaceable because they are no different from any other place on the globe. They have lost their ability to concentrate and refine their own unique and non-displaceable niche in the world.

The fifth and sixth attributes of place form a dyad of place as a field of coherence and pattern memory on the one hand and place as a dynamic and evolving process on the other. Places that become entrenched in maintaining their current patterns of relationship at the expense of enabling new patterns to emerge, tend to stultify in their growth and vitality. Such places become petrified relics of a time long past. On the other hand, places that seek evolution and dynamism at the expense of their own historical roots tend to lose touch with any central, cohering pattern. Such places become disordered, sprawling masses with no central or organizing core.⁴⁹

These dyads help to lift up many of the controversies that are pervasive in the places in which we live today. As regional communities, we face major dilemmas regarding opening versus closing our borders, globalizing versus safeguarding our local economies, cultural diversification versus maintaining a distinct local culture and identity. Critical to approaching these dilemmas, according to this analysis, is a complementary balance between forces. Together, these six attributes help one to identify and define what place is. Additionally, they offer a means for assessing the degree to which a place is healthy, balanced and whole as a living phenomenon.

Our Human Relationship to Place

For human beings, places are meaningful and meaning creating. According to urban planner Timothy Beatley, "Meaningful places are essential for meaningful lives."⁵⁰ Without a *sense of place* we would live within undifferentiated and thereby meaningless space. Tuan wrote, "Space is transformed into place as it acquires definition and meaning."⁵¹ Our sense of home, of homeland, of our place and role in the world, all help to give us a sense of rootedness and identity in the world. They help to nurture us and provide us a safe

haven when we are in need of it. When we have a sense of place in the world, we know where we come from and where we are going. As such, we feel “in-place” in the world.⁵²

Sense of place is an embodied experience, not an abstract concept. Our home and the street we live on may feel meaningful and alive because we have an intimate relationship and experience with it. Whereas, the demarcated neighborhood on the city map in which our home is situated, may have no meaningful intimacy of experience if it is just a concept, developed by an urban planner, “places are ‘immediate,’ known and lived in... (They) are those spaces and environments (built or natural) imbued with personal and cultural meanings.”⁵³

As humans, we are inherently place-makers. Subjectively, we imbue a space with meaning. According to Tuan, “What begins as undifferentiated space becomes place as we get to know it better and endow it with value.”⁵⁴ Objectively, we can restructure the very places we live by the artifacts we create. According to archeological definitions, in fact, what distinguishes humans from other animals is our ability to create and use artifacts.⁵⁵ Every artifact we create in place, helps to inform the place and its structuring of relationships. In this sense, we, as humans, are all artists of place. A freeway, for instance, is an artifact that structures relationships both between humans as well as between other than human life within a landscape. It restructures transportation routes, personal interactions, natural water flow, and animal migratory paths to name a few. The same is true for any structural artifact that we create within a place. According to indigenous educator Vine Deloria, a “building should tell you everything about the society you live in; its history, its possibilities, and its future.”⁵⁶ Our buildings, our roads, our aqueducts, our parks, our communication systems (e.g., telephone polls and wires) all impact upon the structuring of a place and its interrelationships. What this signifies is that as humans we have a role in the creation of meaningful places. We can create soulful and healthy places, or we can create unhealthy and dispiriting places on Earth.

By growing healthy places, we grow health and meaning in our lives. Places are spaces in which meaningful connections and relationships can be developed and sustained.⁵⁷ They are the sites in which community is grown. Places can facilitate meaningful interactions or they can be impediments to them. If we live in an inner city where we are constantly shielded from the natural environment, from interacting with animal and plant life, from experiencing a sunset or hearing the sound of a waterfall cascading down a cliff, then we are severing our connection to vital sources that feed our vitality and viability as human beings.

Likewise, if we create and live in places that isolate us from other human beings, that disenable us from making intimate contact and relationship with our fellow neighbors, then our communal wellbeing likewise suffers. Many studies in fact show that meaningful connections to people and to nature significantly contribute to our health and wellbeing.⁵⁸ Therefore, how we create and structure the places in which we live has significant impact on the quality and longevity of our lives.

Through our connections to and within place, we grow our caring. According to Zen Buddhist Kazuo Matsubayashi, "Caring evolves through attachment to a place. As one puts down roots in a certain location and becomes familiar with the surroundings, one begins to distinguish subtle differences in even the most ordinary landscapes."⁵⁹

By slowing down and connecting more deeply to the locality of one's here and now, an affective-emotional relationship develops between person and place: "Place is a pause in movement... The pause makes it possible for a locality to become a center of felt value."⁶⁰ As we slow down, we feel more a part of a place. We feel its "regularity and rhythm and identify its spatial-temporal reference points."⁶¹

As such, we begin to identify with place. Its rhythms become our rhythms and visa-versa. Its identity becomes interwoven with our identity. We feel gratitude for what a place nourishes in us emotionally and spiritually, we feel pride in what we can offer and contribute to the place we love. As we set roots in a place, it becomes the very ground in which we live and grow from.⁶² It becomes the context and environment in which we grow and develop relationships with others. A person from the Bronx, for instance, will retain many attributes of his or her culture of place, even if he or she moves to a different region.

As we grow our sense of identity and attachment to place, we seek to reciprocally honor and nurture that which nourishes us:

As one settles and becomes attached to a location, one activates space and time, and turns them into places and events that become meaningful in our daily lives. We mark a space with signs and decorations to distinguish it from other places, and we punctuate time with rites of transition.⁶³

In growing intimate with a place, we come to call it our home. Beatley defines *home* as "our life-territory... that we occupy and depend upon for our emotional and physical existence."⁶⁴ According to Day, At-homeness involves: (1) a timeless quality; (2) a positive attunement to the present moment; (3) a lived

interplay between familiarity and strangeness; (4) an attunement of one's self in relationship to significant others; (5) healing and personal wellbeing.⁶⁵

As one's inner life changes, so does the home and place in which one lives. As Zen master Kukai puts it, "Landscape changes as one's soul changes."⁶⁶ This is because the being state which we bring to a place affects the interrelationships within that place. If a father comes home angry every night from work and yells at his kids, then the experience of home may no longer feel as safe or as nurturing for his children. In fact, the "at-homeness" feeling of home is diminished if not destroyed by such actions and such negative emotional states of being.⁶⁷

In this sense, place and self are intimately intertwined. The nature of self (i.e., state of being) that a person brings to place, impacts upon the nature and quality of interrelationships that can occur within that place. Numerous studies have demonstrated the power of group meditation on the region in which they are located.⁶⁸ In turn, the nature and quality of the place can also impact upon the person's state of being.⁶⁹ For instance, sitting by a waterfall can relax our mind and restore our spirits.

Cultures themselves grow out of this interrelationship between humans and their places. According to cultural geographer Joel Bonnemaïson, "Cultural differences can only be adequately understood when placed in their geographical context."⁷⁰ The place in a sense forms the corpus or body in which a unique culture can live and thrive. In cultural geography, this is referred to as the cultural landscape and cultural region in which a collective of people come to form a unique "genre de vive", or life-way.⁷¹ Through this co-created cultural landscape between people and their environment, the people come to experience their life-world of time and space in a unique and particular way.

Through time, this can lead to a bonding between a cultural group and its place. They develop a sense of homeland and an identity in relationship to this homeland. Nostrand defines the concept of *homeland* as follows:

The concept of a 'homeland,' although abstract and elusive, has at least three basic elements: a people, a place, and identity with place. The people must have lived in a place long enough to have adjusted to its natural environment and to have left their impress in the form of a cultural landscape. And from their interactions with the natural and cultural totality of the place they must have developed an identity with the land.⁷²

Even the rise and fall of civilizations always occur within and between places. According to Bonnemaïson civilizations are meta-cultures that, like cultures, are contextual to place:

For ethnologists or cultural geographers, that is, for social scientists dealing with culture, there is no superior culture or civilization as such, but a plurality of cultures and civilizations that contribute to the richness of humankind. There may be relations of force among them, which engender circumstantial inequalities: such is the game of history, but no culture or civilization possesses a superior substance to which the others should convert, so that these relations change with the context. In this sense, Australian Aborigines were superior to the British settlers who found themselves near starvation in nineteenth-century Port Jackson.⁷³

This contextual relationship to place is equally true for nomadic cultures. For Bauman⁷⁴, the modern metaphor of equating our more mobilized and deterritorialized post-modern society with nomadic cultures is false. Nomadic cultures tend to move from place to place in a ritualized pattern within a particular regional place. Their connection and responsibility to place therefore is often heightened not diminished. According to Bauman, our post-modern society would more appropriately be likened to a vagabond or tourist mentality. Both move through other peoples' spaces and set their own standards for happiness and the good life.

It should also be noted that while individual and cultural sense of place can be enlivening to human existence, it also can become disabling and harmful when we become closed-minded in our relationship to place. When humans encapsulate a place in their mind as separate and better than anywhere else, there is a tendency towards chauvinism, parochialism, and jingoism.⁷⁵ This involves the fallacious application of closed-systems thinking to an open-systems phenomenon.

Conclusions and Interpretations

What all of this points to is the inextricable relationship that exists between human beings and place, whether that be at the individual or family level or at the cultural and civilization levels. Within this interrelationship, humans are inherently co-creators of the natural places in which they live. We impress a cultural landscape: "All geographical environments are anthropomorphized to a smaller or greater extent."⁷⁶

One of the questions that this raises is: To what degree are these cultural landscapes developed in harmony with the natural place? This can also be referred to as the development of "authentic place."

Authentic place refers to the idea of a uniquely inherent pattern and spirit in every place, to the essence of a place, to what the Ancient Greeks endearingly called “genus loci.”

Are we as humans helping to create and contribute to the creation of authentic places, or are the cultural landscapes that we are currently creating in the world largely out of tune with these natural rhythms of place? These questions will be addressed in the next section by looking at four orders of mind that we as humans can bring to our understanding of place and their implications for how we relate to and inhabit our natural and cultural landscapes.

The Way We Inhabit Place: Four Nested Paradigms

In Chapter 2, the author differentiated between four distinct orders of aims toward which psychological development has and can be directed. The thesis that will be developed in this section is that each of these modalities of psychological work has major implications for the way in which we as humans relate to place. Furthermore, it is proposed that while each level is critical to the healthy development and evolution of place, there are inherent hazards and limitations which arise when we delimit the horizons of our psychological development and the development of place to only one, two, or three of these four levels. In the following sub-sections, each of these levels will be explored in turn in relationship to place and how we as humans live within it.

Order One: Operational Development and the Management of Variances

At one level, humans as individuals, communities, and collective societies learn to manage themselves and their environments in ways that enable and support their functioning capability. In this sense, we seek to create functional spaces for ourselves to live within. If a family moves into a house, for instance, they will first decide which rooms will serve as bedrooms, which room will be the living room, where they will dine, and so on and so forth. In this way they begin to organize the space in a way that serves their functioning lifestyle.⁷⁷ Toward this end, certain adjustments may also need to be made, either to the

house itself (i.e., through remodeling) or to their established patterns of functioning together within their household.

The same is true with a society that inhabits a particular ecological region. A society organizes development in a region based in part on the need to support and fulfill its functions. The organization and supply of food, water, shelter, transportation, and fuel are all operational needs of any human settlement. In this, a society will either adjust to the patterns and constraints of the existent ecosystems that it inhabits, and/or it will seek to adjust these patterns to better meet its societal demands and needs.

In the modern era, our capacity as humans to reorganize our environment to meet the operational needs of our society has grown astronomically. This has empowered humans to “make changes of unprecedented violence, rapidity, and scope.”⁷⁸ For example, we can dam and redirect rivers to build cities in the desert. In these cities we can build in-door ice-skating rinks and even indoor ski slopes. We have learned to split the atom and harness the incredible amount of energy that this process releases. From this same nuclear fission process, we have learned to build weapons capable of destroying the entire planet. We have the capability to level a rural, ecological region and build an entire urban metropolis in a several years time-span.⁷⁹

With these new technological powers come a great deal of opportunity, as well as a great deal of danger for the continued development and evolution of the socio-ecological places in which we live and for life on this planet as a whole. Both these opportunities and dangers depend on the nature of mind that we as a society and globalizing world bring to the ongoing development and use of these technologies. To the extent to which we treat the world and its living systems as merely functional space that can be reorganized as we humans see fit, we will find ourselves living into the growing ecological crisis that we face today. Currently, as a modernizing and globalizing world we are contributing rapidly to the deforestation, soil erosion, water contamination, air pollution, and species extinction on our planet.⁸⁰ We redistribute water in ways that feed suburban sprawl, the expansion of golf courses, and the proliferation of swimming pools, yet at what cost to the health of our ecological systems that we ultimately depend upon for our very existence?⁸¹ We translate vast regions into monoculture farmlands in the name of operational efficiency and productivity, yet at what cost to the bio-diversity and resiliency of our ecological systems?⁸² We burn fossil fuels to run our

cars, to heat our buildings, to turn on our computers, yet at what costs to the atmospheric systems that support life on this planet?⁸³

Under a strictly operational mind frame, sense of place does not really exist, only space and what fills that space. It is what fills a space that we pay attention to and evaluate land and region on this basis. Land is evaluated in terms of its extractable resources and in terms of how it can be adjusted to best serve our functional societal needs and wants.⁸⁴

Likewise, in seeking to adjust environments to best suit societal needs and functions, there is a tendency to eliminate perturbations that are seen as superfluous or even contradictory to our pursuits. Natural landscape and environment therefore is viewed in terms of its malleability to our pursuits and forces within that environment are judged negatively to the degree to which they become destabilizing forces to our functioning capability. What we call *wild*, therefore, is seen as a destabilizing force that needs to be controlled for, either by fencing it off, domesticating it, or eradicating it.⁸⁵ In this, we seek to create controlled environments that are non-disruptive and conducive to normal functioning.⁸⁶ Thus, we create manicured lawns, sterilized landscapes and buildings, monoculture crops, chlorinated swimming pools, paved roads, and the list goes on.

The danger in this way of operating is that it leads to the creation of environments that are increasingly lifeless and artificial.⁸⁷ In open systems terms, we increasingly cut ourselves off from the natural energies that feed us bodily, mentally, and spiritually. Famed urban historian Lewis Mumford described post World War II development as leading to an “end product (that) is an encapsulated life, spent more and more either in a motor car or within the cabin of darkness before a television set.”⁸⁸

By seeking to create controlled environments that eliminate perturbations or variances to a norm and that are designed to maximize functional efficiency, there is also a tendency to create closed-system models for development that can be replicated anywhere in any place. We create standardized zoning and building practices and materials that produce increasingly homogenized developments and communities. We create strip malls and parking lots that look the same wherever you go. We create housing developments that are stamped replicas from place to place. In so doing, we end up creating the same developed environment everywhere, thus destroying any sense of unique place.⁸⁹ This leads to a monotonization of place, in which biological and cultural diversity is destroyed. In Relph’s words, “There is a widespread and familiar

sentiment that the localism and variety of the places and landscapes that characterized preindustrial societies and unselfconscious, handicraft cultures are being diminished and perhaps eradicated.”⁹⁰

While there are many dangers that the operational mind, when left to its own devices, can fall into, there is also a value and therefore opportunity in the appropriate growth and development of this mind. When guided by the higher and more encompassing levels of mind, the operational mind can be employed to create and design functional space that works with and supports rather than against the patterns and dynamics of a given regional place. The opportunity, therefore, is to use the operational mind and its technologies to develop increasing discernment of the unique operational patterns that support life in a given socio-ecological place. This requires an interactive process of co-adaptation and co-development with natural place. It also requires the development of a comprehensive ecological knowledge of the place within which one lives and works.

Order Two: Self-Actualization and the Development of Being

Beyond the development of functional space within which to operate, humans also work with space at a second level. At this level, humans as individuals, communities, and societies seek to create environments that nurture and reinforce particular states of being and particular qualities of interrelationship between people. In this sense, we create human places that are conducive to particular experiences and ways of living. This goes beyond the work of creating functional space to that of creating the ambiance and mood of a place.

In architecture, for instance, the way in which a structure is designed and built can produce very different effects on a person’s psyche and their experience of moving through a given space. According to architect Christopher Day, “To create nice and, more importantly, meaningful, appropriate atmospheres we need to focus our attention not on the quantities but on the qualities.”⁹¹ A tall cathedral-like ceiling affects us differently than a cozy, low ceiling room. A long narrow hallway creates a different effect than a large open room.

In addition to structure itself, the elements that make up these different rooms also affect the experience of a place. For instance, the way in which a room is lighted can create a very different ambiance

and mood (Day, 1990). The use of natural light, via skylights and windows, also creates a different affect than artificial lighting.

The materials used in the flooring, walls and ceiling also affect the feeling of a place. A wood floor versus a linoleum floor versus a concrete floor creates a different qualitative experience. As Day puts it, “all materials have individual qualities.... It is hard to make a cold-feeling room out of unpainted wood, hard to make a warm, soft, approachable room out of concrete.”⁹²

Colors also affect the experience and mood of a place. Different colors, in fact, have been shown to stimulate different glands in the human body (Bayes, 1970). According to Day (1990)

In a home for maladjusted children in England there is a swimming pool illuminated underwater so that the children’s splashing bodies can appear coloured: red helps to activate autistic children and bring them out of themselves into activity, blue helps calm down the hyperactive ones and bring them into themselves. (p. 48)

Sound is another element that affects the quality of experience in a place. The sound of falling water from a fountain, for instance, may have a soothing effect in a room. Likewise, urban restaurants often design their dining spaces in ways that amplify the level of conversational noise, thus creating the buzz-like effect of being a popular, bustling, and happening place.

As humans, we create different places to support different modalities and states of being. In a house, for instance, a family may choose to decorate certain rooms to feel more public while others are more intimate and private. Some rooms may be designed to feel more lively and upbeat while others may be designed to feel more soothing and as a place for quiet reflection. All together, these different qualitative spaces help to make up and balance out a place called home. In this sense, it is not longer just a functional household, it is now a place with a distinct quality of being and distinct elements within that that together make up this holistic phenomenon called home. According to Bennett, “the unity in diversity that characterizes it is the ‘reality’ of the home.”⁹³

What holds the different experiential spaces of a house together and helps them cohere into an integral sense of home is the core or essence of the family who resides in it.⁹⁴ Place at this level is not just about the creation of atmosphere and mood for its own sake but rather the creation of mood and atmosphere in service to the development and expression of one’s unfolding inner life and essence. This is what

differentiates the experience of an integral and authentic sense of home versus a house that feeds one's outer personality but not one's inner core.

At the societal level we, as humans, also create different places to feed and support different states of being and qualities of interaction. In any given city, for instance, there are places of worship that are built in ways that are conducive to particular qualities of experience and mentation.⁹⁵ Many Christian churches, for example, tend to have spires and cathedral ceilings that lift one's gaze toward the celestial heavens and offer us a sense of ascendance. Likewise, in any given city, one will most likely find cafes and plazas in which to sit and chat with one's fellow citizens. These cafes will tend to create a very different ambiance than the churches and are conducive to a different quality of interaction with others and a different state of mind. Cafés tend to have a more stimulating, social buzzing quality to them whereas churches, on the whole, tend to support a more reflective and reverential state of mind. In addition to religious places and cafes, there are also garden spots, market places, night clubs, and the list goes on, each helping to feed a different qualitative aspect of our being and soul.

As an interrelating whole, each of these distinct places help to make up a distinct, experiential landscape that people move through and live within. As such, each cultural landscape, to the degree in which it is integral, helps to support a particular way of life and a particular way of experiencing one's lived world. This is a step beyond merely focusing on functional use of space to that of seeing the effects that a structured space has on one's psyche and wellbeing.⁹⁶ Does a place feed one's inner life or does it stifle it? Does it help one feel more human and alive or does it deaden the spirit and harden the heart?

Each place tells a story of people's strivings, hopes, sufferings, and dreams. As Beatley puts it, "Landscapes and places are embedded with memories, and the nature of these memories affect how we value and treat places."⁹⁷ As we walk through the projects of an inner city ghetto, we feel something if we are at all human. If we walk through the landscape of a family farm that has been passed down through generations, we may feel something very different.

As our modern, industrial society has begun to reawaken to this level of experiencing, we have realized that mere functional space does not feed the heart, it does not feed the human spirit, and it does not feed meaningful interrelationships. Just providing low-income housing is not enough (as the failure of many of the low-income housing projects built in the sixties are testament to today).⁹⁸ Just designing office space

that is functionally efficient but pays little attention to people's subjective experience is not enough.⁹⁹ What are needed are places that feed the human spirit, that support and encourage the growth of human community and wellbeing. A healthy place at this level can be defined as that which creates cultural landscapes that are conducive to people's self-actualization.

New Urbanism is one of the current movements in our society that is seeking to reclaim and reestablish life at a human scale of development. Largely in reaction to the monotonous developments and suburban sprawl that spread in the United States with the advent of the automobile and its freeway infrastructure, New Urbanism seeks to recreate communities and neighborhoods that are human-scale. The guiding principles of New Urbanism design include walkability, connectivity, mixed-use and diversity, mixed housing, quality and aesthetically beautiful architecture and urban design, traditional neighborhood structure, increased density, smart transportation, sustainability. "Taken together these (principles) add up to a high quality of life well worth living, and create places that enrich, uplift, and inspire the human spirit."¹⁰⁰

Another movement in response to the modern sprawl of human development is Conservationism. This movement seeks to protect and maintain natural wildlife areas from the incursion of human settlement. Wild, in this romantic sense, is viewed as beautiful, robust and untamed by humans and therefore worthy of protection.¹⁰¹ Our human bodies, psyches, and spirit are fed by this pristine and wild nature. We go for walks in the woods, climb mountains, and swim in lakes and rivers, all to feed our growth, wellbeing, and overall self-actualization. Wilderness and nature therefore become identified as a place that we go to and visit to help feed our souls.

Like with the first modality of human relationship to place, there are inherent dangers and opportunities in this second modality. The danger lies in artificially separating human place from *natural* place. We then see human settlements as places that we create and can innovatively design however we see fit, while *wilderness* areas are places that should be largely left alone by humans so that nature can continue to create and maintain them. According to Anderson

Setting aside wilderness is only a reaction to the plundering of natural resources, and both spring from a mind-set of alienation from nature. Moreover, the wilderness concept tends to compartmentalize nature and culture, giving humans the illusion that activities done outside of protected areas will not affect what is within.¹⁰²

What this compartmentalization does is artificially separate us out as humans from the larger planetary and cosmic patterns that we are a part of. This leads to the growing of human places, not socio-ecological places. We isolate place, creating closed systems within the environment. Even the idealized goal of sustainable developments in this modality is to create a separate island of human habitat that no longer impacts on or answers to the ecological environment it is a part of.¹⁰³

What this can lead to is the development of human places that are increasingly unappreciative of the unique patterns of a given planetary ecosystem. We divide up a landscape into human settlements and natural preserves, not understanding that natural systems do not work in this way. Our urban settlements disrupt environmental flow and natural patterns of interrelationship in ways that are harmful and even degenerative to the natural systems that regulate and support life within place and for the planet as a whole.¹⁰⁴ In all of this, there is a blindness to our patterns of living in place and on the planet and how these patterns are in harmony or out of harmony with these larger systems and their evolution.

According to naturalist Aldo Leopold

Your true modern is separated from the land by many middlemen, and by innumerable physical gadgets. He has no vital relation to it; to him it is the space between cities on which crops grow. Turn him loose for a day on the land, and if the spot does not happen to be a golf links or a 'scenic' area, he is bored stiff. If crops could be raised by hydroponics instead of farming, it would suit him very well. Synthetic substitutes for wood, leather, wool, and other natural land products suit him better than the originals. In short, land is something he has 'outgrown.'¹⁰⁵

The opportunity at this level of work is to help create cultural landscapes that are conducive to people's self-actualization in ways that are in harmony with the natural region we live within. As we begin to re-relate to the planetary places in which we live, we begin to understand, for instance, why certain architectural styles have originated from particular regions. Local materials, regional climate, and human ingenuity are of course important factors, but each architectural style that authentically originated from a regional place, also has a mood and tenor that helps to capture and express the unique quality of experience that a cultural body of people have in relationship to the natural place in which they live. The building styles as such grow from the roots of a place, from its unique patterns and associations. The opportunity, therefore, is one of seeing self-actualization and human cultural expression as being a process that grows from and is in service to the larger planetary and cosmic systems of which we are a part as opposed to seeing these systems

as merely feeding sources (which at best we seek to sustain) for our ongoing individual and collective human fancies; the latter view being narcissistic and anthropocentric.

Order Three: Living System Actualization and the Development of Value-Adding Roles

Beyond the development of functional spaces and human nurturing places, there is a third psychological modality for engaging with place. This third order of work relates to our human value-adding role in natural and planetary place. Place, in this sense, can be defined as an evolving socio-ecological whole involving both people and the natural ecosystems in which they live. What this implies is that humans are ultimately not separate from the planetary places in which they live. Rather than seeking to minimize our impact on the planet, at this level humans actively work to help enable and even improve the workings of natural living systems.

This is in fact the role that many indigenous peoples throughout the world have served in the past and, to the degree in which they can, do still today.¹⁰⁶ In studies on Native American knowledge and management of California's natural resources, wildland resource scientist Kat Anderson discovered that much of the ecological landscape of California today is the result of centuries of intentional management by Native Americans. Her findings dispel the often cited myth that California is as lush as it is because so few people lived on the land, thus largely leaving nature alone. Rather, her findings showed that Native American tribes were actively involved in the co-evolution and development of California's natural fecundity and beauty. According to Anderson

Through twelve thousand or more years of existence in what is now California, humans knit themselves to nature through their vast knowledge base and practical experience. In the process, they maintained, enhanced, and in part created a fertility that was eventually to be exploited by European and Asian farmers, ranchers, and entrepreneurs, who imagined themselves to have built civilization out of an unpeopled wilderness. The concept of California as unspoiled, raw, uninhabited nature—as wilderness—erased the indigenous cultures and their histories from the land and dispossessed them of their enduring legacy of tremendous biological wealth.¹⁰⁷

John Muir, the celebrated environmentalist and founder of the Sierra Club, was in fact a proponent of this view of California as a pristine wilderness. What he did not realize was that

(S)taring in awe at the lengthy vistas of his beloved Yosemite Valley, or the extensive beds of golden and purple flowers in the Central Valley, Muir was eying what were really the fertile seed, bulb, and greens gathering grounds of the Miwok and Yokuts Indians, kept open and productive by centuries of carefully planned indigenous burning, harvesting, and seed scattering. (Anderson, 2005, p. 3)

What Anderson's studies indicate is that humans have a value-adding role that they can serve in relationship to the land in which they live.

According to naturalist Aldo Leopold, land is more than just the ground we live upon. Rather, it is a complex living energy system that includes soils, plants, animals, water, and air in a circulating flow of nutrients:

Land, then, is not merely soil: it is a fountain of energy flowing through a circuit of soils, plants, and animals. Food chains are the living channels that conduct energy upward; death and decay return it to the soil. The circuit is not closed; some energy is dissipated in decay, some is added by absorption from the air, some is stored in soils, peats, and long-lived forests; but is a sustained circuit, like a slowly augmented revolving fund of life.¹⁰⁸

The evolutionary trend of these energy systems is to continue to "elaborate and diversify the biota"¹⁰⁹ on Earth. In these evolving energy circuits, humans are inextricably a part of them. As Leopold states it, "man is, in fact, only a member of a biotic team."¹¹⁰ As such, we can either help to enable and feed this elaboration and diversification of biotic life in the places in which we live (as for example the Native Americans of California did), or we can disable and violently disrupt the energy flows and cycles of the land we live upon. In this sense, it is not an issue of treading less lightly on the earth, but rather one of *how* we tread on the earth. Do we live on earth in ways that harmonize with and amplify the natural patterns of land and place or do we fight against these patterns and try to conquer and subdue them to feed our own ends? The mounting ecological crisis that we now face is evidence that modern man has chosen to pursue the latter path. The result of this path, according to Leopold, is always predictable in the end.

In human history, we have learned (I hope) that the conqueror role is eventually self-defeating. Why? Because it is implicit in such a role that the conqueror knows, *ex cathedra*, just what makes the community clock tick, and just what and who is valuable, and what and who is worthless, in community life. It always turns out that he knows neither, and this is why his conquests eventually defeat themselves.¹¹¹

Leopold argued that what is centrally missing in our Western culture today is a land ethic. According to Leopold, ethical values are what hold a community together and allow its members to cooperatively co-

exist. Just as our culture has awakened to the violent injustice of slavery, so now is it time that we awake to the injustice we are inflicting on the lands we live within. In the time of Odysseus' Greece, slaves were property that could be dealt with as owner saw fit. If he wanted to hang them, he had full proprietary rights to do so. Today we look at this and are horrified by such actions because we know in our hearts that all humans are our brothers and sisters and deserve the same basic rights, opportunities, and freedoms that we do. Yet we turn around and commit the same violent crimes against our biotic family. We treat land as property and as such we have the proprietary rights to do with it as we see fit. If we want to destroy the life of the land, it is our right to do so. As Leopold stated, "The disposal of property was then, as now, a matter of expediency, not of right and wrong."¹¹²

A land ethic would involve living rightly with the land. Doing what is right in this case can be evaluated in terms of whether or not an action preserves and adds to "the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."¹¹³ The implication here is that we as humans can and should be living with the land in ways that work with and elevate its systemic generative capacity for life. According to wilderness guide Tom Brown's spiritual teacher, Grandfather, humanity's destined role on earth is to become good caretakers of natural creation. "Nature can exist without us, but it would struggle far more. Remember, we are here for a grand purpose, beyond the self. We are the caretakers."¹¹⁴ This is the legacy that we as humans can grow on earth. "We must look to the future and leave a grand legacy for our children and grandchildren. So too must we leave creation better than we found it; thus we fulfill our destiny as the caretakers of the earth."¹¹⁵

The implications for developing such a land ethic in our modernizing world are immense. First, it would require a complete transformation in the way in which we currently develop and settle upon land and in place. Currently our human developments block, disrupt, and harm the natural flows and energy cycles of a place. By developing understanding and mapping of these ecological flows and cycles, we can begin to discern how our developments can work with and re-enable these patterns. In particular, we will need to tackle the daunting challenge of reintegrating our vast urban centers into these natural flows and cycles. This goes beyond the vision of creating green, energy self-sufficient cities to that of creating urban socio-ecological landscapes that are not isolated islands but rather integral members and contributors to the ecological systems in which they exist. This cannot be tackled by piecemeal solutions, such as creating wildlife trail

bypasses over roads, as noble as these actions may be. What such a challenge requires is first a holistic understanding of the workings of the energetic ecological systems in which we are situated. Only then can we see the uniquely situated place and role that our settlements can serve within these larger systems.

Secondly, we would need to transform the way that agriculture is currently practiced in our society. Vast areas of the United States are decimated in terms of their biotic diversity and carrying capacity for life due to the ways in which we currently run our agro-businesses.¹¹⁶ We must therefore relearn how to cultivate food in ways that diversify and enrich biotic life as opposed to contributing to species extinction and the erosion of land. Permaculture¹¹⁷ and Biodynamics¹¹⁸ are two such agricultural systems that work towards these higher order ends.

Thirdly, we would need to transform the way we do industry. Currently, most of our resource based industries are built on a model of extracting natural resources, transforming them into what we call “value-added” products that can be sold and used by humans, and then disposing of them after their life-term usage.¹¹⁹ The dangers of such a take-make-waste model are multi-fold. Currently we are stripping regions of their natural resources, transforming them into non-biodegradable substances to be used, and then depositing them into landfills. This process is destroying the natural cycles and flows of energy in our ecological systems.¹²⁰ What a land ethic calls for, is the redevelopment of industry into an earth-to-earth process, whereby natural resources are harvested in ways that do not strip a region of its resources but rather add to the health of its systems, are then developed in ways that add not only to their human but also their biotic value, and then are returned to the earth in ways that reciprocally replenish the land that it came from.

To bring about such a new world requires, first and foremost, a transformation in our cultural values and our ways of interrelating with the socio-ecological places that we live within. As Leopold put it, “it is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its [intrinsic] value.”¹²¹ Such a relationship to land and place requires a shift in mental perception. If we continue to view and relate to land through our analytical and objective mind, it will continue to be an object separate from us. To learn to love the land in which we live, we must learn to relate to it inwardly and bodily.¹²² Only when we experience the being of a place and what it energizes in our mind and speech, do we begin to see and relate to it as a truly living phenomenon that is to be respected, loved, and

revered. This is what is sometimes referred to as the spirit of place. This is the experience that such popular songs as “I Left my Heart in San Francisco” and “Shenandoah” speak to. It is what transforms our “caretaker” role of place from one of onerous and daunting burden to one of inspired love and devotional caring. This concept of spirit of place will be addressed further in the next section.

Order Four: Field Regeneration and the Development of Devotional Caring

Beyond the development of functional spaces, human nurturing places, and integrated socio-ecological places, there is a fourth order of work in regard space and place. This order of work, which interpenetrates all the other three levels of work, relates to sacred and spiritualizing places. Every place or region on the planet has a unique spirit that energizes the mind and peoples who live there in a particular way. According to Andean scholar, Eduardo Grillo Fernandez, “Every great people, each culture, each form of life has its own world. In this way the Andean world has its own peculiar mode of being and therefore experiences, in its own way, the events of its life.”¹²³

For instance, when we go to New Orleans and its surrounding bayou landscape, we experience a particular rhythm and quality of life that is very different from life on the San Francisco Bay or life in Tibet and the Himalayan mountain range. In our everyday hustle and bustle of modern life, it is sometimes difficult to slow down enough to consciously experience these rhythms of the place we live within, but when we do they are still pervasively present.

Many ancestral traditions the world over, designated sites for different cultural and religious activities based on the unique energizing force that they experienced each place helping to foster within them.¹²⁴ The idea here, which is the basis of geomancy, is that with each place there is a right action that best coalesces with the spirit of that place. According to Greek wisdom, for instance, the famed temple at Delphi was sited not haphazardly in its location, but rather quite precisely based on the unique power and spirit of that place.

At Delphi, Greek wisdom said that the “genus loci” or spirit of place in that place made it most suitable for honoring Gaia. The sages asserted among other things that a mysterious substance called the “plenum” bubbled up from the ground there is abundance, and that such an abundance favored

Gaia and the work of the priestess oracle, Pithia, to prophesy—clearly establishing Delphi as the touchstone place for planners and designers to visit in pilgrimage to seek out their origin.¹²⁵

In Ancient Egypt, as with many other ancestral traditions, a number of distinct sites were designated as the spiritual origins of their world.¹²⁶ They saw each of these sites as particularly strong focal centers for the different deities, or *Neters*, that they worshipped. According to Egyptologist Schwaller de Lubicz, these Neters were not worshipped as Gods, in the way we use the term today, but rather as divine principles or forces that create, generate, and regenerate the processes of our natural world.¹²⁷ In certain locations, therefore, the Egyptians found a particular divine force to be more readily present and experienceable. It was there that they sited their temples in dedication to that particular Neter.

Beyond the intentional citing of their temples, ancient Egyptians also sought to structurally build their temples in alignment with the unique causative force they were intended to serve.¹²⁸ As such, they saw each temple as a resonant microcosm of that particular macrocosmic or universal force. They therefore used different scales of measurement and different coinciding proportions of forms to best match the patterns and rhythms of that particular Neter. According to environmental psychologist James Swan, this practice of building in resonance with the spirit of a place is in fact a common theme among spiritual architecture around the world; its purpose being to structurally embody and amplify the spirit of that place.¹²⁹

Through these sacred temples and the unique rituals that developed within them, the ancient Egyptians sought to feed and regenerate the presence of the different spiritual forces that they believed created and sustained their world. If one of these forces became unduly weakened, the world would fall out of balance and into a state of degeneration thus impairing the health of its members. Also, the Egyptians believed that at different times of the year and through different eras, different Neters (i.e., causative universal principle) ascended or receded in their influence over world tidings. This understanding was based in part on their astrological studies and the changing alignments of the planets. Therefore, at different times, a particular temple and spiritual Neter were held to be the center of the universe, based on their ascendancy in the cycle.¹³⁰

This practice of the balancing the causative forces of our world through right relationship to sacred places is evidenced not only in Egyptian wisdom but also in many other ancestral cultures the world over. For example

The Salish tribe of the Pacific Northwest has a term *skalalitude*, which refers to a sacred state of mind when all things are in balance and the spiritual dimension of life seems to predominate consciousness, which results in 'magic and beauty being everywhere' Skalalitude results from multiple contact with different sacred sites, each of which has a special purpose associated with its unique powers. Collectively, proper alignment with all the various kinds of sacred places results in an affirmation of self, just as all the colors of the rainbow come together to form white light when focused in a crystal prism.¹³¹

Another example can be seen in ancient Chinese Taoism and its sages, who continually worked to create right relationship with their five sacred mountains, each representing one of the five elemental forces that make up the world. A rightful balance, they believed, would lead to the awakening of *Great Man*.¹³²

According to shaman Grizzlybear Lake

I hope to call your attention to the fact that this Mother Earth is also dependent upon us for her survival. Thus there are power centers upon the earth where one makes a pilgrimage to give, not just to take. Certain holy places are used as a specific place for us, as humans, to return the power. It is a reciprocal relationship and responsibility.¹³³

What all of these ancestral traditions indicate is that (a) each place has a unique spirit that affects and influences our emotional/mental being in particular ways, (b) right action involves living in harmony with and being in service to the spirit of the place in which one is situated, (c) certain places can be experienced as more powerful and more spiritual in their emanations than others, thus deeming them particularly sacred or holy places, (d) the spiritual health of human and planetary community depends upon the continued contact and right balancing of these different sacred energy sources, and (e) humans have a role in maintaining and regenerating these spiritual forces through such means as sacred architecture and devotional ceremony.

Different people may find themselves connected and drawn to different places. As such, we may find that the place spiritually energizes us and gives us a sense of connection and purpose within a large whole. As Native American scholar, Vine Deloria, Jr. stated it, "Lands somehow call forth from us these questions [who we are, what our society is, where we came from, where we are going, and what it all means] and give us a feeling of being within something larger and more powerful than ourselves."¹³⁴

In seeking and finding our place within place, we find that place is a nested system of ever more encompassing wholes. The regional places on this planet that we feel called to connect to and serve are themselves a part of and help to serve a larger place called Gaia.¹³⁵ Likewise Gaia is a part of and serves a

larger place called the solar system. If each place on earth helps to uniquely energize life on this planet, what happens when we turn away from this? What happens when we as humans choose to develop and inhabit places in ways that no longer harmonize with their inherent spirit? Do we contribute to the deadening of spirit in them, in us, in the planet, in the cosmos as a whole?

As an ending note to this section, the author leaves you with the eloquent and inspiring words of historian Donald Hughes:

That is really what we are challenged to do today: to find the places where we connect with the larger cosmos, to keep them free of the impedimenta that would block access to the spirit, and to open ourselves to the values that come from those places. When place is respected and treated properly, spirit is never used up; on the contrary, it becomes stronger. And the more one studies the past experience of sacred place in human history, the more one is impressed by the variety of values that can emerge from it. It is as if this vast organism in which we live, Gaia, the biosphere, and indeed the entirety of the planet earth, has a multitude of organs, of connections and nodes, no two exactly the same, and as we move among them, we give and receive, and subtract from her life or enhance it according to our attitude and our sensitivity. The place where natural ecosystems are intact and functioning in the full spectrum of their beauty is the place where spirit is most manifest.¹³⁶

Chapter Conclusions

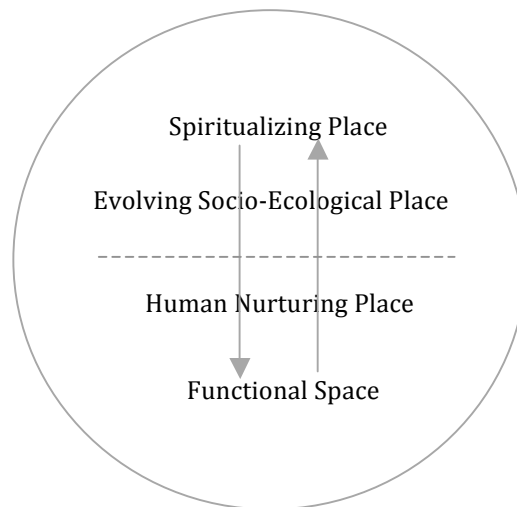
This chapter has attempted to explore through a living systems view the phenomenon of place—what it is, how it feeds us, and what our reciprocal role is to place. In this, the chapter has also explored four different levels toward which we as humans psychologically engage with place and their implications for our world today. Through this, the author has endeavored to lift up the idea that the phenomena of place and place-making are not just human processes but rather critical planetary and universal processes in which we as humans have a role to serve.

The Andean culture speaks of this place-making process as one of developing *fields of cultivation* (or chacras) for the continued nurturance and regeneration of life. For Andeans, cultivation is a process that the whole community of life engages in, including “soil, water, stars, Apus (mountain deities), and runas (people)”¹³⁷ through localized, in situ fields or “chacras.” We as humans, therefore, have the role, not of creating such fields, but rather in helping to intensify them in the enablement of life evolutionary processes:

In this regard, chacra is but another way of nurturing varied forms of life in nature. It is not a human invention, but an accompaniment of all that was and is done by the Apus, an intensification of the nurturing of the chacra in certain places and with those members who need it, who ask for special treatment.¹³⁸

In our modern Western culture today, we view cultivation very differently. We equate it with the human domestication of wild species. As such, we consider ourselves to have dominion over other species. We speak of owning livestock, of owning pets, even now of owning particular genetic strains of seeds. What this illustrates, is the degree to which we as a culture still remain trapped in a human-centric worldview¹³⁹, thus preventing us from moving beyond the lower two levels of the holarchy presented in this dissertation. In image form, this can be depicted as follows: The dotted line between levels two and three indicating the divide which we as a culture now need to cross.

Figure 8. Four Orders of Relationship to Place



Ultimately, it is this author's contention that a healthy relationship to place must include all four of these levels. To be healthy, we obviously must live in places in ways that enable us to perform our operational needs (e.g., procuring food, shelter, water, economic viability, etc.). The fulfillment of such functional needs, however, does not lead to the fulfillment of the human heart. Rather, there is also a need to grow healthy places for human community and individuation to blossom. Faced with our ecological crisis today, however, we are relearning that this too is not enough for the development of healthy places. We must also reconnect to the ecological patterns of place and grow our communities in harmony and support of these

regional patterns of place. This leads to the development of unique and authentic cultures of place. Beyond this, however, is a spiritual dimension that infuses our entire relationship to place. Cultures and ecosystems grow more or less vibrant based on this spirit of place. When we lose touch with this spirit and begin to live in place in ways that no longer honor and worship its sacredness, we close ourselves off from the regenerative source from which new life can emerge.

In our world today, we sorely need to remember and reconnect with this wisdom and spirit of place. In our march toward modern civilization and toward industrial and post-industrial “progress,” we are increasingly destroying the very grounds of our existence (i.e., the soil, water, air, and energy producing capacities of our planet).¹⁴⁰ We are rapidly undermining the socio-ecological diversity and richness of the places in which we live.¹⁴¹ We are creating inner-cities and suburban sprawls that are spiritually and materially impoverished due to their disconnection with nature.¹⁴²

The re-emergence of a love for our environment and for our planet cannot come solely through some abstract call for sustainability (as noble as this cause is). It must first reawaken in our hearts and minds through our intimate contact with the natural world as it takes place around us. Nature is everywhere. And nature is not generalized and abstract, but rather uniquely precious in all of its diverse forms and places. As we come to re-embody the places in which we live, we have the opportunity to live more holy and authentically in tune with its rhythms and cadences; to come alive in its spirit as we come alive in our own nature and spirit.

In this author’s mind, more important than the question of why we have developed the current less-than adequate relationship to place that we have, which goes into such things as the mythology of the Fall from Eden, is the question of how do we currently get ourselves out of this profoundly disturbing mess.

This chapter has sought to frame what a more holistic relationship to place looks like. From this basis comes a succeeding question, one that will be the subject of succeeding chapters, of how we can as individuals and collective societies regenerate a more holistic relationship to place? This is a question worthy of our collective answer, one that becomes more pressing and shrill with every passing day in which we fail in our response to it.

CHAPTER 3

REGENERATIVE PLANNING FOR THE HABITATION OF PLACE

Urban planning has existed as long as cities have existed. According to planning professor Melville Branch, city planning's "development has generally followed the progress of man and his institutions."¹

Urban planning as a professional field, however, is relatively new. It began in the early 20th century largely in response to the industrial revolution and its effects on urban migration. As immigrants and rural farmers flooded into the cities in the late 1800s in search for jobs and the dreams of modernization, cities became overwhelmed in their management and the need for civic reform and long-range planning became increasingly apparent:

Urban planning is a professional discipline, one that originated in the early decades of the 20th century, largely in response to public concern over the deteriorating social and economic conditions brought on by industrialization. What began as a loose affiliation of architects, politicians, and public health officials expanded to include the expertise of economists, sociologists, geographers, and lawyers, as the intricacies of city planning became better understood.²

According to planning historian Mel Scott, the seeds for professional planning began in the 1870s through a growing need and call for reform due to the mounting pressures of industrialization:

Indeed, the spirit of reform had been gathering force ever since the 1870s, and as the cities increased in complexity, their industries multiplying, their slums spreading, and their central areas becoming intolerably congested, this spirit suddenly invested every aspect of urban life, even the least political.³

The function of urban planning can therefore be described as “the attempt to organize and design urban places—from major cities and suburbs to small towns and rural villages—with the aim of meeting certain goals, such as improving efficiency and quality of life.”⁴

What urban and regional planning deal with are the multitude of elements that together make up the system of city life and its surrounding area. According to President A. Lawrence Howell of Harvard University, the ‘city problem’ is “like a jelly fish. You could not pick up a part here and a part there and succeed. You had to lift it altogether.”⁵ City and regional planning, therefore, deals with the system as a whole and all the elements which together make up and influence the life of a city and its region. These elements include (to name a few), “transportation, housing, the economy, architecture, public facilities, the environment, open spaces, zoning laws, land-use regulations, community development, and resource conservation.”⁶ To this list may be added such items as food production and supplies, waste-management, and ecosystem stewardship. Even then, the list is unexhausted.

In addition to the numerous operational elements that together comprise the scope of urban planning, planning also involves the interplay of numerous interrelating parties. In the United States this includes the federal, state, and regional, and city governments, business groups, real estate developers and architects, and citizen groups, to name a few.

Evaluating Thinking in the Planning Field Today

Many authors offer detailed assessments and critiques of our current land-use planning and development patterns. According to Beatley and Manning, these patterns involve one of “continuing to accommodate the march of low-density, auto-dependent, sprawling growth; facilitating the loss of natural landscapes that sustain us and other life on the planet; perpetuating our irresponsible patterns of waste and

consumption; and witnessing the continuing decline in the bonds of community and the quality of our living conditions.”⁷

Calthorpe & Richmond observed that

Our land use patterns are the physical foundation of our society and, like our society, they are becoming more and more fractured. They increasingly isolate people and activities in an inefficient network of congestion and pollution rather than joining them in diverse and human-scaled communities. Our faith in government and sense of common purpose essential to any vital democracy are eroding in suburbs designed more for cars than people, more for market segments than communities. Local zoning laws and development patterns designed to separate and segregate us make it difficult for Americans to work together on the social issues facing the country.⁸

For the purposes of this dissertation, however, we will focus not on the evaluation of content (i.e., best practices, design ideas, etc) but rather will assess the field of urban and regional planning from the lens of the nature of mental processing that currently is being employed in the field and the nature of results it tends to produce. The central question being asked here is: To what degree is planning, as it is currently conceptualized, holistic in its scope, design, and implementation? To address this question, this dissertation will evaluate the field of urban planning in terms of the four levels of psychology that were introduced in chapter one. In doing so, this dissertation will seek to evaluate the nature of mind that is brought to planning and, to the degree that it is not whole, the hazards that it tends to generate.

Planning at the Psychology of Adjustment Level

A psychology of adjustment, as discussed in chapter one of this dissertation, looks at the world in terms of normative standards and the correction of behavior deviant to these norms that threatens the continued functioning of the system.

Most of the field of urban and regional planning, when evaluated through this framework, can be seen as operating at this adjustment level of psychology.⁹ Three of the primary mechanisms used in planning today are that of zoning laws, building codes, policy legislation. By their nature, they serve to standardize land development practices within a given area. They are employed in the effort to manage potential hazards (short and long term) that could disrupt civic life. They are what Adeleye and Olayiwola described as mitigation processes:

Mitigation processes for disaster risk reduction could be seen as a means of institutionalizing the appropriate principles and techniques into the daily actions that local governments are required to take as apart of their on-going planning and development responsibilities. The principles and techniques that are needed to be institutionalized by the local government may include town planning tools like the adoption and implementation of city master plans and some development control mechanism. Mitigation is a process of the decision made and action taken at the local level to minimize results of disaster events on human settlements. It is concerned with keeping a hazard from becoming a disaster. Mitigation is charged with planning and building the various systems and components of the built environment to minimize loss of life, damage to property from the actual event and the subsequent socio-economic disruption. It is concerned with incorporating the best hazard resistant designs into the building and other facilities.¹⁰

For instance, certain building codes came about in the effort to reduce danger of fire within a building and its surrounding area.¹¹ Other codes help to manage such issues as noise control, light pollution, energy and water conservation, parking, and garbage disposal. Zoning deals with more systemic concerns regarding how the city and region functions, such as transportation flow, population density, and land use functions. Policy serves to reward and punish different modes of behavior, thereby helping to give direction to development trends. Giving tax breaks to households that install solar panels, for instance, is a policy incentive that helps to encourage alternative energy use.

Zoning, codes, and policy development in turn help guide the development and approval process for schematic designs. Schematic design work is a fourth primary tool for land-use planning and development. Schematic designs determine the general scope, preliminary design, scale and relationships among the components of a development project. In addition, they serve to set expectations in terms of aesthetics, end uses, budget, and schedule.

While such tools as zoning covenants, building codes, policy legislation, and schematic designs are instrumental to urban and regional planning, they deal strictly with the functional elements of city and regional life. When focus is solely placed on developing functional solutions to city and regional problems, it is the proposition of this dissertation that a number of hazards are faced. These are discussed in the following sub-sections.

The Hazard of Flatland/Non-developmental Existence. One of the dangers facing planning today is that the process of planning has become increasingly non-developmental.¹² A developmental planning process would engage citizens in helping them to re-imagine the place in which they live and the way they live in it, so that

they can realize a higher order quality of life. It would continuously be seeking to bring in new lines of insight and to harness the latent creativity of its people and place. It would seek to envision the community's evolving future and thereby how the community would need to develop in capacity in order to meet it.

A non-developmental process, on the other hand, works merely to solve problems in the effort to maintain current modalities of existence.¹³ It does not seek to generate increased civic investment nor help people realize new potential in the places in which they live. By doing this, we continue to perpetuate a problem solving modality of thinking that is reactive rather than generative. For instance, many communities continue to widen highway lanes to allow for more traffic. But they do not stop to think about the sprawl effect that this action has on the overall region, thus increasing our dependence on oil-driven cars. In a non-developmental mode of thinking, we would continue to do this until we were forced to do otherwise (e.g., when we run out of oil supplies, at which point our current infrastructure would become largely obsolete). In other words, we react to solve individual problems without stopping to think about the overall whole we are seeking to generate and regenerate as a living system over time. We are not seeking to develop our future but rather to react to the perpetuating patterns of past decisions and actions. As Michael states it, "we must seek means for 'directed self-transformation' or abandon ourselves to the consequences of drifting and muddling."¹⁴

The Hazard of Eliminating Perturbations/Closed-system Thinking. When planning's overriding goal is one of functioning efficiency, there is a tendency to seek to eliminate perturbations to the process. We want the process to go as smoothly as possible, which is understandable. The danger, however, is when this desire leads to highly controlled, non-participatory processes that engage civic stakeholders in only a token fashion, thus creating buffers to authentic engagement and co-creation in the community. This leads to a process that is too constrictive and top down, thereby diminishing the potential for creative, holistic solutions. It also tends to lead to an increasingly disenfranchised populace who feel less and less a sense of ownership and stewarding role in their community. At the extreme, this can lead to what has been called *social engineering*. Michael defines social engineering as such:

By social engineering I am referring to an attitude toward planning and society, held by those doing the planning, as much as to a method. It is elitist, top-down planning which assumes that the

planners hold the monopoly on expertise. Those doing it are impatient with and resistant to any feedback from the environment that might upset their plans or the means used to implement them. Goals tend to be set rigidly and emphasis is placed on means for reaching them. It is more a “can-do” attitude in which the problem is assumed given and the task is to devise efficient means to “overcome,” “breakthrough,” or “war on” the problem. Careful assessment of the problem is usually bypassed on the grounds of expediency...¹⁵

The Hazard of Conformity to Standards/Normalization. One of the dangers of using code standards to regulate development is that, if they are applied too automatically and without creative flexibility, they can lead to the homogenization of place. Codes create standards that development projects must meet. As principles for guiding and auditing development projects, they can be quite useful. When they become too automated and form specific, however, they tend to encourage uniformity of design. They then become what Beatley describes as “sterile, avisual, legalistic, zoning requirements.”¹⁶

Ask any architect or developer about their experience of trying to do something out of the norm and more than likely you will hear stories about the resistance of their local planning department to entertain new and untried ideas. If planning becomes merely an oversight process to ensure the minimization of building hazards (as it unfortunately has in many locales), then creativity and the natural evolution and diversification of building forms within a place will be discouraged.

Moreover, if building codes and standards that worked in one locale are adopted in another without conscious consideration, the result is often one of artificial imposition on place. As such, we try to make the place conform to pre-conceived, abstract ideas and forms as opposed to being informed and inspired by the place and its unique patterns. This leads to the development of uninspiring settlements that are incongruent with their environment and monotonous in form.

The Hazard of Societally Defined Values. When planning becomes largely a normalizing force, it tends to self-reinforce current modalities and patterns for organizing settlement growth. In other words, it becomes an instrument for the current trends and demands of a society.¹⁷ As such, no meta-value system is developed by which to guide and evaluate planning. Things are done a certain way not because they make sense in the larger view of things, not because they are sane in that they lead to greater health and wholeness for the community, but rather because they conform to what’s known and what’s in fashion.

Without a connection to the larger, underlying values that all members of a community and place hold in common, there is also the tendency for fragmentation in the planning process.¹⁸ As such, sub-communities, each with their own sense of what their settlement should look like and how it should operate, begin to fight over the future direction of their community. This leads to a politicized process, in the lowest sense of the word, in which planning is reduced to a process of forwarding partisan agendas rather than working to develop a healthier whole. What is missing in this is a deeper dialogue regarding what a healthy and whole community looks like and therefore what the *nonnegotiables* are that all community members hold in common.

As philosophical historian Tom Morris states it

Wherever people work together [or live together], we have an urgent need to attend to corporate spirit. As we can see from its Latin root, *corpus*, or “body,” the word corporate denotes first and foremost any body of people with shared interests or concerns, living together or working together in an organized way.¹⁹

Without this corporate sense of spirit, a community cannot truly plan as a meaningful whole.

The Hazard of Mechanization. If the planning process becomes too functionally oriented, there is a tendency to view the settlement and its region as a series of working parts rather than as a living place. As such, we fail to pay attention to the living quality of the place and its sustenance. Planning then becomes thing-oriented, leading to the specialization of parts. Just like in western medicine where there are doctors for every part of the body, this approach results in increasingly specialized departments of expertise. We develop dazzling technologies for each of the parts, but lose sight of the living whole we are seeking to generate and regenerate.

In addition, this fragmentation of the planning process also tends to lead to a lack of coordinated planning between planning levels (e.g., city, county, and regional, state, etc.) and between the design and execution phases.²⁰ In fact, unlike in many countries in Western Europe, city planning as a profession in the United States has been separated from implementation. According to Altshuler, “the job of the city planner is to propose courses of action, not to execute them.”²¹ All of this leads to an increasingly disempowered and

ineffectual planning process that works as a multitude of autonomous parts rather than as a coordinated and synchronized working whole.

Planning at the Psychology of Human Potential Level

A psychology of human potential looks at the world in terms of the development of our humanity through self-actualization processes. In the planning field, there has been a growing movement toward increasing community participation and collaboration in the planning process.²² As such, planners are beginning to expand their envisioned role from one of being expert engineer to that of being facilitator of a community-wide process in which a broader set of expertise and insight can be woven into the process. The American Planning Association in fact now defines the role of planning as follows:

The goal of city and regional planning is to further the welfare of people and their communities by creating convenient, equitable, healthful, efficient, and attractive environments for present and future generations... It is a highly collaborative process. Through this collaboration process they help to define the community's vision for itself... In the analytical planning process, planners consider the physical, social, and economic aspects of communities and examine the connections between them.²³

What this statement demonstrates is an evolution in conceptualizing the role of planning within a community. According to Landry, planning is moving away from "being solely concerned with the physical and the planning of land uses to being a generalist activity covering an understanding of economic dynamics, the social, the environmental and, increasingly, the cultural as well as the process of engaging communities in visioning where they live."²⁴ This shift requires a shift in the capability of planners from merely functional expertise to that of process facilitator and community engager in developmental visioning processes.

Such planning moves from merely seeking to manage hazards that threaten the potential operability of the community to that of seeking to use the planning process as a developmental tool for its citizens and their involvement in the community. According to Dunn, the process of reorganization is often "defensive in character—that is, it is directed toward preserving and extending the life of the system in the face of change rather than taking the form of a directed self-transformation in pursuit of some higher order goal."²⁵ While the prior approach can help protect the current functionality of the city, it is the latter that can help lead to the enablement of a creative and self-organizing city.

One important tool used in planning today to creatively engage stakeholders in the process, is that of the *charrette*. “A charrette is a brief but intense design workshop in which stakeholders and interested citizens are invited to contribute to the work of an interdisciplinary team of urbanists during the earliest stages of design and planning.”²⁶ What this allows for is a much more co-creative and less top-down approach to planning. In addition, the designs and plans that come out of such a process, tend to have more stakeholder buy-in than ones that are merely drawn up in a black box and then handed to the community by the team of experts.

We have so far looked at what planning is at this second psychological level and what are some of the tools for implementing at this level. Let us now turn to the potential hazards and limitations that such a level faces when it too becomes a closed system paradigm. These hazards are addressed below.

The Hazard of Anthropomorphism. By focusing so strongly on the development and unfoldment of human beings, a psychology of human potential runs the risk of becoming overly human-centric. In planning, this can lead to a process that seeks to involve the creative input of its human residents but does not take into consideration the natural patterns and workings of a place. This leads to development projects that are not reciprocally beneficial to the socio-ecological places in which they are situated and more often than not have degenerative effects on the surrounding ecosystem and their indigenous cultures. This unfortunately is the case for most development projects today.²⁷

The Hazard of Non-Systemic Thinking. By focusing on self-development, there is a tendency to focus solely on individual entities and their growth, as opposed to the development of the collective whole of which these entities are a part. In urban planning, this can result in a focus on the city as a bounded entity without taking into account the larger systems of which the city is a part. A city’s footprint is quite large in terms of its effect on the globe. Not taking this into account leads to non-reciprocal and thereby unsustainable practices.²⁸

Even green technologies, when applied non-systemically, lead to unsustainable development. According to architect Bill Reed

Sustainability is not a deliverable. Sustainability is not a thing. Sustainability is not simply about efficient technologies and techniques. It is about life – a process by which living things such as

forests, neighborhoods, people, businesses, mushrooms and polar bears ensure their viability over the long haul. It is a process of reciprocal relationship – a process by which living things support and are supported by a larger whole.... Buildings can be worked on as autonomous, but only become meaningful and beneficial when understood as part of the living fabric of place.²⁹

Water-recycling measures, for instance, can conserve household water use, but if the larger footprint of urban development on the watershed is not understood in a region, the very source of that water could be undermined over time.

The Hazard of Individualism Without Collectivism. One of the greatest challenges that planning leaders face in our society today is that of NIMBYism (*not in my back yard* syndrome). Giving people a greater voice in the planning process does not necessarily lead to better planning, particularly if an individualistic mindset is predominate in the field. In such situations, the activation of citizens can very well lead to an increased resistance to change (both negative and positive) in their area.³⁰ People may be active in fighting big-box chain stores from coming into their neighborhood, for instance, but then turn around and shop at such stores in the neighboring district. Historical review boards may protect existing buildings, but can often hamper the ability of a city to innovate.

In such neighborhoods, real community is weakened by a lack of shared stewardship and caring.³¹ What exists is a collection of individually activated citizens each pushing for their particular agenda/concern but not really thinking about the good of the whole of which they are a part. This leads to neighborhoods where people continue to not know their neighbor three doors down, even though they are ready and willing to sign a petition to save the integrity of their neighborhood against some perceived development threat.

What is often lacking in an individualistic society is sufficient community infrastructure for developing coalescence between residents and for managing commonwealth systems.³² Most watersheds in the United States are broken up spatially into numerous states, counties, cities, and townships, each with their own autonomous planning departments and very little whole systems management processes. Coordination in such a situation tends to be reduced to one of water rights negotiations and legal battles. What gets left out in all of this is the voice and health of the watershed as a whole. This leads to results like the current status of the Rio Grande, where the river now in fact dries up before it reaches the Gulf in certain years.³³

The Hazard of Rootlessness. In our society today, there is lack of incentive for legacy landholding. Sense and connection to the socio-ecological and spiritual place within which one lives is not often encouraged in our fast paced, upwardly mobile seeking culture. More and more people are becoming transient to the places in which they live due to modernizing and globalizing trends. This, in fact, has been one of the documented challenges of suburbanization. According to Gruenberg

Some of the difficulties stand out particularly in the new factory-made suburbs that have sprung up in all parts of the country around large cities. In these we can see, along with the material advantages they offer to families escaping from crowded homes in crowded cities, the effects of uprooting people from their communities, their churches, their educational, cultural and civic activities. Especially acute are some of the results of detaching people from the extended family of three generations or more, and throwing them together with strangers who come equally uprooted; for in many of these new types of suburbs such extended families are completely non-existent.³⁴

Even people who do seek a connection to place often move into a particular area for its cultural and ecological wealth, yet as the area becomes gentrified and overcrowded, they move on to the next place to seek that same nourishment.³⁵ What is missing in such a relationship to place is any sense of reciprocal caring and commitment. It is one thing to get people motivated to act against a particular planning initiative, and quite another to build a more systemic relationship and connection between people and their place. It is the assertion of this author that planning at this second level of psychology tends to not address this.

Planning at the Psychology of Living Systems Level

A psychology of living systems moves beyond a focus on human actualization through self-actualization to that of seeing the greater systems of which we are a part and within which we have a role of serving and adding value. In planning, this involves developing a community's sense of identity and vocation in a particular place based upon integral understanding of the place, its right working and the right working of people in relationship to that place. This involves people having a role in improving and adding value to the places in which they live as opposed to merely seeking to arrest disorder and tread less lightly on the planet.

At the individual development project scale, this involves stakeholders beginning to see how their value adding role is a part of and contributing to the evolution of the whole socio-ecological community of

which they are a part.³⁶ At the citywide scale, this involves each city or community beginning to realize its vocational role within the larger bioregional systems of which they are a part. At the regional scale, it is about a regional place developing a sense of identity and vocation in the global world, what this place uniquely energizes and brings value to in the world.

While interest is growing, only a small minority of the planning field operates at this level of understanding and engagement.³⁷ Two of the highest goals that are presently articulated in the planning field are those of sustainability and ecological restoration. Both of these goals speak to arresting disorder and to doing less harm on the planet, but they do not lead to, by themselves, working toward enabling higher order potentiality within a given ecosystem. Sustainability, as it is currently conceived, speaks to maintaining the effectiveness of our economy and cultural way of life while depleting less and less resources in our environment. According to the United Nations World Commission on Environment and Development, sustainability can be defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”³⁸ As such, the central focus of sustainability is the maintenance of life, not its improvement.

Restoration, as it is currently conceived, seeks to repair the damage that human inhabitation has made on ecosystems. As such, it seeks to return a landscape to a preconceived ideal of what was. In the words of the U.S. National Research Council, “Restoration is defined as the return of an ecosystem to a close approximation of its condition prior to disturbance. In restoration, ecological damage to the resource is repaired.”³⁹

Both of these goals for planning, while valuable in their own right, are examples of what systems organization consultant Carol Sanford refers to as the workings of the elemental mind.⁴⁰ What this nature of mind typically involves is seeking to arrest disorder and return things to a conceptualized ideal. As such, we seek to minimize our negative impact, solve problems, restore things to a preconceived ideal, and at best take preventative measures so that such problems do not arise in the first place. This way of thinking has also been referred to as first-order thinking.⁴¹ According to Argyris and Schön, first-order thinking occurs when “members of (an) organization respond to changes in the internal and external environment of the organization by detecting errors which they then correct so as to maintain the central features of theory in use.”⁴²

This elemental or first-order thinking can be contrasted to what is called higher-order thinking or second-order thinking. According to Argyris and Schön, second-order thinking involves “restructuring the norms themselves together with associated strategies and assumptions,”⁴³ based on reconsidering notions of the good. Sanford’s definition of higher-order thinking aligns with this definition, but goes further by positing that fundamental to such a process is the reconnection to what is core to that unique living organization as a source for illuminating its unique higher order potential.⁴⁴ Such an approach, therefore, requires a deep understanding and insight into the particularities of that particular system, how it uniquely works, *who* it is (i.e., its unique being quality), and what it is called to become and contribute to the larger world of which it is a part. According to Sanford, it requires an evolutionary, value-adding perspective, rather than just a sustaining, self-maintaining one.

Applied to the planning field, this latter approach involves deeply studying and understanding the way in which a particular socio-ecological system has worked through time. When taken from the perspective of tens of thousands of years, a planner can begin to see the larger core patterns of a place and how humans have worked with or against these patterns through time. This is what development consulting firm Regeneration refers to as an “Integral Assessment of Place”:

We conduct a whole systems (cultural, economic, geographic, climatic, and ecological) assessment of site and place as living systems. We look for what is integral to how they work as dynamic, interrelated wholes, and to their unique nature and why. We compare the current trajectory to the inherent evolutionary potential (what it has the potential to be). We look at the development implications—opportunities and hazards. And we make recommendations for how humans can enable the health and continuing evolution of a place and ourselves as a part of it.⁴⁵

Such in-depth assessment of place, while a growing trend, is still relatively rare in the land-use development and planning field. While GPS mapping and ecological assessment tools are becoming increasingly popular in the field, most of these tools tend to be used for the functional goals of ecological preservation and restoration and/or for sustainability and the minimizing of human impact on the land. As such, these assessments do not enable a comprehensive socio-ecological understanding of how human inhabitation within a place can serve to enable the growing health of the land through time.

Beyond an in-depth, living systems understanding of a place and how it works, a second critical tool for planning at this level is *story of place*. A good story helps to translate complex, systemic understanding

into core metaphors that speak to the heart of something and brings it to life for people. As conservationist Peter Forbes states:

An authentic story has power. Stories of the land awaken and rekindle these experiences of wholeness inside each and every one of us. Stories help us imagine the future differently. Stories create community, enable us to see through the eyes of other people, and open us to the claims of others. We tell stories to cross the borders that separate us from one another.⁴⁶

A story of place serves to bring the essence of a place alive for people. It helps to create a common sense of identity and caring for where they live and how they live there. To continue with Peter Forbes poetic words: "Story is ultimately about relationship. The soul of the land becomes the soul of our culture not through information or data alone, but through the metaphor and analogy of story."⁴⁷

One of the critical elements of a good story of place is the regeneration of a shared sense of identity and meaning within place. Each place and culture has its own identity, its own character. A story of place helps speak to and recreate a community's collective sense of identity as an integral part of a larger living whole.⁴⁸ By reconnecting people to the life-giving essence of the place in which they live and have stake in, the grounds are created for building a shared sense of meaning and purpose that can reach across long-standing social divides and create opportunities for renewed and deepened collaboration. Place is something we all share in common, that is if we can get beyond our projected meanings and reconnect to the underlying intrinsic beauty and value that a place has to offer. It is this shared identity source that a good story of place helps to regenerate for people.

A second critical element of a good story of place is the reconnection to a shared sense of vocation and purpose as a socio-ecological whole. Every place serves a unique value-adding role as an integral part of this planet. By helping people reconnect to this intrinsic role of place, a story can help to illuminate a higher order role that people can play within that system. Studies, in fact, show that people are much more likely to develop a sense of active caring and stewardship for place if they are given an active rather than passive role to play within that system.⁴⁹ This is what is meant by the use of the word vocation. Every place has a vocation that it is being called by the larger systems of which it is a part to serve. As a part of place, every member, both human and other, likewise have a unique vocation that they are being called to serve, in service to this larger vocation.

For instance, two landowners, whose properties sit at different points in a watershed, may be called to serve in different and unique ways. What is health enabling to the land at one point may not be in another. A good assessment of the land would be able to tell people this. A good story, in contrast, would help to inspire the people to act by connecting them to a higher order purpose that they feel drawn to serve. In Prairie Crossing, Iowa, for instance, homeowners shifted their landscaping practices in order to restore native grasslands in their area.⁵⁰ What inspired this change in behavior, according to Thompson, was the development of a higher order purpose within which each member could see his or her meaningful connection and role.

A third critical element of a good story of place is inspiring action. Stories build on themselves. They are not one-time occurrences. A good story should inspire and continue to be inspired by new action. No matter how uplifting a story may be, it is just a fable unless it helps people to see new possibilities for acting and being in the world. A story, therefore is not built just through words and images, it is also built through the physical structures that we bring into existence. These are the symbolic forms and actions we make and take that grow or undermine our story.⁵¹

The Statue of Liberty, for instance, is a symbolic structure that helps to capture and express a story of the immigrant roots and revolutionary dreams that helped found the United States. The statue itself was conceived by French historian, Édouard René Lefèvre de Laboulaye, and built by Frederic-Auguste Bartholdi, two friends who were inspired by the story of the United States and its founding. These two men, in fact, were so inspired that they dreamed up the idea of the statue and then raised the money and backing from their country to commission its construction and gifting to the U.S. Through these actions and through the construction of the statue itself, these two men were able to in turn feed the very story that inspired them in the first place.⁵² To this day, the statue continues to symbolize and feed this dream in the minds of people.

A good story of place, therefore, is a process that is continually building through iterative cycles of dreaming and manifesting. It is one to which each community member is able to uniquely contribute through their own actions and choices in life. Only in this way does a story continue to thrive and grow as an inspiring whole.

As with the other two levels of planning, it is the proposition of this dissertation that this third order of approach can also become a closed system paradigm when any of the other levels are dropped out, in

which case, the relevant story of place itself goes flat. A story of place is relevant and powerful in its coalescing force only to the degree that it continues to be sourced and regenerated by the evolving essence and spirit of a place. There are many communities where a story has become nothing more than a history, where people talk about a *golden age* and how life was more vital in their community at that time. Even really good stories become outdated if they do not continue to evolve with the community and culture that holds them.⁵³ As such, the story either becomes antiquated or it becomes increasingly romanticized as an ideal that once was and can be again. In the latter case, the story often becomes a distorted half-truth that becomes misleading in its coalescing force.

Likewise, cultural stories and myths and their supporting symbolic structures can become tools for divisive thinking and actions as opposed to truly holistic and whole health-creating developments. The swastika, for instance, is a powerful cosmological symbol that speaks to the spiritual workings of the universe used in Hopi, Indian, Tibetan, and Turkish traditions, among others.⁵⁴ Yet it was subverted by the Nazis into a divisive cultural symbol that was used to promote a false story of racial superiority that among other things led to the horrific genocide of Jews and other minority groups.

Even in the example of the Statue of Liberty, it too becomes a potentially divisive symbol when it is used to celebrate the immigrant roots of the United States in a way that overshadows the painful stories of those who had not come over to this country as immigrants in search for freedom and opportunity, but rather were forced to under chains (in the case of African slaves) or were stripped of their homeland and cultural liberty (in the case of Native American cultures). What gets lost in such examples is the coalescing spiritual force that sourced the symbol in the first place. As such, the symbol loses its capacity for spiritualizing the whole.

What, therefore, is required above and beyond this third level of planning, is the development of the capacity in a community to continue to regenerate the stories and dreams of their people and their places in ways that lead to increasing health and wholeness, that coalesce rather than divide and alienate, and that continue to realize new potential for who they are and can be in the world as a collective whole. This requires an ongoing dreaming process, one in which people allow the place itself to dream through them. Only in this way will a story continue to be a living story of place. This nature of dreaming process will be explored below.

Planning at the Psychology of Spiritualization Level

Every place has a unique essence and spirit. Regenerative planning involves a process of re-connecting to this essence and allowing it to source our planning and decision-making processes. This can be described as an embodied dreaming process, in which we hermeneutically experience the phenomenon of a place (i.e., embody the place and its dreams) and allow it to speak through us. As such, we become instruments for place and its ongoing evolution.

The importance of this notion of the dream of place, and one's connection to it, is consistent with the experience of many spatial designers and artists. According to the renowned landscape architect, Lawrence Halprin, it is the receptive connection to place that inspires his designs; designs that speak to a community's collective dreams and lift the psyche of its people. In talking about one of his projects, Halprin describes his work process as follows:

The place isn't really mystical, but it has a quality. When we could get people to come together and work as a group to report on how it felt to them, we came up with a design which has worked and has inspired other people all around the world to try this kind of approach. This is the kind of design which generates a spirit all its own, which encourages the human spirit to soar. That's when real magic starts to happen.⁵⁵

Regenerative planning is first and foremost a process for becoming receptive to, and in service of the spirit of place. When we do so, inspiration can come which opens our imagination to new possibilities and elevates our collective psyche. This is what many great architects and designers through history have attempted to do. According to architect Christopher Wren

Architecture has its political use; public buildings being the ornament of a country; it establishes a nation, draws people and commerce; makes the people love their native country, which passion is the origin of all great actions in a commonwealth... Architecture aims at eternity.⁵⁶

Great architects design structures in ways that speak to and elevate the dreams of a people and their place. Such structures are healing in the sense that they move us to greater wholeness by elevating in our minds that which is greater than the sum of the parts, that which we love about a place and feel called to serve.

Two planning tools that are important to this fourth level of planning are what this dissertation refers to as (a) *embodied dreaming*, and (b) *eupsychian structures*. Neither of these two terms is common to the field, and yet the actions that they depict are evident in practice. Therefore, both terms will be explored briefly below with examples that help to illuminate their relevance to this level of planning.

The term embodied dreaming speaks to processes that help create the appropriate space and mental state in which designers, planners, and citizens are enabled to reconnect to the spirit of a place and allow this source to inform and inspire their design work. This nature of process, in which one allows the place to dream through you, is what designers like Lawrence Halprin speak to in their work.

The term eupsychian structures can best be understood by first understanding the meaning of the term eupsychian. Maslow, who coined the term *eupsychia*, defines it as that which speaks to “the ‘higher’ forms of interpersonal and social organization.”⁵⁷ According to Maslow, the term, as differentiated from the term *utopian*, does not speak to abstract ideals but rather implies “only real possibility and improvability.”⁵⁸ Furthermore, Maslow goes on to define the term as “moving toward psychological health or healthward. (And) it can imply the actions taken to foster and encourage such movement.”⁵⁹ Based on these root meanings and for the purposes of this dissertation, eupsychian will be defined as that which is spirit elevating in quality and lifts people’s minds up to a sense of a higher-order potential for themselves and their community, as that which is health-making in the larger sense of health as greater wholeness.

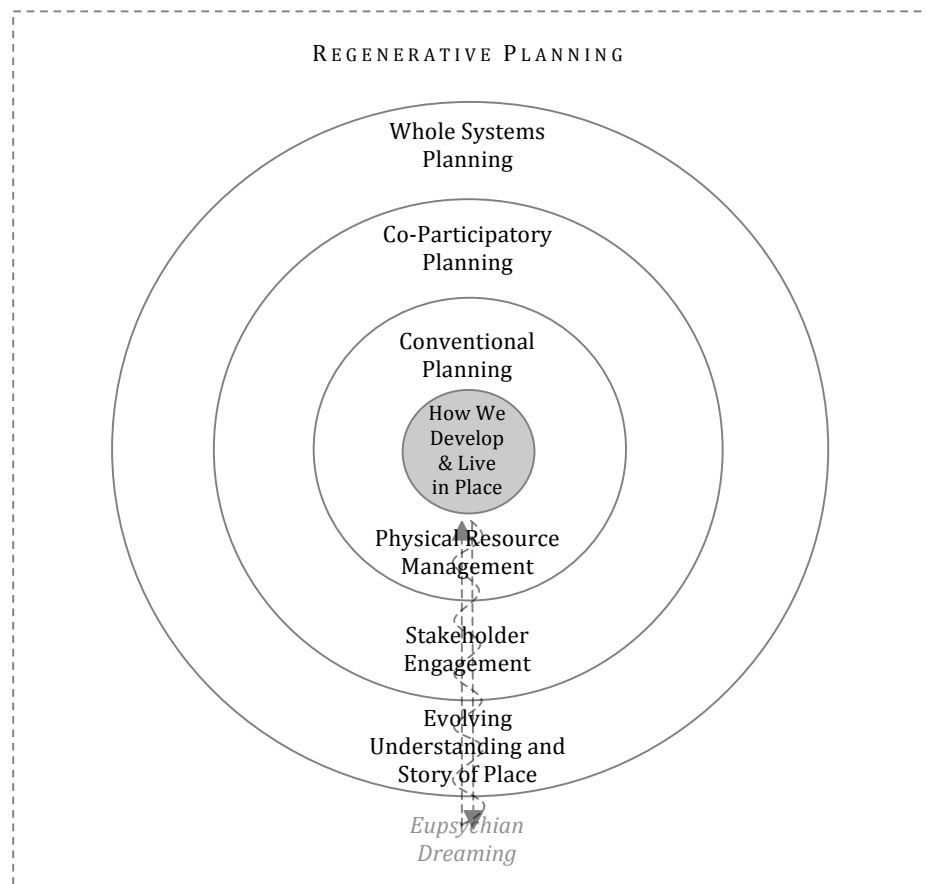
The term eupsychian structures, therefore speaks to a particular means, historically used by great architects, for taking this inspiration and developing it into manifestable projects that speak to and help lift up the essence dreams of a people and their place. As such, they act as acupuncture-like interventions⁶⁰, in which a single new development can spur the awakening of a collective community and region in imagining new orders of possibilities of health and wholeness. Such structures help to regenerate a people’s story and relationship to place.

The Golden Gate Bridge in San Francisco is an example of such a structure. It speaks to the golden heart quality of that region and lifts up in the mind a sense of the region as a whole by literally as well as symbolically connecting the southern and northern peninsulas and serving as an iconic gateway to the Pacific Ocean beyond. Such a structure helps to regenerate the story of its place.

Potentials in the Field

What would planning look like if it included all four orders of thinking reviewed above? Based on the evaluation made above, planning can be seen as largely having remained within the first order of thinking, that of problem-solving adjustment. Most conventional planning processes tend to focus largely on the functional operation of a city and the management of hazards so as to maintain a socially accepted level of functioning. Even the highest order goals that are being articulated in the field today (e.g., green-building, sustainability, etc.) can be and often are reduced down to a series of standardized measures (e.g., LEED ratings) against which to evaluate our actions against our ideals.⁶¹ While such measures are incredibly useful in raising the bar toward which our behavior is adjusted, all of this work is ultimately unviable if it does not include higher levels of work. In this dissertation, regenerative planning is defined as holistically including all four of these levels of work (see Figure 9 below).

Figure 9.
Four Levels of
Regenerative
Planning



Many professionals in the land-use planning and development field are now aware that good functional design does not necessarily lead to good cities and community settlement patterns. To use a musical metaphor, building structures are only instruments that, no matter how well they are crafted, are only as good as the musicians who use them. Good planning, therefore, requires more than just good technical design and management. It also requires the engagement of stakeholders in ways that develop their sense of co-stewardship in the planning process.

According to Landry

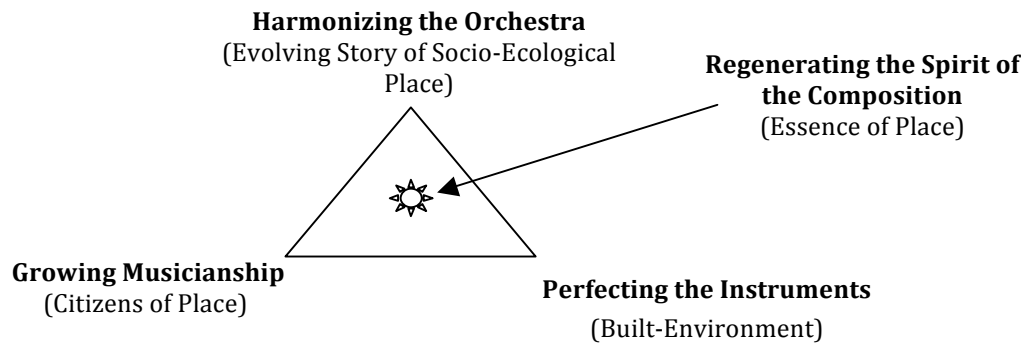
Planning is about to be different from what it used to be – it is set to be a more holistic process. Soon the idea of planning as merely land-use planning will probably feel defunct, as will the reliance on technical code-based work. We are likely to incorporate new insights, such as psychological and cultural literacy, and new people will be brought in and consulted. We are moving from simply asking to actively involving. This paradigm shift in the worlds of planning will take time to unfold in its fullness. It will not happen in a smooth, soothing, business-as-usual way... The shift from ‘participation in planning’ where you merely consult to ‘participatory planning’ where you involve will get us beyond the knee-jerk consultation processes so common yet unempowering. The planning professions should see this moment as an opportunity for them.⁶²

To carry the musical metaphor even further, there is now just beginning to be a larger realization in the planning field that humans and their settlements are merely one section of musicians in a much larger orchestra who must learn to play together in harmony. Without such systemic understanding and stewardship planning, we face such catastrophes as Hurricane Katrina and its devastation of New Orleans.⁶³ Stories of place are one means by which cultures in the past have sought to weave human understanding and meaning with ecological understanding and insight.

Finally, to complete this musical metaphor, there is a single composition that all orchestra members are being called to play together. This is the spirit of a place that sources and feeds the ongoing vitality, viability, and evolution of its members. In an orchestra, if spirit is lost or becomes occluded in the playing, the music tends to lose its vitalizing quality. It becomes mundane so to speak and people begin to lose interest in it. The same is true for place and our relationship to it. A regenerative planning process therefore must continue to re-source this spirit and elevate it the minds of those who live there.

This musical metaphor is depicted below in the following diagram (see figure 10).

Figure 10. Orchestral Metaphor of Regenerative Planning



Therefore, there is a potential to regenerate the planning process itself in a way that develops a more holistic approach to settlement patterns within place, so that we create living, multi-dimensional design rather than static, flatland structures, landscapes, and civic stakeholdership. This involves moving from what Landry described as a shift from a participation model, in which you merely consult, to a participatory model, in which you truly involve.⁶⁴ It requires evolving the site assessment process to one of systemic socio-ecological understanding. It includes developing and evolving stories as a means for building solidarity. It involves working to create eupsychian structures that speak to the dreams of a place and its peoples.

Chapter Conclusions

This chapter sought to develop an overview of the field of urban and regional planning in terms of four different orders of thinking and relating to place. From this, it articulated a potential for what the planning process might become if it were to address all four of these levels holistically.

Based on these definitions, the following two questions become pertinent: (1) What would a comprehensive regenerative planning process look like that worked at all four levels of aim? (2) What nature of process skills would planners need to develop in order to help lead such a regenerative process? These questions are explored in the following two case studies.

CHAPTER 4

A LEADERSHIP CASE STUDY OF CURITIBA, BRAZIL

This case study examines the leadership processes of a core team of planners in Curitiba, Brazil. It is presented in narrative form, followed by a brief single-case analysis section and summary of findings. More in-depth analysis and cross-case findings will be presented in chapter seven.

Data used for the case study include public documents, participant interviews, field notes from site visitations, and multi-media images and maps. Participants in the interview process were selected from a core team of organizational and planning leaders that has been integral to the initiation and implementation of the community planning and engagement process. Due to ethical considerations, the researcher has sought to protect the anonymity of research participants. No names or other identifying features are attributed to quotes derived from the research interviews. Henceforth, all research participants, when directly quoted, will be referred to as *interviewee* in the case narrative. However, due to the public nature of these case studies, names and leading figures are mentioned in relationship to public document sources and citations.

The Story of Curitiba

Curitiba is a large provincial capital city in southeastern Brazil with a population of roughly 2.4 million inhabitants. Curitiba is not known for any exceptional landmark; there are no beaches or wide, bridge-spanned rivers. It rains quite often. It has slums or shantytowns that have sprouted up around the city's edges with roughly 1,700 new peasants migrating from the countryside to the city every month.¹ Its population has skyrocketed over the past fifty years, growing sixteen-fold. Its city resources have been scant.

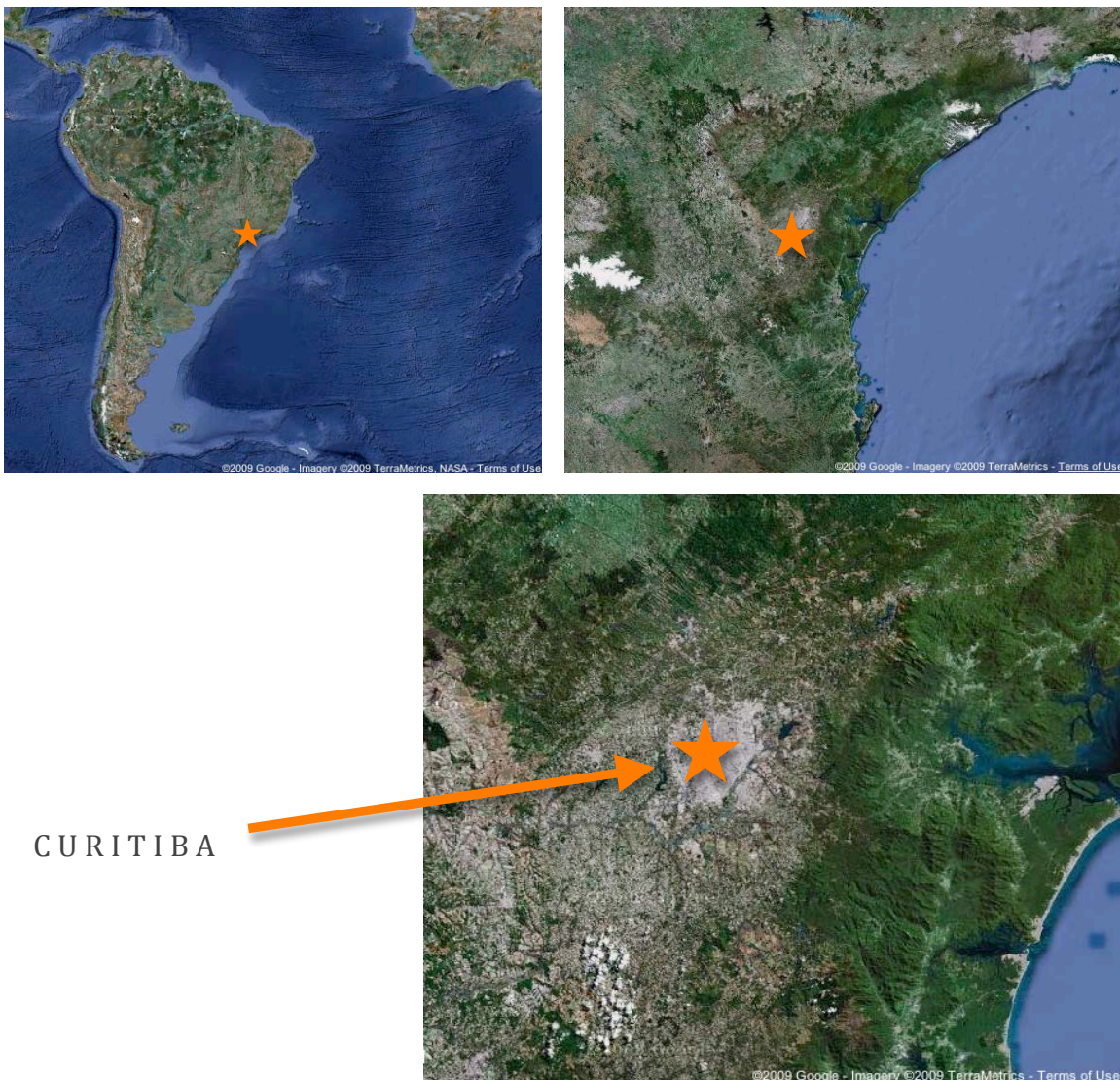


Figure 11. Satellite Maps

Given all of this, it is a small wonder that Curitiba has not followed in the footsteps of most other burgeoning third world cities faced with these dilemmas. Rather than becoming an urban metropolis overrun with poverty, unemployment, inequity, and pollution over the past half-century, Curitiba and its citizens have instead seen a continuous and highly significant elevation in their quality of life.

Though starting with the dismal economic profile typical of its region, in nearly three decades the city has achieved measurably better levels of education, health, human welfare, public safety, democratic participation, political integrity, environmental protection, and community spirit than its neighbors, and some would say than most cities in the United States.²

Many, including the United Nations, have in fact lauded the city of Curitiba as now being a leading model for ecological urban development and planning. The statistics show why:

- The amount of green space per capita in the city has risen in the past thirty years from a dismal half-a-square meter of green space per inhabitant to over 50 square meters per inhabitant. In fact, nearly one-fifth of the city is now parkland.³
- Over 1.5 million trees have been planted by volunteers along streets and avenues.⁴
- Curitiba's fast and efficient bus system carries more passengers per weekday than New York City's and runs with an 89 percent approval rating.⁵
- Auto traffic has declined by over 30% since 1974, despite the facts that Curitiba's population has doubled in this period of time and that there more car owners per capita in Curitiba than anywhere else in Brazil.⁶
- The city of Curitiba has the highest percentage of citizens who recycle in the world. In fact, over 70 percent of all the city's trash is now recycled.⁷
- Curitiba's 30-year economic growth rate is 7.1 percent higher than the national average, resulting in a per capita income that is now 66 percent higher than the Brazilian average.⁸

What makes these accomplishments even more astonishing is the fact that all this was achieved through the means of a very limited civic budget. Many of Curitiba's programs are designed to help pay for themselves, to address multiple civic issues at the same time, and to systemically coordinate with and enable the working of other programs. The "Green Exchange" is a good example of this systemic approach to planning.

In the slums or favelas, where refuse vehicles can't negotiate unpaved alleys, small trucks fan out in a massive 'Green Exchange.' For bags of sorted trash, tens of thousands of the city's poorest receive bags of rice, beans, eggs, bananas, and carrots that the city buys inexpensively from the area's surplus production. The results are both better public health (less litter, rats, disease) and better nutrition.⁹

Furthermore, the excess money generated by the city's recycling program is then used to fund additional educational and health programs for the poor. Many of these educational programs are in turn housed in retired (yet fully operational) city busses that have been remodeled into mobile classrooms. And many of these educational and social programs themselves generate income. For instance, free day-care centers for the poor give kids the opportunity to create art-and-crafts, which are then sold in local souvenir shops. As one resident explains it

The city is the best human invention. But to make it work, a city's society must be understood as a train that will go no faster than its slowest wagon or car. City governments exist to push the slowest car so the whole train will go faster.¹⁰

Fundamental to all of these changes in Curitiba is the change that has taken place in the culture itself. The spirit within the Curitiba culture and its civic pride has risen dramatically. In a survey conducted in the 1990s, over 99 percent of Curitiba residents told pollsters that if they could choose anywhere in the world to live, they would choose Curitiba. This contrasts with similar polls conducted in New York City, in which 60 percent said they would rather live somewhere else, and in Sao Paulo, in which 70 percent said they would rather live in Curitiba.¹¹

Historically, Curitiba has been known as being a rather conservative and introverted society. This, however, is now changing. As local writer, Valencio Xavier, wrote, "Curitiba has always been a very tight city . . . before we were like oysters that crack open just a little bit to get the world passing by. Now we are opening up."¹² Curitiba residents take pride in their city and on the whole are much more intrinsically motivated to act on behalf of the collective good of their city and fellow citizens. In the 1990s, downtown shopkeepers formed a trade association that collected dues to fund joint advertising and sponsor activities. According to one of the local shopkeepers, Anibal Tacla

In any other part of Brazil, if you talk to a merchant and ask him to pay three hundred dollars a month for an association, he will give you a big four letter word. Here, eighty percent joined up. Everything's like that now – if you talk to Curitiba residents about separating garbage, they will do it, because they know they live in a different city. This mind-condition – it's very important, and it's the exact reverse of what happened in Rio [and for that matter most other modern cities].¹³



Figure 12. City Skyline in 2008

Given all of these measures of success, the question that arises is how was this feat accomplished; how did Curitiba successfully bring about such a large-scale transformation and regeneration of their city structure and culture?

While the answer to this question is not simple nor clearly apparent from what has been written on Curitiba, all the literature sources reviewed for this study agreed that central to this transformation project's success was the leadership and visionary role held by Jaime Lerner, the several times mayor of Curitiba and principal architect of the city's urban redevelopment over the past thirty some years, and his core group of planning associates.

Their story begins in the 1950s and 60s. During this period of time, Curitiba was dealing with the straining effects of an explosive population growth that had started to gain momentum in the 1940s and 50s.

Between 1950 and 1960, in fact, the population of Curitiba doubled.¹⁴ Such rapid, unmanaged growth stretched the limits of what the city infrastructure could handle, in particular in terms of its ability to handle automobiles. Traffic jams had become more plentiful and air pollution was worsening. City officials at the time responded to these changes by calling for the implementation of a city plan that had been drafted two decades earlier to deal with the issue of reconfiguring the city for the automobile era. It, like most urban plans of that time, called for widening the main streets of the city to include more lanes and building a highway overpass that would link two of the city's main squares. Implementing this plan, however, required knocking down many of the turn-of-the-century buildings that lined the downtown and building the highway overpass directly over the historic main-street of the city.

To the city administration's surprise, uproar and resistance to this plan was unexpectedly strong. Leading this resistance was Jaime Lerner and his associates in the architecture and planning departments of the local branch of the federal university. For Jaime Lerner, this city plan and the ripping up of the downtown which it proposed, meant the end of the city which he had lived in and loved all of his life. According to Lerner, "They (the city planners at the time) were trying to throw away the story of the city, they were trying to emulate, on a much smaller scale, the 'tabula rasa' miracle of Brasilia (Brazil's capital city that was built from the ground up as a modern city with modern high-rises and speed-ways)."¹⁵ The city was at a crossroads. Was it to go the way of most modern cities and accommodate itself whole-heartedly to the automobile, even if it meant the loss of its unique and historical character, or could it find another path, one that would reconcile its modernization needs with its historical character and the principles of human-scale and ecological-based development?

In the end, the state's development company refused to finance these projects and instead offered funds to enable a new master plan to be drawn up. Thus, in 1965-66, a new and quite innovative master plan was developed, led by the same architects and planners, including Jaime Lerner, who had fought against the implementation of the first city plan. Contained within this plan, as it turned out, were the seed thoughts for reconciling the modernization needs of the city on the one hand and the desire to preserve and grow the historical character of the city in a human and pedestrian friendly manner on the other. The implementation of this plan began five years later, when as a result of a political fluke Jaime Lerner was elected mayor of Curitiba at the age of thirty-three.

Having now become mayor, one of Jaime Lerner's first actions was the brilliant and highly symbolic move of remaking the downtown in one swift and bold feat. Having helped to save the historic downtown street just five years earlier from being covered by a highway overpass, Jaime Lerner now sought to revitalize this central street by making it a pedestrian mall. Such a move, however, was unheard of in the field of city planning at the time. According to Lerner, "I knew we'd have a fight. I had no way to convince the storeowners a pedestrian mall would be good for them, because there was no other pedestrian mall in Brazil. No other in the world, really, except maybe Munich. But I knew if they had a chance to actually see it, everyone would love it."¹⁶ Knowing this, Lerner and his staff prepared for almost a year before they acted directly on the downtown street. First, they created traffic alternatives that made vehicle flow on the main street less necessary. Then they worked on designing a plan for the street redevelopment that would create the least resistance from shop-owners and their customers: "I told my staff, 'This is like a war.' My secretary of public works said the job would take two months. I got him down to one month. Maybe one week, he said, but that's final. I said, 'Let's start Friday night, and we have to finish by Monday morning.'"¹⁷ And this is exactly what they did. Moving in with over one-hundred construction workers on Friday night, they jack-hammered up the pavement and put in cobblestone, streetlights, and tens of thousands of flowers. The following business week, the same storeowners that were threatening legal action to fight this move, were asking the mayor to extend the pedestrian mall even further so that their stores too could be included in it.

The following weekend, however, the newly created pedestrian mall faced another threat. Members of the local automobile club planned a "retaking of the street" by driving their cars through the mall in protest. Rather than setting up a police barricade to stop them, Jaime Lerner sent in children. When the protestors arrived at the mall, they found dozens of children sitting in the former streets painting murals. Thirty years later, business and cultural life in this pedestrian mall is flourishing, and the mall now extends over twenty square blocks in the downtown area.

To this day, every Saturday morning (except when there is heavy rain) children still take over the pedestrian mall and paint and draw pictures in commemoration of the day when Curitiba took back their city's historic center and returned it to pedestrians and a more human-scale way of life.

Figure 13. Pedestrian Mall in 2008



A Unique Approach to City Planning

One of the most distinctive and outstanding aspects of Jaime Lerner and his associates' approach to city planning was their unique work process. Every morning, Lerner and his core team of planners would meet in a log cabin retreat in the middle of a forested city park. There, according to one of the leaders interviewed for this study, they worked only "on what (was) fundamental, on what would affect a large number of people and could create change for the better." Then, in the afternoons, they would return to city hall to meet with their constituents and to deal with the city's day-to-day needs.

By structuring their workdays in this way, these planners put a much greater daily emphasis on large scale, visionary planning than most city governments do. Yet, at the same time, they sought to temper this deeper, visioning work with continual interaction and exchange with the needs of the people. In other words, the mornings helped them continue to see and work on the bigger picture of the city and its evolution, while the afternoons helped them to stay grounded in the needs and pressing issues that the people of their city faced on a day-to-day basis. As one interviewee states it, while “I had all kinds of pressure and people coming and showing their needs every afternoon, I could react in a good mood because I knew we were working on what was really fundamental.”

According to the planners that were interviewed, this balance between needs and potentials was critical to their success.

For me, a good strategy is a daily balance between needs and potentials. Why? Because if you are working only with the needs and going every night and asking what are the needs of this neighborhood or that, you won't change anything. On the other hand, if you are just looking at a large number of people, the big problems, you'll be far from the people. So you have to keep a daily balance.

Each morning was structured as a charrette-like process. According to Jaime Lerner, “we use the charrette, always the charrette.”¹⁸ The charrette is a creative design process developed in architecture that involves gathering key specialists from different fields together in an intensive meeting to quickly try and sketch out solutions to a given challenging situation. In the U.S., the charrette is often employed in the architectural field as a means for stimulating creativity and collaborative alignment between design team members. In such cases, however, the charrette is almost always used as an individual event rather than as a continual day-to-day process. By turning their morning meetings into a continual charretting process as opposed to a solitary event, the city planners of Curitiba were able to generate the creative space in which to continually delve deeper into their understanding of how the city worked as an integral system and how to refine solutions that would enable its continuing improvement and evolution through time. “It was always a learning process,” said one of the interviewees.

By working in this way, the city planners helped to create a shared sense of commitment in their morning meetings toward continually working to improve the critical systems in their city. As one interviewee states it, “you always need to make improvements,” and the focus of the morning meetings was

“to identify and work on those improvements.” Depending on what they were working to improve, they would call in the critical leaders from that system to join their meetings. As this same interviewee describes the process, “When the discussion was on transportation, we got everyone involved from transportation. When discussion was community engagement, the same.”

It is interesting to note that while each member of this core team brought to it a particular professional background and strength, they did not see themselves as specialists but rather as generalists in their orientation. Some of the planners have stronger architectural backgrounds, some have stronger civil engineering backgrounds, some are more focused on transportation, some have greater background in the ecology of the area, some are stronger in their ability to navigate political issues, and some are more focused on developing the community and organizational systems. But rather than each working in their own area of expertise and periodically reporting out to others, they instead developed a working process in which they would work as a team every morning on the collective issues of the city. In this way, they could each bring a distinctive perspective that helped to hold a picture of the larger whole, so that the solutions they came up with were much more multi-faceted and systemic in their approach. In the words of one interviewee, “the multi-faceted success of our projects occurred because we were not specialists. Specialists think the world spins around their specialties, which reduces creativity greatly.”

Authentic Core Concept

Critical to working every morning on the fundamental issues of the city, was the development of a core concept or *scenario* for guiding the city’s structural growth. As one interviewee puts it

I’ve been in many places in the world, many cities. It’s hard to find out from them the scenario. What is the design of the city? What’s the real structural growth? For me, the city is a structure of living, working, leisure, everything together. And in many cities with very sophisticated planning, I couldn’t get an answer from them as to what is the design of the city. (I’d say) “Make me a sketch of your city,” and they were afraid to do this. There was always some spots, some arrows, but never a real design, a real concept, which is the structural growth of the city. For me, for all of us, this was debilitating. I cannot work in a place where I do not know what is the scenario.

This core concept for guiding Curitiba's structural growth, however, was not something that the planners believed could be invented out of thin air. Rather, they believed that it was critical to derive this concept from an understanding of how the place authentically worked in the past. According to Jaime Lerner

Every city has its hidden designs – old roads, old streetcar ways. You're not going to invent a new city. Instead, you're doing a strange archeology, trying to enhance the old, hidden design.¹⁹

This "strange archeology," however, required more than just an understanding of historical human settlement patterns. It also required an understanding of how the ecological system worked and flowed through the area. Curitiba exists on a forested flood plain, through which multiple rivers intersect each other multiple times. In this flood plain, the greatest diversity and accumulation of biological life occurred along the river corridors. When humans settled the plain, first as indigenous peoples and later as European and other immigrant groups, they set up transportation corridors that ran alongside and tended to mirror these river corridors. This flow of commerce and human exchange, which tended to match the flow of biological exchange, led to the development of many of the major road arteries that run through Curitiba today.

Through this process of "strange archeology," Jaime Lerner and his core team saw that life (both human and other) tended to concentrate along these corridors of flow. Based on this understanding, they realized that the traditional radial model of urban growth, in which there is a densely populated city center and increasingly less dense populated areas as you move outwards from the center, did not match the way that life worked in their city. Therefore, they developed a core concept for Curitiba's structural growth of "a linear city with structural arteries."²⁰ This linear growth concept involved concentrating development of commercial and residential use along the major corridors of transportation. Therefore, the tallest buildings, the most commercial activity, and the greatest intensity of public transportation routes occur along these corridors. In addition, the land around the biological corridors (i.e., the rivers) was bought by the city and developed into linear parks that now weave throughout the city, often parallel to the densely populated urban transportation corridors. As one interviewee put it, this helped to "keep the rivers flowing naturally."

This core concept of linear growth has continued to guide the master planning and zoning policies of the city for the last thirty plus years.²¹

Co-Responsibility and Solidarity

Even with good internal organization and a clear concept for orchestrating planning and design, the city planners could not have accomplished what they did without engaging the people of Curitiba. According to two-time Mayor Cassio Taniguchi

No matter how well run we are, we still would not have all the resources we need. We can only get those resources by mobilizing more people to participate and take co-responsibility for devising solutions. We cannot organize ourselves in linear ways because people do not live their lives in straight lines.²²

With each situation, with each project that the planners worked on, they would seek to develop the appropriate partnership with key stakeholders in order to develop a shared sense of commitment, stewardship, and investment in its success. As one interviewee puts it, “every problem has its own equation of co-responsibility.” For example, when the planners developed their concept of an above ground subway-like system using rapid transit busses with designated lanes, budget constraints would have normally required buying the busses slowly over time, which would have taken years and years. Instead, they approached private bus companies to develop a joint partnership of co-responsibility. Through dialogue they developed a partnership in which the city would pay for the implementation and maintenance of the rapid-transit infrastructure and, in accordance with the companies, would set the fare and bus schedules. The bus company in turn would provide the buses and charge per kilometer of travel. By developing the partnership in this way, Curitiba was able to implement a public transit system that today is recognized as a world-leading model. It carries over 2.4 million passengers per day, maintains low fares for travel so that poorer segments of the population can use it, does not cost the city one-cent in subsidies, and makes a healthy profit for private bus companies. This is an example of a successful partnership of shared responsibility.

Whether it was getting private bus companies to be co-responsible for the success of the transit system, or getting youth to be co-responsible for the maintenance of parks through programs for growing and planting trees and flowers, or providing carts to entrepreneurial homeless people to collect recyclable trash in public areas, in each case the city sought to do more by doing less while growing the co-commitment of

others. According to Taniguchi, “the social system will only have a growing impact by not growing, and so encouraging business, the voluntary sector, and citizens to take more responsibility.”²³

To develop such equations of co-responsibility, however, requires more than just good negotiation skills. It requires what one interviewee describes as a quality of “solidarity” with the people. According to this interviewee, “With solidarity I mean not manipulating one against the other, it’s having the people inside of you, of understanding what’s there.” This solidarity requires compassionate engagement with people and their place, of listening to and finding out what it is that they love about the place in which they live, what it is they identify with, and find meaning in by living there. As Jaime Lerner described it

You have to have a certain kind of complicity with people when you’re trying to understand what are their problems, what are their dreams. People, they are not living in the city just for survival. You have to love the city. They have to have this relationship that has to do with identity, with a sense of belonging. There are some neighborhoods that don’t even have [public-transportation or schools], and the people are happy. Why? Because their father lived there; their grandfather lived there. There’s a sense of belonging to a place.²⁴

Understanding people and what it is that feeds their sense of identity and belonging in a place, therefore, is a key element of solidarity. But, solidarity involves more than just a shared sense of identity and belonging. It also requires understanding and relating to what it is that people are striving to achieve, to what their dreams are individually and collectively. As Lerner stated it

There is no endeavor more noble than the attempt to achieve a collective dream. When a city accepts as a mandate its quality of life; when it respects the people who live in it; when it respects the environment; when it prepares for future generations, the people share the responsibility for that mandate, and this shared cause is the only way to achieve that collective dream.²⁵

By demonstrating this respect for all citizens, the poorest included, Jaime Lerner and his team developed a level of faith and trust with their citizens that is unheard of in most modern cities. These same citizens, in turn, became more willing and motivated to accept co-responsibility of their city’s mission: “They are willing to build their own simple housing, especially with a little architectural counsel and utility connections. They volunteer for environmental projects, they start cottage industries. Civic life flourishes.”²⁶

Urban Acupuncture

Building the faith and trust of their citizens, however, required more than just solidarity, it also required good, highly effective action. As Jaime Lerner stated it, “We were gaining the support from the population by showing and doing.”²⁷ Metaphorically, Lerner depicts this process of leveraged demonstrative action as one of urban acupuncture: “I call it urban acupuncture, which is where you focus on key points that increase energy and flow.”²⁸ The idea of urban acupuncture is that while planning takes time, there is also need for immediate, leveraged action that can help jump-start the process of regeneration within a community. As one interviewee put it, “the whole process of planning takes time and it has to take time. But sometimes you shouldn’t wait. There is some focal point where you can do it fast and you can create a new energy that can help the whole process of planning. It’s not instead of the process of planning, it’s to help it happen.” And in the words of another

Urban acupuncture begins with the development of a good idea. A lot of people think participation is just asking or having meetings. This is okay, but you have to have an idea to start. It’s like a game, sometimes it’s the community that starts the game, sometimes it’s the political leaders or sometimes it’s a planning group. Someone has to start. And when they can go back and forth, my feeling is innovation is starting. With innovation, there’s an understanding that you cannot have all the answers, you cannot be so prescient as having all the answers. Start and give some room to people to react and with this room they can correct you if you are not on the right track. And that happens all the time in Curitiba. We didn’t start with a very good idea. We started with one idea and then little by little we understood that the whole process of planning is trajectory where you can correct always.

Good, innovative ideas, therefore, were not developed strictly in a back room by planning professionals. Rather, they were developed through collaborative and iterative processes among key stakeholders. They involved a process of taking initial ideas—whether they came from the planners themselves, from community members, or from third-party groups—and jump-starting a dialogue among stakeholders to refine them and build political will toward their manifestation. As one planner notes, “We are professionals who bring projects to completion. We are not paperwork professionals.”²⁹

In the effort to develop good ideas, Jaime Lerner and his core team developed a set of what they referred to as objective and subjective criteria by which to evaluate and refine potential ideas. Objectively, successful actions and projects were deemed those that were: (1) simple in design (simplicity), (2) easily and

quickly implemented (speed), and (3) inexpensive (frugality). Subjectively, five major criteria for developing and refining projects were: (1) human-scale, (2) landscape, (3) life, (4) memory, and (5) continuity. These objective and subjective criteria are explored below.

Objective Criteria

Simplicity. Simplicity, in the context of planning, has to do with refining an idea so that it becomes more and more paired down to its essential elements. Complexity can often kill a project, particularly when it is unneeded complexity. Furthermore, complex solutions often lead to increasing reliance on experts and professionals with specialized training. In contrast, simple grassroots solutions can empower people to be increasingly autonomous and creative in their implementation and ongoing management. A good example of this is the boarding stations that Curitiba developed for their rapid transit bus system. In working with Volvo, Curitiba developed a system where people could enter glass tubes that were built on sidewalks, pay their fare in advance as you would at a subway station, and be ready to board in large groups when the bus came.

To enable this system, the Curitiba planners worked with Volvo to design buses with doors that would open up like a subway train.



Figure 14. Rapid Transit Bus Tubes

Once they successfully developed the buses, another issue arose. How would they ensure that the busses lined up exactly with the opening in the tubes to ensure safe passage onto and off the busses? Volvo saw this as an opportunity to peddle their sophisticated engineering. They went to work on developing a computer system that would line up the bus with the tube with precision. The cost of the system, however, would have been almost as much as the bus itself. Given Curitiba's limited budget, this was not an acceptable solution. Moreover, it would only lead to increasing reliance of Volvo for servicing and parts replacement through time.

So what did the planners of Curitiba do? They turned to their own home-grown experts, the bus drivers themselves. According to one interviewee

Volvo wanted to sell us this system. It was almost as expensive as the bus. So I called the chief of drivers of the bus companies and I asked him, "could you park this bi-articulated bus in this boarding tube?" He said, "of course I can do it." "You can do it?" "Yes." He took a piece of tape and put it on the window of the bus and another piece of tape on the boarding tube. And the moment they were in the same line, he stopped. Since then, they've never had an accident.

Aligning pieces of tape to position the bus is an example of an elegant and simple solution. It did not require complex computer systems or a multitude of parts and outside suppliers—and it cost the city nothing. Yet if they hadn't adhered to their mantra of simple, elegant solutions, they may have deferred to Volvo or other "experts" to supply them with a superfluous solution. As Lerner put it, "It's very hard to understand simplicity. Simplicity needs a kind of commitment. You have to be sure of yourself. If you're not, you'll listen to the complexity-sellers, and the city is not as complex as they would like you to believe."³⁰

Speed. In addition to simplicity, successful urban acupuncture requires the ability to act swiftly and produce substantial effects in a relatively short period of time. As one interviewee states it

I think speed is important. Why? One, to avoid your own bureaucracy. Once the political decision is done, you have to do it immediately. Otherwise, it's like Sunday brunch with a huge family. Secondly, to avoid your own insecurity. Sometimes you have a good idea but you start to think it won't be possible. Start. Just start.

In other words, while planning may take time, action should be quick and decisive. Otherwise, the political will that is built up will be squandered. As Lerner put it, "with speed comes credibility."³¹

The downtown pedestrian shopping area is an example of this. If Lerner and his team hadn't been able to transform the area in one short weekend, they probably would have lost the opportunity through

infighting with local business and auto-rights lobbyists. By creating a measurable effect in such a short period of time, they instead were able to win over the populous and local business owners because they could experience the tangible benefits of the transformed area. This helped them establish their credibility and opened doors to further longer-term projects within the community.

Another example is the opera house, which they built in one month. The speed with which they built it, along with the beauty of the building itself, all helped to contribute to the sense of pride and possibility in their city. It since has become a symbol for their city and what they can accomplish.



Figure 15. Opera House built in two months out of recycled metal piping in an old quarry

Frugality. In addition to simplicity and speed, frugality was a third criterion that Jaime Lerner and his team used to evaluate and refine ideas. According to one interviewee, a commitment to frugality leads to increased creativity: “When you want creativity, just cut a zero from your budget. Just cut the zero and sometimes if you cut two zeros, you have more creativity.” Through their value for frugality, Jaime Lerner and his team always sought to develop projects that drew from the existing resources of their community rather than requiring the importation of new ones. Many of the city’s buildings were built from recycled materials. In fact, they used recycled materials before the term sustainability had even come into vogue. The reason? It made logical sense to save money and reuse available resources.

Subjective Criteria

For urban acupuncture projects to be effective, however, more was required than just quick, simple, and inexpensive solutions. In addition to these quantitative criteria, Jaime Lerner and his team also saw the importance of producing particular qualitative effects through their interventions. Such projects could not just be functionally efficient and effective in their execution, they also need to be revitalizing in ways that would ripple out to the surrounding community. As Lerner stated it

I have always had the illusion and the hope that, with a prick of the needle, it would be possible to cure illnesses. To begin recuperating the energy of a sick or tired point through a simple touch, you have to deal with the revitalization of this point as well as its surrounding area. I believe that some medicinal “magic” can and should be applied to cities, as many are sick and some nearly terminal. As well as the medicine needed in the interaction between doctor and patient, in urban planning it is also necessary to make the city react; to poke an area in such a way that it is able to help heal, improve, and create positive chain reactions. It is indispensable in revitalizing intervention, to make the organism work in a different way.³²

In the effort to generate such revitalizing effects with their interventions, Lerner and his team employed a number of subjective criteria to develop and refine ideas. Five such criteria are discussed below:

Human-Scale. The criterion of human-scale involves looking at how projects affect human relationships. Do they help support and enable more human and humane interactions or do they lead to increased isolation and dehumanization. The pedestrian mall is an example of this. By blocking off traffic and getting people out of their cars, Lerner and his team helped to create space in the downtown for people to slow down and interact more through face-to-face exchanges.

Landscape. The criterion of landscape involves looking at how projects fit within and integrate with their surrounding landscape. Architecturally, this involved developing structures that did not compete, or clash, with existing buildings and land features but rather supported and accentuated the character of the place. With transportation, each modality of transport, be it bicycle, bus, car, or train, needed a designated lane through the landscape. Like with the buildings, they cannot compete with each other but rather must integrate together seamlessly while supporting the autonomous functions of each. With ecology, the city

planners sought likewise to integrate the functions of the city with the critical environmental corridors that ran through their cities in ways that integrated and supported the working of each.

By turning these areas into parks, they allowed for the river to continue to flow and flood naturally while also providing a socially beneficial function to the city that did not compete but rather supported and appreciated this natural flow.

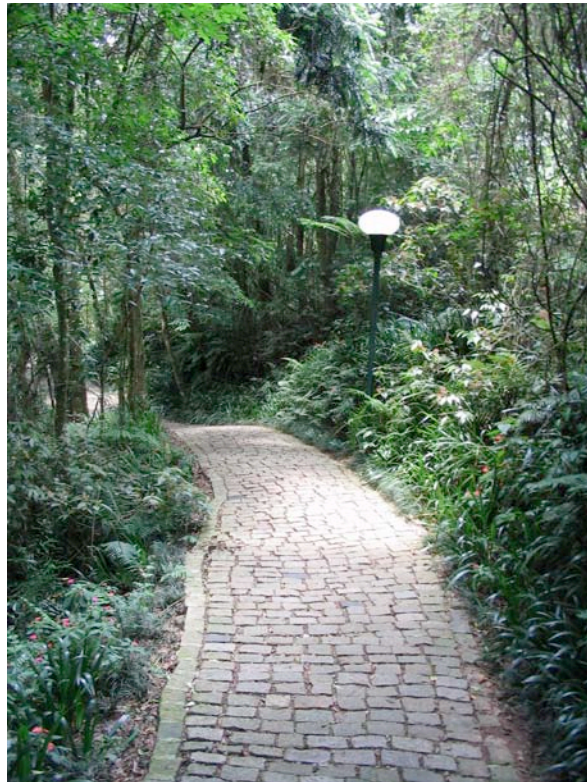


Figure 16. Forested Corridor in the midst of city

Life. The criterion of life involves looking at the life-generating aspects of a project. Does the project generate new life socially, environmentally, and/or economically in an area? Or is it degenerative in its effect (e.g., through pollution, economic disparity, etc). The downtown mall is a good example of this. Through its transformation, social and economic life was revitalized in the downtown, centered around streets and plazas with cleaner air, outdoor interactions, and beautiful arrays of flowers and trees. All in all, the effect was life-generating to the area, not depleting.

Memory. The criterion of memory involves honoring and celebrating the roots of the culture and place. Does the project contribute to our understanding and appreciation of the historic roots of a place, to its sense of identity and origins that have helped to make it what it is today and what it can potentially become tomorrow? As one city document explains

The whole process would not have taken place and the discovery would not have been made – together with the assertion of this identity – if the city could not redeem its past even as it blazed new trails leading to the future by revolutionizing its urban planning, its public transportation system, its social and economic profile, and its physical scenery. Memory is the anchor-ground of identity, and identity is the feeling of belonging to a place.³³

By employing the criteria of memory, Jaime Lerner and his team sought to develop projects that connected and reinforced peoples' sense of identity, love of place, and appreciation for the wisdom of past generations.

Continuity. Finally, the criterion of continuity helps to look at where focal points for intervention are most needed and highly leveraged within the landscape. Continuity looks at where the flows of energy and exchange fluidly occur within the system and where they are blocked or disjointed. For this reason, Lerner and his associates often targeted areas in the city that were cut off, underutilized or ignored by the general flow of day-to-day city life. This included old rock quarries, which they transformed into beautiful cultural centers, and shanty-town favelas, which they sought to reconnect to the rest of the city through their food-for-trash programs and youth-mentoring plant nurseries.

The criterion of continuity can be applied temporally as well as geographically. As Lerner put it, "you cannot have empty places during 18 hours a day."³⁴ For instance, the 24-hour street project was an intervention that Jaime Lerner and his associates made to create increasing continuity in the downtown social and economic life from day to night. Before it, life in the area largely shut down after daytime working hours. By introducing the 24-hour street, they created an easily policed center in the downtown where nightlife could flourish. From this simple intervention that brought people to the downtown at night, further restaurants, bars, and theatres began to stay open later, thereby expanding the area of nightlife well beyond the one block center.

Systemic Networking and Integration

For Jaime Lerner and his team to successfully engage in urban acupuncture, however, required more than just development of and acting on good ideas. It also required the ability to see and work with their city at a systemic level. As Lerner described it, the city is like a turtle and its shell.³⁵ You cannot cut it into isolated parts and work on them in isolation without destroying the quality of life of the whole. As one Curitiba document explains, the city is not just a series of isolated functioning parts, it is “a living being”³⁶ that is dynamic and growing as a whole.

To work with a good idea in isolation, therefore, is a haphazard approach in that it doesn't take into account the systemic implications and opportunities that any such intervention creates in relationship to the larger whole. Rather, Jaime Lerner and his team always sought to look at possible solutions in the context of the network of relationships of which they were a part and upon which they could have an impact. This led to the creation of far more integrative and systemic solutions than would otherwise have been possible. A good example of this can be seen in Curitiba's food for trash program:

“[T]he city has been buying surplus food from farmers in the surrounding countryside and trading it for bags of garbage – six kilos of trash bought a sack of rice, potatoes, beans, and bananas. For a kilo more, some eggs. The program began in 1989 when an outbreak of leptospirosis, a rat-borne disease, was noted in the slums. Because the streets are narrow and unpaved, the garbage trucks hired by the city couldn't get up to them to collect trash, which was piling up in the favelas. Lerner's team made a few quick calculations: how much would it cost to pay the garbage haulers (a private concern) to collect the trash from the crowded slums? When they had a figure, they determined how much food they could buy for that sum and then let the slum dwellers collect the trash themselves and bring it down out of the favelas to the trucks. Along the way, the program manages to support small farmers who might otherwise have to abandon their fields and migrate to town.”³⁷

By thinking in networking terms, Jaime Lerner's team developed a cheap, simple, but ingeniously designed, solution which addressed a number of different systemic issues at once, including waste management and recycling, urban ghettoization, health and nourishment, the economy of small farmers, and regional migration flows into the city.

Another example of this systemic way of thinking and working is the city parks. Lacking the funds to buy up green space for city parks, Jaime Lerner and his team instead integrated their city parks with the civic water management systems. They did this by using federal funds that were allocated toward flood control

solutions to buy up the land around their rivers and streams. In doing so, they created both natural flood control systems and open green spaces for civic recreation (see photo below). In this way, they integrated the functions of water resource management and public parks and recreation. Furthermore, they got children involved through school programs in the growing and planting of flowers for the city parks. In this way, they even further integrated the different functioning arenas of their city.

In each case, Jaime Lerner and his team started with a single pressing problem, whether it was garbage collection or flooding. But, rather than try to solve it in isolation, they looked at it in relationship to the larger working systems of which it was a part. This enabled them to successfully generate design solutions that integrated various functions of the city together toward the mutual benefit of the whole. As Lerner stated it, “Good planning will encourage the bringing together of functions...a city that regroups its functions will save a great deal of energy.”³⁸ In other words, by integrating functions, Curitiba planners were able to save both energy and resources while maximizing the systemic benefits of their initiatives.



Figure 17. Natural Flood Control Park

Generative Centers

By integrating functions through urban acupuncture-like interventions, Jaime Lerner and his core team always sought to maximize the generative capacities of their citizens to participate in and contribute to the life and wellbeing of their community. Thus, education programs were an integral aspect of their success. Rather than organizing such programs in a generalized, one-size-fits-all approach, however, Jaime Lerner and his team focused instead on developing small, simple programs that were directly tailored and linked to the specific needs and generative potentials of a given neighborhood and population group in the city.

In each case, they worked on organizing educational programs with these groups and neighborhoods through the development of energizing centers (i.e., acupuncture focal points) that engaged and elevated peoples' abilities to work and contribute to the city as a whole. Some examples of geographical centers, where they developed acupuncture-like projects to elevate and educate their citizens, were: the downtown pedestrian mall, the botanical gardens, the open amphitheatre, the lighthouse centers (library/educational centers) in each neighborhood, the 24-hour street, the environmental university, and youth-mentoring plant nurseries in the favelas. In each case, Jamie Lerner and his core group saw the energizing center as having the potential to uniquely contribute to the city as a whole. And in each case, they sought to organize programs and projects in ways that would help maximize the generative potentials of each of these centers.

For instance, they saw that by blocking off automobile traffic to the downtown, they could maximize more of the unique value potential which that space had to offer the city, one of elevating human interaction and camaraderie.³⁹ To do this, they had to provide certain material resources, i.e., the stone to lay the walkways, the flowers to plant in the flowerbeds, and the lampposts to provide a particular nature of lighting. In addition, they had to provide certain human resources in an educative role in order to help facilitate the transformation of the downtown mall. Thus, for instance, they organized the children to paint murals in the streets in order to thwart a potentially divisive demonstration by automobile drivers. By organizing this event and its subsequent reenactments every Saturday, the civic leaders have helped to educate and remind people of their value priorities (i.e., children and human relationships take priority over automobiles and individualistic convenience).

Another example of Curitiba's educating organization can be seen in their development of low-income housing. Rather than following the conventional route of building low-income housing for the people, Curitiba's city government provided the resources and the support system to low-income families such that they themselves could build their houses. The city government provided the land, the money for building supplies, two trees, and an hour of consulting time with a city architect. Functionally speaking, the net result of this program was that these people got their low-income housing and the city saved themselves the labor costs. Even more importantly, however, was the energizing enablement of these people's capacities to build their own homes and neighborhoods. What could have been a very monotonous and, energy-wise, flat neighborhood of low-income housing developments became instead the start of another uniquely energizing neighborhood (i.e., center) in the city. And therefore, through this process, these people's future generative potential as value-adding citizens of Curitiba was lifted.

Yet another example of Curitiba's organization can be seen in the development of their Open University of the Environment. Through this university, the civic leaders offered (and still offer to this day) free basic courses that introduce people to the nature of thinking processes that have stimulated the city's growth and evolution. Though anyone could come, the city sought, in particular, core groups of people organized around particular natures of work, what they call the *opinion-makers* of the city. With these groups, they tailored the course to fit their particular focus of work. One such group was the taxi drivers. The taxi drivers were initially concerned about losing business to the newly developed public transportation system. Curitiba's civic leaders' response was to try to reorient the taxi drivers toward a different nature of aim. By helping them shift from a focus just on physical transport to thinking about tourism, they were able to see how they could elevate their potential earnings in a way that also added increased value to the city.

In each of these examples, the city developed educational support systems for their people. Each of these support systems were developed and/or tailored to focus on the needs of particular groups and centers within the city. By providing them material and mentoring resources, these systems helped to upgrade the energy and thinking capacities of people. In this way, by upgrading the people's capacities within these centers, they have helped to elevate and extend the unique generative potential that each of these centers bring to the city.

Infrastructure for An Evolving Legacy

One of the most striking aspects of Curitiba's regeneration is its longevity. For over thirty years, Curitiba has continued to be recognized as a leading innovator in urban planning and renewal. In fact, all six mayors that served between 1976 (the end of Lerner's first term) and 2008, including one outspoken opponent of Lerner's, followed and helped advance the same course that Lerner and his associates started.⁴⁰ Almost all of them have approached their city's problems with the similar spirit of creative design collaboration with their citizens:

Five of the six [mayors from 1976 to 1999] were architects, engineers, or planners who treated the city and its political leadership as a design problem, continuously unfolding as the city's 1965 master plan shed its rigidities and evolved to meet changing needs. Those six mayors' twenty-eight years (and counting) of good management have generated a flow of interconnected, interactive, evolving solutions – mostly devised and implemented by partnerships among private firms, non-governmental organizations, municipal agencies, utilities, community groups, neighborhood associations, and individual citizens. Curitiba is not a top-down, mayor dominated city; everyone respects the fact that, while it is served by leaders, many of the best ideas and most of their implementation come from its citizens. It encourages entrepreneurial solutions.⁴¹

This success, in large part, is due to the development of a city infrastructure and culture that has worked to continuously evolve its planning and management processes. One of the key organizing centers of this infrastructure is IPPUC (Institute de Pesquisa e Planejamento Urbano de Curitiba), which is Curitiba's official research and urban planning institute. This organization, of which Lerner and many of his core team associates have been president at one time or another, has been the on-going center for generating many of Curitiba's new and innovative design ideas. In a city that is ever changing, the IPPUC has been a presence of continuity throughout Curitiba's transformation. In fact, "the mayor, department heads, and staff involved in currently hot issues meet there every Thursday for a frank exchange on how to keep multiple city projects moving."⁴² Through this on-going working relationship between the IPPUC and city officials, continuity in the overall direction of Curitiba's transformation and development has been largely maintained through succeeding administrations.

What is noteworthy about the IPPUC is its dynamic approach to master planning. In contrast to many cities, which develop a Master Plan and then review and revise it every five to ten years, Curitiba's IPPUC was developed to review and revise the Master Plan on a year-to-year basis. As such, the IPPUC is

continuously involved in monitoring and assessing the effects of their projects as well as tracking overall trends and trajectories as means for delivering on-going feedback for revising and evolving the master plan. This in a sense creates a dynamic and evolving planning process as opposed to a rigidified plan that is set and followed for years to come.

Keeping the Story Alive

Curitiba continues to face challenges to its sustained success as an innovative leader. Its world-renowned public transportation systems are aging. Urban growth has spread beyond the city's governing jurisdiction to neighboring municipalities that don't necessarily hold the same ethos or planning infrastructure as does Curitiba. These inhabitants, while tax paying members of other municipalities, use Curitiba's public transportation system to get to jobs within Curitiba. In addition, gated communities are being developed on the outskirts of Curitiba⁴³ in ways that threaten the community-sharing ethos that has helped make Curitiba what it is today. Yet these pressures on Curitiba's city infrastructure today are no greater than what city planners have faced in the past.

The question of whether Curitiba can continue to sustain and evolve its legacy as leader in urban and regional regeneration rests more on whether or not it can maintain and grow its planning culture for innovation and systemic thinking. One of the major questions that now faces Curitiba is whether or not it can pass this cultural legacy on to the next generation of leaders. All the members of the core team that helped to seed Curitiba's revolution are now retiring from public office. The mayor that is now in power, while highly aligned with the vision of Lerner's team, is the first of this new generation. Will he and others who succeed him continue to place emphasis on the importance of balancing needs and potentials by meeting every morning to work on the larger vision of Curitiba's evolution? Will they continue to work on its systemic improvement, or will they merely maintain what was generated before them? Will they continue to hold the city and its people dearly in their hearts through a sense of real solidarity? These questions can only be answered through time.

Critical Perspectives

While this case narrative has been focused on studying the success patterns of urban planning in Curitiba, it should be noted that, as with any urban community, Curitiba also has its weaknesses and critics. According to Hawken et al., “Curitiba has significant problems still ahead of it: A third of metro-region houses are unsewered, 8 percent of its citizens still live in slums... and nearly half its children are not yet completing grade school.”⁴⁴ A big factor in this situation is that because of Curitiba’s successes, it “attracts much of the surrounding misery of southern Brazil, and cannot possibly handle it all.”⁴⁵ In addition, as mentioned earlier, urban growth has spread beyond the bounds of the municipality’s control and gated communities are being developed on the outskirts of Curitiba in ways that threaten the community-sharing ethos. At a planning process level, criticism has been made that the citizen participation process has not been inclusive enough and that it caters too much to the interests of business-elites.⁴⁶

In spite of these weaknesses, however, Hawken et al. proclaims that

Perhaps [Curitiba’s] most impressive achievement is that a simple philosophy and persistent experimentation and improvement have created a First World [ecological-minded] city in the midst of the Third World—breaking what Lerner calls the ‘syndrome of tragedy’ that paralyzes progress, and replacing it with dignity and hope... The existence of Curitiba holds out the promise that it will be first of a string of cities that redefine the nature of urban life.⁴⁷

Case Summary Analysis

The central research question of this study was: What are the critical internal and external success factors for implementing a regenerative planning process within an urban community? Based on the research data collected and through the process of collating, analyzing, and converting this data into the case narrative presented above, the following critical success factors have been deduced and are summarized below.

Internal Success Factors

The following is a list of some of the critical internal leadership capabilities that the lead planners of Curitiba developed in themselves and/or in their team in order to successfully carry out regenerative planning processes. For the purposes of this study, internal leadership capabilities are defined as the psychological means by which a person and/or group orders and organizes their thinking in order to lead a particular process at a given standard of quality. This involves looking at both 'how one thinks' and 'what one thinks about' in order to successfully carry out this process.

1. *Balancing needs and potentials.* Critical to Jaime Lerner and his team's success was their ability to keep a daily balance between deep, visioning work and on-the-ground pragmatism.
2. *Always learning, always improving.* Jaime Lerner and his team always worked on improvement, both in their own capacities and in their city's operational and governing systems.
3. *Knowing and loving your village.* Core to their ability to develop successful solutions that spoke to the hearts of their people and their place, was their continually deepening relationship with place. When asked what example Curitiba offers the rest of the world, Jaime Lerner answered as follows

The more you study your own condition, the deeper you get in your own reality, the more universal you are. Tolstoy said, 'if you want to be universal, sing your village.' This is true in literature, it's true in music... And it's true in cities, too. You have to know your village and you have to love it.⁴⁸

This caring relationship to place includes more than just a connection to its peoples and their histories. It also entails developing a heart-felt relationship with the landscape itself, with the rivers, the trees, and the birds that have shaped and continue to shape the identity of Curitiba and its region.

4. *Solidarity through compassion.* Jaime Lerner and his team sought to understand and care for the dreams and needs of their people. They did this by developing a felt sense of compassion and solidarity with

their citizens, by listening to and finding out what it is that they love about the place in which they live, what it is they identify with and find meaning in through living there, what it is they are aspiring to create in their lives, and what it is that is preventing them from doing this.

5. *Interpreting the collective dream.* Critical to their success was their ability to translate the dreams of their people into actionable concepts and projects, ones that spoke to and elevated the spirit and collective will of their city. This, in turn, helped to develop the political will and trust of their people, so that they could work on more extensive changes in the system.
6. *Generating a field of co-responsibility.* Jaime Lerner and his team sought to develop projects and programs in their city in partnership with their citizens, in ways that grew a shared investment in and responsibility for their success. Critical to this approach was their personal commitment and sense of co-responsibility. It was, to a large degree, their dedication and willingness to make things happen that helped win over others to their causes.
7. *Less resources, more resourcefulness.* Jaime Lerner and his team always sought to minimize their and their citizens' reliance on outside resources by instead focusing on solutions that harnessed and elevated the intrinsic resources of their people and place. This internalized restraint to reliance on outside resources was a key element in their ability to generate sustainable, place-based solutions.
8. *A systems networking mind.* Jaime Lerner and his team's ability to look beyond the externally manifesting problem to the systemic workings underlying it was critical to their ability to generate new, systemic solutions. By thinking in systemic and energetic terms, they were able to see links and potential links between the operating systems of their city, thus enabling them to develop integrative solutions and leveraging interventions at key focal points that saved the city energy and resources.
9. *Creativity and fun.* If Jaime Lerner and his team had not been doing what they loved and had fun doing it, they would not have accomplished all that they did. According to Lerner, the secret to creativity is "to

have fun. All my life, we have fun. We're laughing all the time. We're working on things that make us happy."⁴⁹

External Success Factors

The following is a description of some of the critical external process elements that the leaders of Curitiba incorporated into their planning process. For the purposes of this study, external success factors are defined as the explicate steps engaged in by a person and/or group in order to implement a particular process at a given standard of quality. This involves looking at 'what one does' in order to successfully carry out this process.

1. *Building a field of realization.* One of the critical dimensions to Curitiba's regenerative planning process was their investment into continuously deepening their vision and understanding of their place and its potential. This included the following three elements:
 - Building an operational infrastructure for working that incorporated much more time for creative visioning/charretting versus linear problem solving through specialized departments.
 - Studying the historical and present workings of the urban and ecological systems as a means for developing a core understanding of the city and place (i.e., how it really works and has worked through time and what it is working towards) and translating this into a core concept for guiding city planning. This is what Lerner refers to as the practice of "strange archeology."⁵⁰
 - Engaging citizens in co-responsible planning and management. This involves integrating key stakeholders (both public and private) into solution finding dialogues and developing equations of co-responsibility whereby mutually beneficial joint-partnerships are developed to carry out these solutions.

2. *Regenerating civic behavioral patterns through urban acupuncture.* A second critical parallel dimension of Curitiba's regenerative planning process was their work to orchestrate leveraged interventions that helped to rectify current and foreseen problems while at the same time introducing higher order work patterns in key sectors and areas of their city. This dimension included the following three elements:

- Identifying key focal points in the system for leveraging change and developing good intervention ideas that capture and elevate the dreams of the people
- Refining and upgrading the leveraging potential of these projects by systemically linking functions so that each intervening solution works on and integrates multiple systems.
- Developing educational support systems in relationship to each project as a means for elevating the distinctive generative potential of a given energy center and its people.

3. *Growing a legacy.* A third critical and concurrently occurring dimension of Curitiba's regenerative planning process was their work to institute a planning structure and culture that fosters ongoing innovation and evolution. Two critical elements to this dimension are:

- Developing a living master plan and planning infrastructure that seeks to continually improve its iterative loops of design and feedback between community members and city planners.
- Educating future generations of leaders by integrating them into the core team planning process and culture, so that civic planning wisdom is passed from generation to generation. It is unclear whether this last element occurred in Curitiba and to what degree.

CHAPTER 5

A LEADERSHIP CASE STUDY OF NOISETTE, SOUTH CAROLINA

This case study examines the leadership processes of a core team of planners in the North Charleston area of South Carolina. As in the first case study, it is presented in narrative form and followed by a brief single-case analysis section and summary of findings. More in-depth analysis and cross-case findings will be presented in chapter seven.

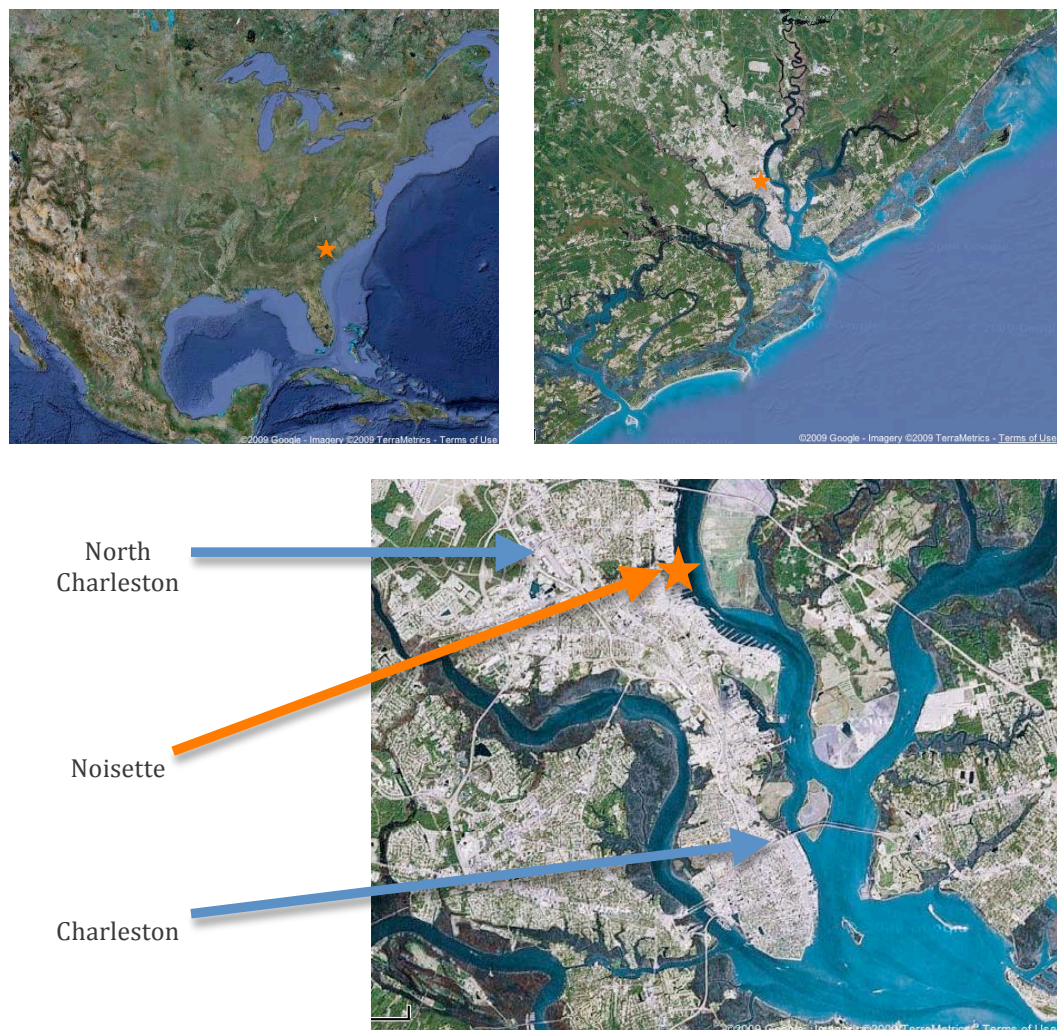
Data used for the case study include public documents, participant interviews, field notes from site visitations, and multi-media images and maps. Participants in the interview process were selected from a core team of organizational and planning leaders from both for-profit and non-profit organizations that have been integral to the initiation and implementation of the community planning and engagement process. Unlike Curitiba, the Noisette vision and its planning leadership arose from the for-profit sector, as will be explained in greater detail below. Due to ethical considerations, the researcher has sought to protect the anonymity of these research participants. No names or other identifying features are attributed to quotes derived from the research interviews. Henceforth, all research participants will be referred to as Noisette

leaders or *interviewee(s)* in the case narrative. However, due to the public nature of this case study, names and leading figures are mentioned in relationship to public document sources and citations.

The Story of Noisette

Noisette is a joint public-private venture between the city of North Charleston, South Carolina and the Noisette Company, co-founded by developers John Knott and Jim Augustin. According to journalist Keith West, the “Noisette Project (is) an ambitious \$1 billion, 2,800-acre development designed to renew the traditional urban core of North Charleston. Touted as the largest urban renewal project of its kind in the U.S., Noisette represents a major shift in governmental planning for the City of North Charleston.”¹

Figure 18.
Satellite
Maps



North Charleston, as its name suggests, lies just north of its more famous neighbor, Charleston. Situated between the Cooper and Ashley Rivers, North Charleston has the potential to be a very desirable place to live. However, due to its industrial wastelands and depressed economy, North Charleston has largely remained a real estate nightmare. According to Cunningham, "North Charleston is a community without a core."²

This depressed state of affairs was compounded in the 1990s by the closure of the local naval base. According to journalist James Scott, the base closure left behind "roughly 300 acres of asbestos-filled shops and rotting homes (that) compete for space with cracked roads and faulty water and sewer lines..."³ In addition, the closure left behind "contaminated lands, the eroded urban streams, the abused waterfront with its concrete shard riprap, the largely abandoned stretches of shops on the main street... (and) the economically distressed."⁴

Based on this situation, John Knott and his partners worked with the City of North Charleston to develop an urban renewal master plan for the naval base and its surrounding area. In this venture, John Knott and company embarked on an innovative experiment in the field of sustainable development and urban renewal. According to Knott

The Noisette Company has funded the master planning of the 3,000 acres and a community involvement process that was conducted over 2.5 years and involved hundreds of meetings with thousands of citizens. We invited them to envision and create their own future. The Noisette Company will only be directly developing 350 of the 3,000 acres. This investment model is a new vision to bring the skills of community developers to assist city redevelopment at a systems scale.⁵

This investment model, in which the developer invests heavily in the community as a whole as a means for elevating the developmental value of their property, is based on the philosophy that "an economically and environmentally depressed area will only be turned around when the community begins to act out of a renewed sense of value."⁶

The innovation of this investment model, according to Robin O'Malley, project director of the Environmental Reporting Program for the Heinz Center for Science Economics, and the Environment in Washington D.C., "pushes the boundaries farther than anyone in the development industry."⁷ As O'Malley stated:

[John Knott] could have done a sustainable green development in the footprint of the property and

left it at that, but his engagement of the community is more real than we know of, as is his commitment to the environment and economic sensitivity and really building that into the fabric of what he's doing.⁸

What this investment approach entailed was the undertaking by John Knott and his firm of a thirty million dollar, community wide master planning process in which "community meetings involved every neighborhood... (and) citizens identified what was needed and a plan was developed at no cost to the City."⁹

The project's stated aims, according to journalist Dennis Quick, are "to accomplish its North Charleston renaissance by reviving the natural environment, creating a community whose beauty and sense of sanctuary offer spiritual renewal, and encouraging respect for the new community and its inhabitants."¹⁰

To achieve these aims, the Noisette leaders engaged in a 12,000-year assessment of human and natural history of the region as a means to reconnect the community to its unique, place-based patterns of sustainability. In Knott's words

We discovered the pre-human settlement condition of the natural systems and overlaid the current developed framework of the existing city. This analysis showed that we could reconnect about 70% of the natural systems without taking private land and significantly improve the storm water performance of the community.

This research also established the basis for a socially durable community. Durable communities require two critical elements. First, every member of the community understands the unique history and heritage of their physical and social community and secondly, every member holds in common, a vision for the future to which they contribute.

These are classic principles for building great companies (which are also communities). Our inventory process gives us the ability to communicate the rich but forgotten history and our community-based master planning process helps to develop, articulate and build a common vision.¹¹

Coming out of this community-wide assessment and master planning process, the Noisette leaders then sought to develop an institutional framework of non-profit, for-profit, and governmental agencies to address the community's needs, while always seeking to develop a more sustainable and socially just culture over the long-term. As a part of this institutional framework, these leaders also set up a funding structure for ensuring the ongoing viability of this social and ecological work. This will be discussed in greater detail in the subsequent sections of this chapter.

While an assessment of the overall success of this project is still pending (it is only five years into an outlined process of twenty years), there are a number of indicators that make this project noteworthy in the

field. According to one journalist, “Noisette has sparked the revitalization of an impoverished area and opened the Cooper River to the North Charleston community for the first time in more than a century.”¹²



Figure 19. Noisette Creek

Economic indicators show a significant resurgence in the area. Between March 2001 and October 2005:

- Home ownership rose from 32% to 45%¹³
- The average time for houses on the market went down from 270 days to 30 days.¹⁴

- Housing values rose from \$54/sf, a level that was flat or declining for 20 years, to being \$140/sf¹⁵
- Commercial land, which was trading at \$50,000/acre, went to \$250-500,000/acre.¹⁶
- The school system adopted LEED as a base building standard. The first LEED School opened in South Carolina at \$106/sf versus the norm of \$120/sf.¹⁷
- In areas where no investment had occurred for 30 years, more than 2,000 new housing units have been started.¹⁸
- More than 800 new professional families with children are moving into the existing housing and changing the dynamics in the area and the schools (this has been done in a way that is seeking to avoid gentrification of the neighborhoods by increasing the urban in-fill rather than forcing out the existing, less economically advantaged residents)¹⁹
- More than 12,000 new jobs have been attracted to the Navy Yard in Noisette.²⁰

In addition to these economic indicators, the Noisette project has also garnered a number of national awards and accolades, including

- The American Society of Landscape Architects (ASLA) conferred their highest honor for design and planning with their award of excellence for the Noisette 140-page Master Plan. It has been hailed as setting a new standard for holistic city planning.²¹
- In 2008, Noisette was named one of the top ten neighborhoods by Cottage Living magazine²²
- In the same year, the Navy Yard in Noisette was named one of the top ten green housing developments by Natural Home.²³

Based on these initial, but significant, measures of regenerative success, the question of what the critical internal and external success factors were for implementing this process becomes pertinent. Through the compilation of in-depth interviews, document research, and field observations, a number of critical process elements emerged. These elements will be explored below in following order: (1) the origination of

the vision, (2) the realization of its potential in the community, (3) its implementation, and (4) its ongoing evolution and potential propagation to other communities.

Growing a Holistic Organization, Vision, and Approach

Unlike Curitiba, the initiating source and leadership for the Noisette project originated in the private sector, through the leadership of John Knott and his associates. The development of this guiding leadership and vision began many years before the project was initiated. Growing out of the master builder tradition, John Knott and his associates developed a values-based organization and network of integrative partners working toward a shared vision for evolving community building in the 21st century. The development of this organizational capacity for initiating the Noisette project is discussed below through the following four sub-sections regarding: (a) connecting to and growing from a value-adding lineage of master builders, (b) growing a values-based learning organization, (c) growing an integrative, multi-dimensional team, (d) creating a vision for evolving community building in the 21st century.

A Family Tradition of Community Builders

The Noisette Company, founded by John Knott and Jim Augustin, is a values-driven organization that stems from the master builder tradition of Europe. Passed down from Knott's grandfather to father to son, the master building tradition looks at buildings not as isolated boxes but rather as *living organisms* embedded within living communities:

We were basically taught that we were not in the building business. We were in the human habitat business. We were not in the development business, but in community development.²⁴

According to one interviewee, buildings that were built out of this tradition were developed not by a series of functional technicians and sub-contractors "in pieces and parts" as "we build today," but rather as an integral, emerging whole by artisans from the community:

Design-build was just the way everything was done. There wasn't any such thing as the builders over here and the designers over there. That's not the way things work. And we didn't have

subcontractors. We had artisans. And the artisans were a part of the design team. Every building was designed with the artisans. Basically the architects and engineers, what ever they were, kind of conceived of the structure and how it would hold together, but the artisans actually were designing it as they went, that's why cathedrals would take fifty years to build, they were designed over time.

And the designers and the master builders actually understood that buildings were systems. They really understood that they were living organisms. And so the craftsmen... literally understood that the buildings breathed and contracted and expanded. They understood how all the different materials were in harmony with each other and how they would react to each other. They literally understood that intuitively.

Buildings, out of this tradition, were built to be beautiful as well as functional. They were also built to last, to be sustainable through time. As one interviewee puts it, "sustainability is not the new thing. Green is not the new thing. The new thing is the crap we've been doing for the last fifty years." Before then, he states:

houses were solar designed... They used today what we would call passive design as opposed to active design, which is technology. And so they used materials that were appropriate to the climate. They didn't ship things from all over the world to put into buildings, they used materials that were regionally based. And if you used regionally based materials, basically you used materials that were appropriate to the climate.

The more important element of wisdom that the Noisette leaders attribute to the master building tradition, however, lays not with technologies of old, which can easily be reduced to functional knowledge and techniques, but rather with its underlying system of values and orientation to the community as a whole. As one interviewee noted

I have a fundamental disagreement with the environmental movement. I have a huge disagreement with the green building movement. It's not about technologies, it's not about building materials. They say it's about all these pieces and it's all wrong. What's happening is, we got in this mess because our Gods became technologies, whether it was oil, whether it was energy, whether it was air conditioning systems, whether it was cars, telecommunications; now we are getting coalescent with other technologies that are quote environmentally friendly. We're going to be disconnected even further.

What is missing in this focus on technology, according to this same interviewee, is the understanding that technology is not the goal but rather the instrument. As he states it, "Technology is a resource to serve humanity and serve community. It's not the resource that is dominant. It should be a resource to serve."

Based on this understanding, the Noisette leaders have come to understand that sustainability lies first and foremost with, as one interviewee put it, "the wisdom of people, the wisdom of culture and the wisdom of behavior." It is for this reason that these leaders see themselves primarily in the business of

growing a community's capacity for "healing the social, economic, and environmental health of [their] region."²⁵

A Values-Based Organization

Growing out of this master builder tradition, the Noisette leaders have developed a series of core values for guiding strategic thinking and decision-making. As one interviewee states it, "If there is one thing that I will try to leave with you today it is to...focus on values." It is the belief of these same leaders that these values must continuously be instilled throughout their work. As one interviewee explains

I would say that what I try and do as a leader, my job is not so much about telling people what to do; it's more about being a teacher. Most of the time is about teaching values and teaching process.

A great deal of emphasis, therefore, is placed by these leaders on building capacity and integrity around core values. A number of these values, which emerged through the interview process, are explored below.

Life-long learning. One of the shared core values of these Noisette leaders is a commitment to continually learning and growing as individuals, as organizations, and as partners with the community. For them, sustainability is not a final destination; it is a process and a journey of continual learning and improvement. As one interviewee states

Have we done 100%? Absolutely not, probably not even close. A lot of what we talk about is the journey to sustainability, we believe that no one is there. A lot of people think we are one of the real leaders and yet if I had to go as a percentage of how far along the journey we are, I would say 10% toward that goal.

For this reason, even though these same leaders are becoming increasingly occupied by the work of managing the implementation of their projects, they continue to focus on broader, longer-term improvement. This includes improvement both of their own capacities as well improvement in the capacities of those they are serving. As one interviewee, when asked how they continue to evolve in the midst of all the workload they have taken on, describes it, "Well, we try to keep the real focus on what our mission is...The beginning

part of our mission actually starts with ‘To build the capacity’ ...and it’s that capacity building that we try to stick to.”

In the effort to continually learn and build new capacity, the Noisette leaders that were interviewed all placed value on listening and asking questions as opposed to trying to supply all the answers. As one interviewee put it

The highest level of wisdom is knowing which questions to ask when. It is not about the answers. The inquiry process is a process of emerging the wisdom in dialogue from a community. That’s the highest form of wisdom. It’s not about knowing, it’s about learning.

It is this process of continually striving to ask the right questions and to remain receptive to the emerging answers that has helped enable these leaders to continually evolve, both in terms of their capacities and aims. To quote Eric Hoffer, as John Knott does in the beginning of one of his recent public presentations, “In times of change, the learners will inherit the Earth while the knowers will find themselves beautifully equipped to deal with a world that no longer exists.”²⁶

Emerging potential versus fixing existence. Closely tied to this value of life-long learning is the value of continuously working to emerge potential, the potential of individuals, the potential of organizations, and the potential of communities of place. As one interviewee states it

I believe fundamentally that every single human being is a gift from God, that they are great, and that our role in our lives is to emerge all the gifts. Not to just give our own gifts, but to emerge the gifts from each other and from the creation.

This process of facilitating the emergence of the gifts of people and place requires seeing beyond existence to what is currently not there but potentially could be. In the words of one interviewee, “the hardest thing is to see the stuff that’s not there, too see what’s missing in this. People review whatever is there. That’s input, [i.e.,] here’s some books. If you say, ‘If you could just look at this and tell me what I’ve missed or what you think ought to be there.’” This seeing of what potentially could be is what the same interviewee describes as, “the process to emerge the pattern.” In other words, these Noisette leaders believe that each person and each place has an inherent pattern, an inherent gift, and it is our role as human beings to

help those inherent patterns to emerge and flourish. Doing so requires the capacity to see beyond current existence, to see what potentially can be.

Love, respect and caring. Closely tied to this capacity to see potential is the value of respect. One of the stated beliefs in the Noisette Master Plan is that “respect is at the core of every successful human relationship and endeavor.”²⁷ According to one interviewee

The heart of sustainability is about fundamental respect for each other, long-term thinking and respect for the land and the place where we are. Respecting the culture, respecting the ecology, respecting each other... And we can't care about anything unless we love it. And that's fundamentally where we have to go. If we get there, then we will be able to fix this.

Love, caring, and respect are, therefore, critical elements to the success of the Noisette approach. In fact, this has become one of the primary requirements within the Noisette Company for hiring and work role decisions. As one interviewee states it, “what I try and do, and all of us do here, is try and hire really, really, smart people who deeply care about what they're doing; really, very passionate people.” This is based on the belief that one should only do what one really has passion for. As the same interviewee puts it

[O]nly do what you love. Because you can't care about something unless you love it. And if you are going to have any profession, make sure what you do is that you love that profession because then it will be a hobby. And if what you do is a hobby then you will give your person and your entire being to it and when you do, you will give a great gift to the world. If this is just a job, then go fishing for the rest of your life or something. Don't waste everybody's time.

Connected systems thinking. Two more stated beliefs in the Noisette Master Plan are: “Successful problem solving starts upstream with systems thinking” and “All decisions will be made to serve the long-term health of the economy, ecology, and social fabric of the community being directly developed as well as the larger community in which it participates.”²⁸ These two beliefs, when taken together, help to describe what the Noisette leaders describe as connected or systems thinking.

According to one of interviewees, connected systems thinking involves looking beyond the *boxes* (or buildings and plots of real estate in the case of a developer) to the larger context and systems of which they are a part.

[O]nce you have a whole different view of the world, then you're doing everything in context. Part of systems thinking is the ability to see beyond all the boxes. I tell people you can't use the expression "Out of the box thinking," if you're a sustainable thinker, because nothing is outside the box.

Through this systemic worldview, he argues, boxes don't have any meaning in isolation of the connections of which they are a part. They become dead boxes as opposed to being part of a living system.

Your whole body is little boxes, in the sense of a cell. The cell that's alive is connected to all of the other cells, somehow. The cell that's not connected to any of those other cells, is like the phone that doesn't work, the computer that doesn't work.

For this reason, the leaders of Noisette Company understood that they couldn't, in right conscience, come to the Navy Base in North Charleston and just build, for instance, an industrial park or car dealership in isolation of the surrounding community. Such an approach would be a non-systemic way of thinking about things in that it wouldn't take into account the rich living context and fabric of which the development is a part. Doing so would lead to the building of one more dead box that may give the developer a good financial return in the short run, but would further cut-off the economic, environmental, and social potential of the community surrounding it.

Rather than approach the community with a preset agenda, the Noisette leaders sought to listen to the community and really think deeply about where the greatest potential for their investment lay. According to one of the interviewees, what systems thinking really involves is an approach of deep listening and making connections in one's mind that weren't there before:

So this whole connectivity thing is, I guess, once you're a connected thinker, then you can't possibly do anything other than the approach that you talked about, which was come in and notice. Do this or that, noticing or assessing, or taking inventory of what's here, and all that. That's just, kind of pondering what's all here and not assuming anything about it.

Through listening and seeing connections, the Noisette leaders have sought to find solutions that can systemically benefit the triple bottom line of "the planet's environment, economic prosperity, and social health." Such higher order aims, in fact, are a direct result of this way of thinking. In other words, once one begins to see the living connection between things, one can't conscionably go back to just building boxes, to just working on personal economic returns. As one interviewee put it, "you don't necessarily start out saying, 'I have to improve everything.'" But once you're a sustainable thinker, seeing everything connected, "you can

see that you'll find a way. Like the sweet spot of a tree, the three circles, and all of that, the Venn diagram kind of thing. The one decision that will give you benefits in each."

Finding this *sweet spot* between the environmental, economic, and social health dimensions of a system means finding the leverage place in that system where an action or intervention can elevate all three simultaneously. This is in contrast to dualistic thinking, in which if one were confronted with all three, one would tend to compromise or balance. For instance, dualistic thinkers might seek to balance between economic protection laws and a free market economy. But, thinking in this way assumes that each of the three areas is its own separate box to be weighed and balanced against the others. What this betrays is an inability to see the interconnectedness among all three. As one interviewee states it

I was coming across something yesterday where somebody was explaining sustainability as balancing all three. There's something about that which is, I only have ten things, so I can load it in my Venn diagram so that I'm getting more into one or the other. Balancing implies that if I treat the environment better, I'm not going to be able to make as much money or have people have as many jobs, or whatever. That's like a zero sum thought process...Anyway, if you come at it that way, you can say all the words but you're illustrating that you don't quite get the illustration...It's not a compromise or a balance, it's like finding this whole other place that you can't imagine if you're in this balance mentality.

Once you start thinking in connected terms, one sees that every decision and action one makes, both big and small, has ramifications in relationship to these larger systems. And the more one understands these connections and ramifications, the more one feels connected into these systems, the more one takes responsibility for stewarding and improving them. Systems thinking, in this sense, involves more than just thinking about connections, it also means acting to reweave those connections. This is because, from a systemic viewpoint, thinking, values, and actions are interconnected. One interviewee illustrates this point as follows:

If you map your purchasing, what you purchase individually every day, it's a decision about your value system. And if you were to map your purchases and then track them back to the companies who made them and the resources that drove the creation of those, you would find your carbon footprint. But how many of you really know that? Where your shoes came from, where your jeans came from, where your jewelry came from, what kind of car you are driving. Where the tires came from? What damage they created? What didn't they create? You don't know that. And then the taxpayers, we just write checks for everything. We are not responsible. The only thing we are responsible for is to write the check and pay the bill. But the bill that we are paying has a value system connected to it, and we don't understand that. So it's not just the builders, it's us. What our work is about, is trying to create these reconnections, so that people actually know what they are doing and take responsibility for it.

Courage to dream. At the very beginning of the Noisette Master Plan, the following quotation attributed to Daniel Burnham reads:

Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing consistency. Remember that our sons and our grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty.²⁹

This statement captures quite eloquently the belief of the Noisette leaders that one needs to dream big in order to actualize real change. This belief, to a large degree, is connected to the previously stated value of systems thinking. Once one sees things in systemic terms, one realizes the importance, really the necessity, of being able to work and plan at a systems-wide level. According to one of the interviewees, this larger, systems level of planning and envisioning was the way planning was done before the 1960's:

[Currently,] cities plan and replan their cities block-by-block, section-by-section, and they don't get to a large enough scale, they don't get to a systems level, like we used to think in this country. When they built a water system, they'd build it for a hundred to two hundred years. In New York City, that water system was built 150 years ago when they had a million people. It's now serving 16 million people. When we built powerhouses, when we built schools, everything we built were gorgeous buildings that we want to save today. Tell me a school that was built since 1960 or a power plant that was built since 1960 that anybody wants to save. Tell me a library that anybody wants to save.... We didn't used to do that. We used to think about the future and we used to plan at this large systems scale and build to the system. We don't do that anymore.

What this statement suggests is that without this ability to think, dream, and plan at a larger systemic level, we have greatly diminished our ability to accomplish anything great, let alone sustainable. Rather, we end up creating lesser, more temporary solutions.

To create and steward a vision, however, requires more than just the ability to think and dream big. It also requires a great deal of courage and faith in the midst of uncertainty. As one interviewee notes

[I]t's an issue of courage. It's all about courage. Do you have the courage to take the risk, to walk across the ravine on a bridge you are constructing on the way you are going across, believing that you will finish the bridge and get to the other side? That's what courage is, the bridge isn't there, you're building it and you have to have the confidence that you are going to get to the other side. And the most important thing about getting to the other side is you have to decide what you want that to be when you get to the other side and it's all based on values.

What this suggests is that it is through courage, founded in the faith that if one stays true to one's core values one will get to the other side, that great accomplishments are made and dreams are brought to life.

Teach through deeds, not words alone. The Noisette project offers a demonstration of what can be accomplished when people are brought together as a community. This demonstration is not accidental. When asked how they work on shifting the current mindset of the development and planning field, one of the interviewees responded, "the way we do it is we do our work." This same interviewee attributes this approach of teaching through demonstration to one of his mentors. As he describes it

I went to [him] one day and I sat down with him and I said, 'I want to build this new trade association,' and [he] had said, 'just don't do that.' He said, 'I tried that. It doesn't work. Industry are sheep and the shepherd they follow is profit. If you truly believe in your philosophy and your values, then build a profit model. Just focus on your work. Build it and they will follow.'

Based on this advice, the Noisette leaders have worked to build a new profit model that integrates economic return with environmental and social returns. In undertaking each major project, they have sought to grow their understanding and capability as a team while furthering the evolution of this profit model. They see the Noisette project as the most recent step in an evolutionary path, with each step building upon the learning, partnerships, and accomplishments developed from the previous ones.

A Multi-Dimensional Team

Through the succession of evolving projects in which the Noisette leaders have worked together, the systemic vision, capabilities, and make-up of their team and partners have likewise evolved. In this, a multi-dimensional team has emerged that cuts across many different disciplines of professional training and experience. According to McCune, "the development team includes 13 other individuals or firms, covering nearly every discipline (related to a community planning process)."³⁰ It is a team and network of manufacturers, suppliers, builders, developers, designers, engineers, community organizers, educators, and

ecologists brought together by their focus on creating higher quality, more durable, and more affordable homes and healthier, more sustainable communities.

In this network of players, the Noisette Company role has become one of integrator and vision setter. As John Knott puts it, “we have to become the integrator that brings together all the players and create a systems approach to community planning and home building.”³¹

A Vision before it was an Actuality

The vision that has served to integrate these team members has likewise evolved through this process. It is interesting to note, however, that while it has evolved in its complexity, the central vision for the Noisette project came about long before the team began to act on it. In this, a certain amount of synchronicity is evident. For instance, in 1994, John Knott was invited to attend a conference of preeminent thinkers from various backgrounds to look at the impact of technology on the built environment in the next fifty years. Rather than do what they were asked, however, the group of invited leaders turned their assignment around to one of envisioning what human habitat should be in the next fifty years, and then, from this standpoint, re-evaluating technology. Through this effort, they developed a series of principles for a sustainable city, along with a vision for regenerating a fictitious community into a 21st century sustainable city. As one interviewee describes it

The city of Sanborn was a mythical city... of 80,000 people on a river with a closed military base with every social and economic dysfunction you could ever imagine.

The synchronicity of this is that the opportunity for the Noisette project, which showed up four years later, was Sanborn come to life. As this same interviewee explains

[I]n 1998, four years after doing this, when we were invited into the city, this city was a population of 79,000, with a closed military base on a river with every social and environmental and economic dysfunction or worse than what we had actually hypothesized in the mythical city of Sanborn. So what Noisette is, is Sanborn brought to life.

This vision, for both the imagined and actual city, is one of creating a 21st century American city that “respects and responds to [its] unique climate and place.”³² It is a vision for regenerating a community into a sustainable city that

is socially just, respects and protects our ecological systems, restores our intuitive understanding of our natural world and its benefits to our human health, and creates a sustainable economy that allows access and opportunity to all in our community.³³

In the Noisette Master Plan, Jim Augustin entitles this vision a “Green Village Vision.” He describes the vision as follows:

We envision a re-invigorated area of the city:
Where people live, work and learn...
That is inclusive of all the community’s people...
Where the built environment embodies respect for individuals, community, and the natural environment...
That understands its place in the fabric of the larger community, and celebrates its connections with other city areas and their shared culture and history...
That restores and enhances the environment while harnessing natural systems...
That values beauty, and provides opportunities for sanctuary, spiritual renewal, and inspiration...
That is a great place to grow!! To grow families, to grow knowledge, to grow skills and jobs, to grow plants and trees, to grow friendships, to grow old...
That leads to improvement throughout the city.³⁴

Growing Realization of Community Potential

While the driving vision and values for the Noisette project originated in the private sector, the stewardship of this vision has grown through time to include stakeholders that bridge across the traditional boundaries of for-profit and non-profit entities, and public and private proprietorships. One of the distinguishing features of the Noisette approach is its intensive up-front investment in developing a shared sense of understanding, aim, and joint stewardship in the community as a whole. This up-front investment, which spanned over a period of five years, is discussed below in the following four sub-sections regarding: (a) developing an aims-driven partnership for co-investment and co-learning with the city of North Charleston, (b) creating a communitywide investment strategy, (c) initiating a placed-based assessment process, and (d) engaging community stakeholders through a values-centric master planning process.

The Noisette project came about through a marrying of aims between the city leadership of North Charleston and the Noisette Company. To provide a brief history, in 1993 the Naval Base at North Charleston was designated for closing and in 1996 was closed permanently.



Figure 20. Naval Yard Buildings that are now being restored into LEED Platinum buildings

During this same time period, a new mayor (who is still mayor as of 2008) came into power. The mayor's vision was to revitalize the area of North Charleston around the Naval Base, which included some of the most poverty stricken and crime-ridden neighborhoods in the area. At roughly the same time that these changes were happening in North Charleston, John Knott and his team were gaining recognition in the sustainable development world and specifically in the Charleston area for their development of Dewees Island. Dewees was the first opportunity where Knott and his team could integrate many of the different

elements they had been working on into one community. As one interviewee states, until this project, there was “nothing that had really cut across the entire scope of land-use to building to technology to community planning and to education.” The result was a widely acclaimed success story of a sustainably developed island in harmony with the natural ecosystem.³⁵

Based on this project’s success, John Knott and his team wanted to take their work to the next level. According to one interviewee, their vision was to create a “Dewees in the city,” to create a community that was both ecologically sustainable and socially just. As Knott stated it

The nonprofit board of directors came to me and said, ‘Dewees is great, but if you really want this to serve the average person as well as take root and become a force for changing development, it’s going to have to be done in an urban setting.’³⁶

Hearing about this aim and its possible alignment with their own, the mayor *pro tem* of North Charleston invited John Knott and his team in 1997 to look at the possibility of bringing this vision to their city. It started with the idea of looking at five square blocks around the old downtown area of North Charleston but quickly grew in scale to three thousand acres. As one interviewee recalls

The mayor kept saying could you look at this now, could you look at this now, could you look at this... and that’s how this thing grew from five square blocks to three thousand acres.

The reason why it grew in scope, according to another interviewee, was that, “we saw this as an opportunity that we could finally get to a systems scale but what we realized was that cities don’t have the budgets or the capacity to think that way anymore.” Instead, the Noisette leaders offered to bring the master planning and community development skills that they had developed in their field to the city. In the words of one interviewee, “we were bringing skills of master planning community development in the green field world to the urban world.”

This led to the formation of an aims-driven partnership between the city and the Noisette Company in 2001, in which both sides developed a set of promised commitments. According to a 2007 sustainability report

The City, recognizing the uniqueness of the Noisette team, announced in March 2001 the formation of an innovative partnership with The Noisette Company. Accompanying this announcement was a City Pledge by the Mayor and City Council describing what the City was committing to accomplish.

The City also outlined its desire and commitment to become a model for sustainable city redevelopment.³⁷

Building from this core partnership, it then became clear that a greater diversity of partners would need to be included in their endeavor. As stated in the Noisette Master Plan, “it became evident that a wide range of individuals and organizations would need to come together to be successful in advancing the New American City.”³⁸ In this effort, the Noisette leaders sought to develop learning-based partnerships in which their role was, according to the Master Plan, one of “catalyst; to help grow the capacity of partners to build a sustainable culture, to communicate the vision, leading the planning efforts, and inspire others to invest their time and resources.”³⁹

According to the Mayor of North Charleston, this strategy has already paid off greatly:

At the start, no one other than The Noisette Company shared and was willing to invest in our vision. Now, other developers, companies and the Charleston County School District have joined in to invest in sustainability in our city. By any measures, the changes have created a more healthy, livable and vital community.⁴⁰

Whole Community Investment

One of the most distinctive features of the Noisette leaders’ approach is their philosophy and commitment to invest in the long-term health of the community. This is based on the age-old philosophy of “a rising tide floats all boats.” Rather than solely focusing on the redevelopment of their parcel of purchased land in the Navy Yard, the Noisette Company understood that the Navy Yard and its surrounding neighborhoods were interdependent— ecologically in terms of the wetland systems they shared, and socio-economically in terms of the residential and commercial geography and real-estate of the area. In their words: “The reason [was] simple. Planning and development decisions within the Navy Yard directly affect the surrounding 3,000 acre area. Revitalization efforts in the surrounding 3,000 acre area directly affect the Navy Yard.”⁴¹

Based on this understanding, the Noisette leaders saw that in the long run, the best investment of their resources, in terms of financial, ecological, and social capital returns, was into the community as a

whole. As one interviewee put it, “We said we would invest – this is like stuff that nobody does. We would invest a lot of money in the whole thing so that it all works together.”

In this sense, the Noisette leaders were very savvy in their strategy. They understood that a major redevelopment of the Navy Yard would likely lead to increasing investment in the area. Yet, without an integrated approach to the area, rapid redevelopment was likely to have negative impacts on the social, ecological, and economic health of the overall community. As they state it in their 2007 sustainability report

Having an accepted master plan is crucial to guide future growth in a sustainable manner. While the Noisette community had seen better economic times than it was experiencing in 2001, optimism abounded due to the strong sense of community and potential opportunities regarding redevelopment. In other cities, experience has shown that when depressed urban and suburban areas turnaround, it happens very quickly. Often times, the turnaround occurs so quickly, it takes the city or neighborhood by surprise. The result is a flood of development projects that have not been well thought out or integrated.⁴²

Place-Based Assessment and Design

The master planning process began with an extensive assessment process in which the Noisette leaders spent two years studying and developing an understanding of the history of the community and its region. This approach is based on the principle, as stated in the Noisette Master Plan, that “all endeavors are approached with a forensic process that starts with observation and enquiry versus formula orientation.”⁴³ Underlying this approach is a set of beliefs and philosophies that have helped orient the Noisette leaders’ work. Three such beliefs are articulated below:

A land ethic. Citing conservationist Aldo Leopold, one interviewee spoke of the importance of developing a land ethic. As he stated:

[W]e don’t get to a point where we understand that the land we are living on and the places we are, we are actually temporary stewards of, we don’t really own it. Even though we own the real estate, we don’t really own it and we are only there for a short period of time. We sell it and pass it on to somebody else. And if we understand that, we have to start acting in a way that we are stewards of that land and we actually understand that every step we make has an impact.

Based on this desire to care for and steward the land that they were developing, the Noisette leaders

invested a great deal of time and money up front in studying the area. They did this out of the belief that, by understanding how a place works ecologically, their development could be better designed and built in harmony with it. As one interviewee explains, through this study they were able to discover the “pre-human settlement condition of that ecology... [and thereby] were able to determine that [they] could reconnect 70% of that ecology in that 3000 acre area without taking any private land. Now if you don’t know that, you can’t make that connection” (see photo of restoration area below).



Figure 21. Noisette Creek Restoration Area.

Uniqueness of place. One of the underlying beliefs of the Noisette leaders is that great places are an expression of people in dialogue with the unique natural patterns of a region. As they state in the Noisette Master Plan

The character of the great places in the world is represented in their architecture, cuisine, and their artistic expression. Man, when confronted with the unique natural resource base and climate

conditions of each area, develops a unique response in forming the economy, architecture, land plan, and cuisine for each of these cultures.⁴⁴

Based on this belief, the Noisetette leaders envisioned this project as an opportunity to regenerate the uniqueness of the Charleston area by way of creating a 21st century response to the inherent patterns of that place. According to their Master Plan

The peninsula city of Charleston is... the 18th and 19th century answer and response to climate and natural resource base... The River Center at Noisetette provides a unique opportunity to create a national center for architectural design that explores and develops the 21st century architectural equivalent of responding and respecting our unique climate and place.⁴⁵

To successfully carry out this vision of a 21st century response to place, however, required them to first understand the place and its unique assets and patterns.

Social durability. One of the critical elements that the Noisetette Master Plan identifies as being essential to creating long-term social durability and economic health is that “each member of the community understands the unique history and heritage of their social community and physical place.”⁴⁶

This is based on the belief that the “dysfunction that we find in our cities, businesses and other organizations can always be traced to (recognition of) these core elements.”⁴⁷ As one interviewee put it, if we lose touch with our roots, we lose touch with our identity and sense of role in relationship to place. In indigenous cultures, it was the role of the elder to pass this wisdom on to the rest of the community. According to this interviewee, this role has been largely lost in our modern day communities:

[E]verybody works to inform you, if they are a really great organization, with a long term history about what the unique heritage and history of that physical and social community is.... [But] who owns the responsibility in our cities in this country to orient us when we move into the city to the hundreds if not thousands of years of history of that physical place and that cultural place of that city? Who owns that? And do you all come from cities or towns where you have a city council and a planning department that has spent their time orienting every newcomer into your neighborhood into your community?

Recognition of this growing void in our communities today reinforced for the Noisetette leaders the importance of always initiating a community development project with an assessment of place and its unique heritage. According to their Master Plan

It is this understanding that causes us to commit significant time and resources to the inventory of historic, economic, ecological and cultural resources of a community over the course of time. This process informs our team and the community about the unique heritage of the community we now call Noisette.⁴⁸

In socially, economically, and environmentally blighted areas, this assessment work is all the more important in that it helps people to re-conceptualize their place and reconnect to that which makes them proud of living there. As one interviewee stated

The importance of this work is, going back to social durability, we believe that people that live in economically depressed and socially depressed and environmentally depressed areas are people that have very low self esteem and the rest of the region look down on them also and call the place all kinds of names, and the people that live there all kinds of names. And every city that we come from has those complexes. And so what we are trying to do is get people to see the place in a different way.

Based on these underlying values, the Noisette leaders engaged in an extensive two-year process for studying place. This process involved the following key steps:

- **Inventory Assets.** According to the Noisette Master Plan, “The first step of this master planning process is to inventory the assets, seeking to understand the essence of what makes this place unique.”⁴⁹ This includes looking at the ecological, economic, and cultural history of the place.
- **Analyze Patterns.** The inventory of assets is then analyzed in terms the different order changes that occurred in the history of that place. As one interviewee describes it, they asked questions like, “what were the different order changes in economic and culture?” And “what were the skill sets and values that emerged out of each one of those?” Out of this, according to this same interviewee, emerges “an amazing pattern of history in contribution out of this place.”
- **Develop Principles.** From this pattern understanding, principles are then developed for guiding future planning and development. As their Master Plan states it, “the process of inventorying the assets and analyzing the patterns of prior land use enables us to develop the principles that will guide future planning and development.”⁵⁰
- **Emerge Concepts.** Using these principles as guidelines, the initial planning concepts are then

developed. As described in the Master Plan, “the initial planning concepts emerge from these principles and from the prior planning efforts of the City, County, and State.”⁵¹

- Synthesize. These initial concepts are then refined and synthesized into a master plan. “(Inputs from the community and city leaders) led to the synthesis of the planning recommendations contained in this master plan.”⁵²
- Develop Elements. The different actionable elements and phases of the plan are then developed and commitments are made by the various partners.
- Design, Build, Operate. As the Noisette Master Plan states it, “over time, the City of North Charleston and the Noisette Company will jointly develop the elements of this plan, beginning the process of transformation to the New American City.”⁵³

A Values-Based Community Engagement Process

Following this intensive two-year period of researching and understanding the place, the Noisette leaders then engaged in a two-year process of community engagement. This strategy was based on a belief, as stated in the Master Plan that a second critical element to social durability, beyond a common connection to the heritage and lineage of a place, is a shared vision that each community member holds for “the future to which they help contribute.”⁵⁴

As one interviewee explains, good strategic planning involves building a plan in which everyone is a part of building it. “And the reason you do that is because you unearth the wisdom from the people... and as the plan is being created, everyone is engaged in that so when they wake up in the morning, it’s their plan.”

Therefore, the Noisette master planning process was designed as an emergent process in which people’s input could help form a common vision for their future. As the Noisette leaders state in their Master Plan, “our community involvement process is organized to achieve the creation of a common vision and an ongoing process to evolve and mature that vision over time.”⁵⁵

Strategy. Their strategy for doing this involved developing a community engagement process that could help marry the place-based wisdom of the people in the community with the planning wisdom of their design team members. As one interviewee states it

So our belief is that we are technically competent and have great wisdom about design and planning. What we don't have wisdom of is the place and the people. And we believe that that is actually more important than the technical competency. So we are really, as artisans, translating that wisdom along with our experience into a future vision that is rooted in the place deeply and connected very much with the people themselves. That is really what we are trying to do in our work.

Toward this end, the Noisette leaders helped to design the engagement process in a way that was emergent, values-based, human connecting, and empowering. It was emergent in the sense that the plan emerged from the process of engagement as opposed to them bringing in a pre-imagined plan that could then be vetted and upgraded by the community. As one interviewee puts it, "We deeply, deeply believe in community engagement. We truly have no drawings, when we start. The drawings emerge out of the process itself."

It was values-based in that the numerous dialogue sessions with the community were all carried out at the level of values regarding what people really cared about and loved about their community, as opposed to being focused on things and design details. In the words of one interviewee

What I would say is that the one consistency between all of those projects, are the values and the process. I would say that if you looked at any one of those efforts, at the beginning, and then you looked at them half way through, and at the end, you would see a dramatic improvement and a dramatic change to the physicality of what was envisioned. It's more integrated, it's deeper, it's much richer, and it's because all these people and all the community understood the values but brought their wisdom and their skills.

It was human-connecting, in that a major focus of the community engagement process was to reweave the connections between and among community members that had been lost or weakened through time. According to Knott, "It's not enough to live in an environmentally responsible home in a sustainable community. People need to feel a connection to others in the community, and it's our job to build in opportunities for human connection."⁵⁶

The process was empowering in that it sought to make the community members the designers and owners of the vision being created. As interviewee puts it, "we allowed it to be theirs and they became the

designers. We became the catalyzer, the teachers, the value-transferors.”

Process. The process for carrying out this community engagement strategy involved four main steps, carried out over two years. In all, four thousand residents were involved through hundreds of meetings. These four steps are detailed below:

- Step 1: Getting to Know You. This step involved meeting with each neighborhood and sharing stories about place, both from what the Noisette leaders had learned from their research and from community members who lived there. According to one interviewee

We do all this research at the beginning and then, once we have the research, the getting to know you part is neighborhood by neighborhood, going into the communities and saying, “Okay let me tell you a story about where you’re living.” Out of that, we start to emerge oral history that we have no way of unearthing.

- Step 2: Eat and Greet. In this step, the Noisette leaders engaged in a series of meetings with the different neighborhoods and sought to learn more about the potentials and challenges that their neighborhoods faced and the values that they held. As one interviewee explains

The next step is eat and greet, which is where we, again neighborhood by neighborhood, we’d never meet across neighborhood lines, we blow these neighborhood maps to a large scale, about the size of this table, put eight to ten people around them. We average about a hundred people per meeting. We ask them three questions, what do you like about your neighborhood, what don’t you like about your neighborhood, and what do you think is missing?

A big part of this step was trying to get people to build trust and reconnection to their neighbors and neighborhood through a focus on values. This then formed the ground for developing a shared vision for the future. In the words of interviewee

What they do is they have to elect a leader at the table, and we provide a facilitator. They get up and they have easels that they’re putting values and other things on. So, they get up and start talking about the three answers to the three questions. They start talking about, “Oh this 200 year live oak tree that’s in the same yard that was owned by the same family for 200 years, or five generations, or what ever it was. Actually, all of these kitchen cabinets in these houses in the neighborhood were actually made by two generations of cabinetmakers that came from the same family that lived in the neighborhood. They’re art objects. Oh, there’s this crack house down here. There’s this abandoned car there...” There’s a lot of value

conversations going on as they get up, and you can't help it. Then you've got eight or ten other tables there, and they're, "Oh yeah, I didn't know that." Oh, we talked about that. I agree with them." So what you're doing is, over time—and this takes about a year and a half, all these different meetings—helping people within their neighborhoods start to get comfortable with each other. They're starting to know that they hold the same value system. Then each neighborhood comes together to really determine its future on what it wants.

- Step 3: Treasures. In this step, the community members were given cameras to go out and capture the treasures and blights of their neighborhood. They then used these photos to engage the designers in what they wanted to preserve and grow in their neighborhood, and what they wanted to see changed. This step was described as follows

We have a next step, which is called treasures and that process is again organized neighborhoods we're deploying cameras into the community and we're doing the same thing. Photograph what don't you like, photograph what do you like, and photograph what do you think is missing. Now, they can't photograph that but what they can do is either bring a photograph of something that was removed, or they can bring a photograph from someplace else. Then, we actually blow those photographs up during lunch and then after lunch our designers are there, and we get each group coming up and talking about why they took the photograph. Our designers aren't allowed to say anything. They just draw while the people are talking. They can ask them questions but generally they're not supposed to talk. If they don't understand something or what they said or something, but they're not allowed to engage in a judgmental question or to declare anything. It's all about emerging the wisdom from the place and the people.

- Step 4: Crayons in the Hand. In this step, the designers brought back draft drawings to the community for input and upgrades. A key to this step was building a field of mutual respect between the designers and the community members. One interviewee explains

The fourth step was crayons in the hand, which is where the architects and engineers are required to give these draft drawings out to the community. They, basically, are required to take the top off the pen, hold the top and give the pen, or design tool to each member of the community. I've never seen anyone actually mark the drawings up. They actually ask for the top back, put the top back on the pen, and point. But what happened in that moment, was the big expert architect gave permission to the member, and respected the member of the community that much, that it allowed them to mark their drawings up, which allowed the community member to say, 'No, I respect you too much. You're very talented. Let me point where my concerns are.'

Developing the Community into an Attractor Site for Sustainable Development

Having engaged stakeholders in an extensive research and visioning process for re-imagining what was possible for their community, the Noisette leaders then sought to translate this newly realized potential into leveraged projects that could regenerate the community. This is discussed below in the following three sub-sections regarding: (a) transforming degenerated centers into attractor points for seeding new, healthier life patterns, (b) sustainable partnering of resources through systemic networking, (c) building a sustainable culture by instituting an integrated mentoring and funding support system.

Life Attractor Points

The Noisette Master Plan was not a comprehensive master plan for the city of North Charleston as a whole. Rather, it was a planning overlay for the 3,000 acres that surrounded and included the Naval Base. The reason for this approach was that the Noisette leaders were not interested in taking over the planning work of the city. What they were interested in doing was seeding a new pattern for planning by focalizing on a distinct area in the city. The strategy was one of turning the Naval Base and its surrounding area into a center for applying, and thereby learning, sustainable planning measures and practices. As stated in their Master Plan

This master plan is not intended to replace the comprehensive plan but rather to propose specific initiatives and guidelines for a 'renewed sustainable center.' The implementation of which would accomplish the City's goal of becoming a leader in sustainable redevelopment of an urban environment.⁵⁷

This strategy began with a process of re-branding the 3000 acre area. According to one interviewee

We determined we would call this area Noisette. Noisette comes from the history of the place. It is named for Phillipe Noisette, who was a French botanist in the 1700's. He was one of three leading botanists who chronicled the flora and fauna of the United States...[His] family has a link to the land and this place for over two hundred plus years. It also gives us an interracial marriage link, it also gives us a growing and botany link, all kinds of linkages. That's why we named this area Noisette.

In doing this, the Noisetette community was seeking to accomplish a change in the regional perception of their place. As one interviewee states, “we wanted to change the regional perception and establish Noisetette as a national model of sustainable development.” They understood that in order to redevelop this area as a sustainable city center, they would need to attract many more investors, developers, businesses, and non-profit organizations, and other stakeholders.

For this reason, the rebranding of the community involved not only an attempt to reconnect its residents to their rich and vital past, but also an attempt to set forth a new and vibrant future. In the words of the Master Plan, Noisetette was a vision for a 21st century “New American City: A vibrant, healthy city, embracing its heritage and celebrating its role as community, ecosystem, and marketplace.”⁵⁸ It was a vision “based on the Triple Bottom Line – a balance among people, planet, and prosperity – embodying the belief that sustainable cities must be equally responsive to social needs, environmental responsibility, and economic vitality.”⁵⁹

This approach of transforming a degenerated area into an attractor center for sustainable urban development and practice was also holographic, in that it applied both to the overall vision as well as to the various elements within the plan. The Naval Yard, for instance was re-envisioned as becoming the urban density center of the city. As one interviewee describes it

This area turned out to be, in our master plan, the urban density city center that North Charleston never had. There is no middle of North Charleston. You can go on the freeway and it says North Charleston, next 10 exits...There’s a convention center and this big outlet mall. But you get there and it’s like, it either feels suburban spread out to you. There’s no sense of arrival anyplace that is the middle – the downtown, the hub.

Furthermore, the Noisetette leaders envisioned this urban core as becoming the center for guiding, through demonstration, sustainable planning and design in the city and region as a whole. According to a 2007 sustainability report, “The sustainable design, construction, and operation of the built elements will make this a manifestation of the Triple Bottom Line, unifying social, environmental, and economic goals.”⁶⁰

In beginning to build this Naval Yard center, the Noisetette leaders were cognizant that they needed to attract a particular nature of residents and businesses to the area. As stated in their 2007 sustainability report

The businesses central to The Navy Yard at Noisetette play a very important part in the creation of the

future. This is more than just a block of buildings where you come to work everyday – rather, this is a very important place and the businesses that locate here are core to that significance.⁶¹

For this reason, the Noisette leaders have sought to attract businesses that share in their vision for building a sustainable, developmental economy--sustainable, in the sense that business practices are designed to meet the triple bottom line and developmental, in the sense that businesses strive to continuously evolve the practices and capacities of their organization, their workers, and community as a whole toward this larger aim. Toward this end, the Noisette leaders have identified six areas of businesses that they seek to attract. The areas are academic research, the arts, building/planning/design, local independent retail, non-profit organizations, and industries focused on restoring our built and natural environments.

Beyond this new urban core, a series of other more focalized centers are also in the process of being developed, each time helping to turn a degenerated area into an attractor center and transformative node. These centers include the eco-industrial park (see photo below), the Sustainability Institute, schools as community centers for their neighborhoods, the Michaux Center in the Noisette Creek Preserve, and the Fisher recycling center.



Figure 22. Noisette Eco-Industrial Park

The Sustainability Institute is a good example of building an attractor site as a transformative node. The Institute was formed in 1999 with the stated mission “to build the capacity of South Carolina communities, preserve our state’s precious natural resources, and enable every person to have a healthy, comfortable and energy-efficient home.”⁶² It started by first building its own center. Rather than housing the institute in a new high-tech green building, its founders chose to retrofit one of the old, dilapidated houses in the area. It specifically chose a house that mirrored most of the other houses in the area, all built in the World War One era and all highly energy inefficient in their design. What they did was to affordably renovate it into a green home as a symbol and demonstration to others in the neighborhood that it could be done inexpensively and efficiently. As one interviewee describes this process

The Sustainability Institute was organized, this is a home that we bought, it didn’t used to look like this. The transformation of this is remarkable. This is one of the first affordable green homes in the country. It is \$85,000 total investment from acquisition of the building, total renovation of it, and the landscape transformation. So this is something that people can get their hands around. Almost every other green home in the United States cost a half-million or a million. They’re all great facilities with all kind of great stuff going on, but the average person walks in there and says, “how much did it cost? Oh, a half million dollars!” First thing when they walk out is say, “I can’t do it.” Well this is eighty five thousand dollars and this replicates about a thousand homes in the area. It’s very similar to a lot of houses in this area. And the whole idea was to create a place where people in the neighborhood could come who could really get into this and see that it’s workable, that they could actually do it, and teach from this house what they could do, and then give them a project management strategy for their own home.

What they were able to demonstrate through this house renovation was that you could build a healthier, more durable, state-of-the-art house, save hundreds of dollars on utility bills, yet employ no advanced technologies.

Moreover, through the process of renovating the house, they learned more about this type of housing and what methods worked best, in terms of cost and ease of application, for weatherizing homes in the area. From this new found understanding and knowledge, they were able to develop a cheap \$150 low-tech weatherization kit that could be applied by local residents to their homes and save them over \$200 a month in utility bills. To date, they have helped local residents save over \$400,000 dollars in utility expenses.

Working in this way, the Sustainability Institute has also become an attractor site for partners in the green building field. As one interviewee puts it, “they actually draw the green economy and green resources

within the area.” Therefore, the institute has become both an attractor site and a transformative node for green building in the area.

Systemic Partnering of Resources

To build and leverage the effectiveness of these developmental centers, the Noisette leaders understood that such initiatives could not be done in isolation of one another. Rather, they needed to be linked systemically with each other, as well as integrated with existing value-adding efforts in the community. This is based on an understanding that fragmentation leads to a wasteful and ineffective use of resources. As stated in their Master Plan

Our cities are faced with a mounting crisis... It has become very clear that we have too many narrowly defined interests competing for too few resources both in the public and private sectors. We believe that the issue is not a lack of money but how the funds are allocated.⁶³

Two core beliefs put forth in their Master Plan regarding resource management and use are (1) “All resources are interdependent in natural as well as human communities” (p. i.1), and (2) “All planning and decision-making [should] favor collaboration and [be] based on sustainable partnering of resources.”⁶⁴

Sustainable partnering of resources involves a process of systemically linking resources, community partners, and value-adding systems together in a way that leverages the systemic effect and return (in terms of social, economic, and ecological capital) on investment, and ensures longer term, collective viability. To do this, the Noisette Master Plan offers the following guiding principles:

- Eliminate silo thinking in funding of any community resource
- Increase the number of groups with a vested interest in any community resource as users and beneficiaries
- Leverage and combine the resources of Public, Private, and NGO entities in the creation of any community resource
- Align interests to build broader constituencies to support long term, community resources
- Connect the capital and operating budgets when planning any investment
- Establish reserve fund mechanisms to handle future repair, maintenance, and replacement costs

- Design the community into the care and stewardship of each community resource⁶⁵

One example of sustainable partnering of resources is the Noisette Urban Alliance, which was developed in order to link together leading manufacturing companies in sustainable home building and furnishing products with the development efforts of the community of Noisette. By doing so, they helped link together manufacturers in a way that made “sustainable building more understandable and affordable for everyone in the community”⁶⁶ and in turn offered the manufacturers “opportunities to evaluate sustainable innovations in the real world, and learn directly from the people they’re in business to serve.”⁶⁷ This systemic linking helped break down silos of operation and create a more effective partnering of resources toward the accomplishment of shared aims.

Building a Sustainable Culture

Some of the most distinctive features of the Noisette project are the organizational systems and structures that they have put in place to grow a sustainable community, long after the development project is complete. According to one of the interviewees, this organizational strategy is based on the belief that the current field of urban and community development faces two fundamental problems that need to be addresses. They are: one, that “we’ve been building lots of green ‘things’ but no one has been focused on building a sustainable culture;” and two, that “no one is any longer investing in the long term health of the economy and the environment and the social health of the community.”

Based on this analysis, the Noisette leaders set up a framework of non-profit organizations and initiatives aimed at building a sustainable culture in the community and tied them to a sustainable funding infrastructure that could support them in perpetuity. As they state in their 2007 sustainability report

In realizing sustainability is about more than green buildings, and the Noisette community will remain far beyond build-out of the Navy Yard, we have cultivated a framework of organizations and initiatives designed to grow and support sustainable communities... [and have] established a sustainable funding stream to support the development of healthy, regenerative community pathways.⁶⁸

According to one interviewee, the idea was to create a permanent “NGO structure outside of government that

would partner with government” and would “act as kind of brain trust, value transfer, and value audit system for the community.”

Based on this intention, the Noisette leaders identified six programmatic arenas that this organizational framework needed to address:

- Education and life-long learning
- Economic opportunity
- Environmental restoration
- Social justice and civic responsibility
- Enhancing public health
- Celebrating arts and culture⁶⁹

They then proposed the formation of a number of non-profit organizational entities to address these six arenas. These non-profit entities include: the Noisette Foundation, the Lowcountry Civic Justice Corp, Lowcountry HUB Business Corp, the Michaux Conservancy, the Sustainability Institute, and the Navy Yard Association for Business and Community. In each of these cases, the Noisette Leaders were seeking to build a catalyzing center for educating, organizing, and coalescing community members around a specific mission and need identified through the master planning process.

The Noisette Foundation, for instance, was established with the mission of becoming a community foundation for catalyzing as well as raising and providing funding for “collaborative neighborhood redevelopment” initiatives that can grow the long-term economic, social, and environmental health of Noisette and its surrounding area.⁷⁰

The Michaux Conservancy, to cite another example, was established to reconnect community members with the natural ecosystem through “creating an outdoor classroom and research laboratory for students and the community” in connection to the restoration of the Noisette creek and its surrounding tidal marsh systems.⁷¹

To ensure the viability of these organizations, the Noisette leaders then set up a funding infrastructure to support their operations and development in the long term. This infrastructure included the

innovative linking of a 12% transfer fee on all property sales in the Navy Yard to perpetually fund this organizational framework of support systems in the community.⁷²

Evolving and Propagating Learnings

In addition to an infrastructure for ongoing learning and development in the community, the Noisette leaders have also begun to set in place an organizational means for propagating and evolving this approach beyond Noisette. To capture and grow their learnings from Noisette, they are currently working to set up a sustainable development research center networked to a series of University graduate programs. As they state it in their Master Plan:

In order to ensure that the community of Noisette and our industry learns from this process and can translate the experience to effective models for sustainable planning and development, we are planning the creation of a Sustainable Graduate Internship Center with 25-30 positions annually representing the physical and social sciences with no repetitive positions during the year. Any University participating must agree to a minimum 30-year research effort in the specific discipline. This would be a resident program for one year. This center would also oversee the measuring and monitoring of the principles and objectives set forth in the metrics of this plan as well as utilizing the Heinz Center for the Environment's Indicator System to measure the long term health and progress of the Noisette Community.⁷³

In addition to this research center, the Noisette leaders have also begun to publish annual sustainability reports to track progress and measure and analyze outcomes in relationship to the larger aims of the project. This feedback loop allows for ongoing learning and course correction as they proceed with the development project. As they state in their 2007 report:

[This] document highlights the progress realized through the year ending 2007 and is focused on the attributes that have helped move the Noisette community closer to a sustainable future.

In future annual sustainability reports, we will implement the resources and tools needed to achieve more detailed documentation and statistical measurement outcomes. Going forward, using the first edition of Our Journey to Sustainability as the baseline, the outcomes will be measured against stated goals and objectives.⁷⁴

To measure and track progress in these ways, the Noisette leaders have developed and adopted a series of sustainability metric systems. As interviewee puts it, "we define measurements so that you know in the future that you actually have gotten where you wanted to go."

One of the most innovative metrics they have developed is that of the Noisette Rose. Based on an array of indicators around each of the three areas of the triple bottom line, the rose starts in the middle at a zero and then grows outwards on different spokes or petals from this center as progress is made in regard to each indicator. In this way, not only is progress monitored in regard to each individual line but also in regard to the overall balance or imbalance of development in the whole. If the rose grows symmetrically in all directions, it shows that development has been made equally in each of the triple bottom line arenas. If the rose grows asymmetrically, it shows which areas of the whole are being left behind and need more attention.

In addition to all of this, the Noisette rose also serves as a symbol. According to one interviewee this is because

Phillipe Noisette cultivated the first rose in the United States. It's collected throughout the world. It's highly revered in France and Australia. The most valued rose in those two countries. There's a Noisette rose conference every four years somewhere in the world. And we literally developed a triple bottom measurement system that for every building and every piece of infrastructure, you can measure economic, social, and environmental goals for each building and each piece of infrastructure you build, natural and physical, as well as specific Noisette community goals. The idea is that you want the rose to open equally. And so as it is opening towards the edge and becoming in full blossom, you are able to determine how well you are meeting or exceeding those goals, using an ecological asset as a measurement tool and a symbol.

In addition to the Noisette rose, a series of other metric systems have been developed or adopted. These include:

Benchmarks for Success, presenting standards for measuring, reporting, and learning from results. The Noisette Quality Home Performance Standards have been created specifically for the climate and geographical conditions of the South Carolina Low Country. The LEED Green Building Rating System is the definitive consensus performance standard for commercial and high-rise residential buildings.⁷⁵

And in addition to these quantitative metric systems are qualitative ones. For instance, the mayor of Noisette set one important indicator of success as being whether young adults who went off to college returned to Noisette to raise a family because they felt it would be a good place to raise their children. And according to one interviewee, this was also a personal indicator for the mayor:

That was the mayor's big indicator... [H]e took it on as his personal thing to change the whole place to the degree that he could, so that his kids and other peoples' kids would say, "I just love where I live and I see it as a place to raise kids." Now both of his kids have houses and reside here, so he's got his measurement made.

Beyond an infrastructure and metric systems to capture and grow learnings from Noisette, the Noisette leaders have also set out to develop an infrastructure for applying and transferring these learnings and skills to other communities. As one interviewee states

No one's ever done this kind of model where you come in as a project sector developer and plan three thousand acres of a city. I mean... we've got close to seven million in nonprofits, that are serving this area, that have nothing to do with our direct real estate of the 350 acres. Well they do but I mean in traditional thinking. So, this is a whole new model for cities and we have a lot of cities that want us to replicate.

Toward this end, *City Craft* was formed, which as one interview describes, involves bringing their network of community development and planning professionals to a city and "actually creating a city-based organization that [they] own a piece of, but not the majority piece." Through this organizational partnership, as this interviewee explains, "We bring our process and talent, we find regionally based developers, architects, engineers, and we transfer...this capacity into the region itself and build the capacity there."

In addition to propagating and transferring this learning to other communities, the Noisette leaders also see the importance of empowering the next generation of leaders within their organizations and community. As one interviewee notes

We have a really exciting young team here of executives and our nonprofit heads are just unbelievable, unbelievable with what they've done... What's on the bones of these organizations is so far beyond, I mean, a thousand percent beyond anything I have ever conceived. And it's because these very talented, passionate young people who are well educated but have huge hearts and a great deal of care about the future, are investing enormous effort to build something very different here.

In this sense, it is through this next generation of leaders that the current Noisette leaders see the greatest opportunities for evolving this work. According to one interviewee, the younger "generation has more of the answers than we do... [They] aren't burdened by 40 years of history, of experience... I really do believe that the answers that are out there, we don't have. And I think [they] have them intuitively."

Critical Perspectives

While this case narrative has been focused on studying the success patterns of urban planning in Noisette, it should be noted that, as with any planning initiative, the Noisette project also has its real and perceived weaknesses. As mentioned earlier, the Noisette project is still in its beginning stages and therefore difficult to analyze in terms of its ultimate successes and failures. This project has faced some initial challenges and criticism in its region. One of the local papers, *The Post and Courier* investigated John Knott's business history and questioned whether he had the integrity to follow through with the Noisette project commitments due to the failure of development projects he was managing in the late eighties and early nineties.⁷⁶ This four month long investigation, however, ultimately abated due to lack of any substantial evidence of wrongdoing. It was found that the reason for his business failures in the late eighties was due largely to the Savings and Loans failures, which caused many land development projects to go bankrupt at that time.⁷⁷

There was also tension, and even a break in partnership, between the Noisette company and the mayor and city council of North Charleston for a period of time in 2005-2006 regarding a misunderstanding in the terms of a financial loan.⁷⁸ This rift in relationship, however, was mended soon afterward. There was also some concern expressed by local residents over the quality of the river front park that was developed by the Noisette Company; these residents felt that it did not live up to expectations. In addition, there has been growing concern in the community that the development of the Navy Yard is not happening quickly enough.⁷⁹

It is interesting to note that many of the challenges and criticisms that the Noisette Project has faced are linked to the same elements that lend it its innovative strength. What sets this project apart from others, is the degree to which it has forged collaborative working relationships between public and private partners. According to Jon Dougal, syndicated columnist for iGreenBuild, "Never before in the history of urban revitalization in the United States has there been a unique partnership like the one that exists between the City of North Charleston and Noisette Company."⁸⁰ This unique partnership, while paving new ground, has likewise raised questions regarding the legal separations between public and private sectors. A great deal of the criticism directed toward the Noisette Company in the first few years of the project has derived from the perception that they were involved in the project primarily for the money and had found a backdoor way to

access public lands and funding. According to North Charleston city councilman Kurt Taylor, "Most people think of Noisette as a real estate deal."⁸¹ The fallacy with this perception, according to Taylor, is that "they (The Noisette Company) don't get the credit they deserve for the millions of dollars they have spent on community enhancement and social justice projects."⁸²



Figure 23. Noisette Riverfront Park

Case Summary Analysis

The central research question of this study was: What are the critical internal and external success factors for implementing a regenerative planning process within an urban community? Based on the research data collected and through the process of collating, analyzing, and converting this data into the case

narrative presented above, the following critical success factors have been deduced and are summarized below.

Internal Success Factors

The following is a list of some of the critical internal leadership capabilities that the lead planners of Noisette developed in themselves and/or in their team in order to successfully carry out regenerative planning processes. For the purposes of this study, internal leadership capabilities can be defined as the psychological means by which a person and/or group orders and organizes their thinking in order to lead a particular process at a given standard of quality. This involves looking at both 'how one thinks' and 'what one thinks about' in order to successfully carry out this process.

- *Life-long learning and improvement.* This capacity and value has already been described in detail above. What can be added here is the corollary capacity of being able to see anew and not get trapped in old models or paradigms of thinking. For instance, when the Noisette leaders approached the assessment and community engagement process, they spoke of needing to just “come in and notice...and not assum[e] anything about it”
- *The courage to dream.* This capacity and value has already been described above.
- *Love, respect, and caring.* This capacity and value has already been described above. It can be added, however, that connected to this capacity is the value for developing a “land ethic,” for respecting and caring for the rights of land and place.
- *Seeing and emerging potential.* This capacity and value has already been described above. Tied to this capacity to see and emerge potential is the capacity to name it. For instance, by re-branding the area, the Noisette leaders were able to help others perceive new potential in that place and therefore were able to attract a wider net of engaged stakeholders.

- *Teaching values through deeds.* This capacity has already been described above. A corollary to this capacity that can be stated here is the capacity to walk your talk at all levels. This is based on a realization that every decision we make, from the biggest to the smallest, has an impact on our lives and is reflective of the values that we choose to uphold.
- *Connected systems thinking.* This capacity and value has also been described above. Based on that exploration of this capacity, two corollary capacities can be articulated here. They are: one, the ability to ask the right questions; and two, the ability to translate systemic understanding into reconciling, holistic solutions that meet and leverage all three arenas of the triple bottom line. This is what one leader described as finding “the sweet spot...the one decision that will give you benefits in each.”
- *Appreciate the unique heritage and lineage of any community.* This capacity that the Noisette leaders cultivated in themselves and their work stems from their belief that socially durable communities grow from their roots. This is evident in John Knott’s appreciation of his master builder roots, and it is evident in their approach to Noisette and the level of investment they made in reconnecting to the roots of that place and its unique heritage and lineage.
- *Empower people to contribute through a focus on shared values and aims.* A second value that the Noisette leaders hold in regard to social durability is the capacity to build a common vision for the future toward which every community member can contribute. This is a systemic capacity that they sought to build into the community of Noisette. To build this systemic capacity, they had to develop particular leadership skills in coalescing the diverse aims of the community members. They did this by lifting the dialogue up to the level of core values. In doing so, they were able to find common ground among members and to develop a set of shared aims toward the future.
- *Focus on beauty, spirit, and what’s sacred, not just on the functional.* Woven throughout the language of the Noisette leaders is an attention not only to the functional elements of their work but also to the being

and spirit dimensions. John Knott, in fact, describes five dimensional needs that any community needs to address: functional, social, economic, aesthetic, and spiritual.

External Success Factors

The following is a description of some of the critical process elements that the leaders of Noisette incorporated into their planning process. For the purposes of this study, external success factors are defined as the explicate steps engaged in by a person and/or group in order to implement a particular process at a given standard of quality. This involves looking at ‘what one does’ in order to successfully carry out this process.

1. *Growing a holistic organization, vision, and approach*

- Connecting to and growing from a value-adding lineage of master builders
- Growing a values-based learning organization
- Growing an integrative, multi-dimensional team
- Creating a vision for evolving community building in the 21st century

2. *Growing a field for realizing new potential in Noisette*

- Developing an aims-driven partnership for co-investment and co-learning with the city of North Charleston.
- Engaging in an intensive, placed-based assessment process
- Engaging the community through a values-based master planning process

3. *Developing the community into an attractor site for sustainable investment and development*

- Transforming degenerated centers into attractor points for seeding new, healthier life patterns
- Sustainable partnering of resources through systemic networking
- Building a sustainable culture by instituting integrated mentoring and funding support systems

4. Evolving and Propagating learnings

- Developing a research infrastructure for capturing learnings
- Developing a metric feedback system for continually evaluating and correcting course
- Developing an infrastructure for applying and transferring learnings to other communities
- Cultivating the next generation of leaders in the field of community planning

CHAPTER 6

ANALYSIS AND CONCLUSION

In this chapter we will look at a synthesis of cross-case analysis findings in terms of critical internal and external success factors. Following this analysis, this chapter will then use these findings to revisit and reevaluate the theoretical framework developed in chapters two through four. Conclusions and an examination of the significance of these findings will then be explored. Finally, recommendations for future research will be made.

Cross-Case Analysis

Based on the case study narratives and single-case findings, a cross case analysis was done to synthesize key capacities and process elements for regenerative planning. These findings are presented below:

Key Internal Capacities

The following is a list of some of the critical internal leadership capabilities that the lead planners in both case studies developed in themselves and/or in their team in order to successfully carry out regenerative planning processes. To reiterate, internal leadership capabilities can be defined as the psychological means by which a person and/or group orders and organizes their thinking in order to lead a particular process at a given standard of quality. This involves looking at both 'how one thinks' and 'what one thinks about' in order to successfully carry out this process.

(1) Balancing Realization and Actualization Work

In simple terms, realization work can be defined as the process of envisioning and conceptualizing new potential whereas actualization work involves the process of manifesting that potential into existence. These two modalities of work are highly interrelated. In a sense, people can only actualize potential to the extent that they first realize it. As systems organization consultant Charlie Krone explains

In one way, conceptualizations are an act of realization. [For example,] I realize what the table is about. Only then can I actualize it. That's to me how realization and actualization fit together. Actualization to me means, I bring life to that table. That's different from I use the table.¹

Through realization processes, one works on "creating a deeper level of consciousness" in relationship to something. Krone adds that "the more conscious we become, the more consciously we [then can] generate [i.e., actualize something]." ²

In both urban planning cases that were studied, it is evident that a high level of investment in time, energy, and money was made toward realization work (see chapters six and seven). This level of investment involved trying to deeply understand and conceptualize the core workings and potential of a place and then translating this into a collective vision and set of actionable ideas that could inspire their community to strive toward higher order ends.

In Curitiba, the leaders dedicated every morning to this work of continually realizing the greater potential of their city and what it could become. This gave them the basis from which to actualize higher order solutions.

In Noisette, the leaders invested the first five years of their involvement with the community largely doing realization work. They spent this time trying to deeply understand and see the greater potential of that community and what it could become. Only then, did they form a plan for redevelopment.

Both sets of leaders understood that without this space and ability to think, dream, and plan at a larger systemic level, their ability to accomplish anything great, let alone regenerative, was highly diminished.

(2) Faith and Courage to Marshal a Vision

Out of this process of connecting to the real potential of their communities, the leaders in both cases then had to marshal the will to see their visions through (see interview transcripts in chapters six and seven). It is one thing to see and connect to the greater potential of something, it is quite another to then choose to serve this greater potential through thick and thin. Yet, at the same time that these two aspects are distinctive, they are also highly interconnected. As spiritual teacher G.I. Gurdjieff wrote, “Life is real only then when I am.”³ In other words, to connect to what is real in a community requires one to likewise become real oneself. The two are interconnected and iterative. The more that the leaders of Curitiba and Noisette connected to the real potential of their communities, the more they were compelled to act. In turn, the more courage they had to act, even when the path was unclear, the more clear and real the path became.

As one of the leaders in Curitiba states it, “With innovation, there’s an understanding that you cannot have all the answers, you cannot be so prescient as having all the answers.” What you have to do is just start and the answers will come. Metaphorically, Jaime Lerner described this process as one of not waiting “until all your pumpkins are in the truck to start your journey to the market, [for] they will accumulate along the way.”⁴ In Noisette, one of leaders spoke of it as a process of walking “across the ravine on a bridge you are constructing on the way.” In both cases, a great deal of faith and courage is required, grown from a deep connection and will to serve that which is real and potentially can be, both in the community and in oneself.

(3) Appreciating the Unique Heritage, Identity, and Vocation of a Place and its People

In connecting to the real potential of their community and place, both sets of leaders also sought to grow this appreciation of place in their fellow citizens. In both cases, these leaders spoke of place as a living continuum from past, to present, to future. In Curitiba, the leaders spoke of it in terms of memory, identity, and vocation. As one of their city documents stated, “memory is the anchor-ground of identity, identity is the feeling of belonging to a place... [and vocation speaks to] where does it lead to?”⁵ Without these three things, “cities are subject to the whims of someone who will invent another vocation and impose another path.”⁶

The Noisetete leaders speak of this same phenomenon in terms of social durability. According to them, social durability is ensured when “every member of the community understands the unique history and heritage of their social community and everyone holds a common vision for the future which they contribute to.”⁷

Based on this understanding, both sets of leaders sought to appreciate this connection to the lineage of place, both in themselves and in the community as a whole.

(4) Living Systems Thinking and Healing

In connecting to the lineage of place as a living and evolving continuum, both sets of leaders relate to their place and community as a living system. As one city document in Curitiba stated, “cities, like all living being, live in a state of permanent change.”⁸ Or in the words of John Knott, “when we look at a city and a place, we view cities as living organisms.”⁹

In seeing the city and community as a living system, both sets of leaders see their role as one of healer rather than developer or city manager. As John Knott put it, “I asked our urban designers to see themselves not as designers, but as healers.”¹⁰ As healers, both sets of leaders looked at their city as a living system of connecting nodes and energy flows. At one level, they looked to see where the connections were obstructed or diminished by the structural skeleton of the city:

And it's kind of like a doctor looking at a body. You have to determine whether you're in triage or that you can actually fix the body. And in most cases, cities can be restored and fixed, but the only

way you can do it is, first, to inventory the assets. You've got to see the value that's there. You've got to see whether it has good bones or not, and where the bones have been disconnected. So it's really looking at it as a living organism and trying to see whether it has all the components to function as a healthy organism, if it can be restored.¹¹

At another level, they looked at the city as a living system of vitalizing energy nodes and flows:

I believe that some medicinal "magic" can and should be applied to cities, as many are sick and some nearly terminal. As with the medicine needed in the interaction between doctor and patient, in urban planning it is also necessary to make the city react; to poke an area in such a way that it is able to help heal, improve, and create positive chain reactions. It is indispensable in revitalizing interventions to make the organism work in a different way.¹²

In both cases, these leaders looked at the interconnection between systems, where these connections existed and where they had been lost or were in disrepair, in order to find the greatest leverage points for regeneration. This is what Lerner refers to as the art of "urban acupuncture"¹³ and John Knott as that of "corrective engineering."¹⁴ In both cases, they were looking for the "acupuncture points" or "sweet spots" where they could best regenerate the vitalizing systems of the community and their interconnectivity as a whole living system.

(5) Continual Commitment to Learning, Improving, and Evolving

Based on a living systems perspective of life, both sets of leaders understand that life is not static but rather continuously evolving, and that without this continual drive toward emergence and improvement, entropy will set in. As one Curitiba document explained, "In order to prevent paralysis and immobility from bringing about a retrocession, the city itself demands new changes at the completion of each cycle."¹⁵ Likewise, one of the Noisette leaders states, "you don't necessarily start out saying, 'I have to improve everything.' But, once [you're a sustainable thinker that sees everything connected], you can see that you'll find a way."

For this reason, both sets of leaders see their work as a continuous process of improvement, intrinsically in terms of evolving learnings and capacities and extrinsically in terms quality of life and living in their city. For this reason, they talk about the process as a continual learning journey of creative discovery and emergence.

(6) Building Solidarity Through Compassion and Respect

Both sets of leaders understand that regeneration of a community fundamentally requires regeneration of the human heart. Human communities are founded on human interrelationships and the ability to love and care for one another. For this reason, these leaders put a great deal of emphasis on the criticality of developing respect and compassion for their fellow citizens (see interview transcripts in chapters six and seven). Without this, no real sense of solidarity and co-commitment could have been generated.

As the leaders in Noisette state it, “Respect is at the core of every successful human relationship and endeavor.”¹⁶ In Curitiba, one of the leaders talks about it as a process of “having the people inside of you, of understanding what’s there.” John Knott, in fact, defines respect in terms of its etymological roots as being a process of “seeing anew,” of seeing people as if for the first time, without assumptions or prejudice.¹⁷

(7) Translating Solidarity into Partnerships of Co-responsibility

Connected to this capacity to build solidarity is the capacity to translate this new heart felt co-commitment into structured partnerships that foster ongoing opportunities for strengthening peoples’ investment and will to learn and change. The city’s partnership with private bus companies in Curitiba is an example of this. So is the partnership that was formed between the Noisette Company and the city of North Charleston. In both cases, these structured partnerships of co-responsibility involved public-private partnerships working toward shared, mutually beneficial aims.

(8) Generating a Field of Self-organizing Creativity and Resourcefulness

In both cases, these leaders worked to enable the creative, self-organizing contributions of their community members by providing the appropriate guidance, support and restraints while empowering bottom-up innovation. This is what Leadbeater refers to as structured self-organization, which involves providing “public leadership to encourage people to devise self-organizing solutions.”¹⁸

The public housing project in Curitiba is a great example of structured self-organization, where the city helped to set up the appropriate building parameters and financial and advisory support systems in a way that empowered their citizens to creatively design and build their own homes. The Noisette leaders, for instance, helped to set up a designated eco-industrial park with supportive business incubation structures that has attracted numerous businesses. The leaders set up the space and structure, but have encouraged businesses to take the initiative in forming creative eco-industrial interrelationships that reduce waste while growing interdependent self-sufficiency. For instance, a biodiesel plant set up business and then helped to bring in a sustainable brewery. The brewery sources all its energy from the biodiesel plant and in return gives it all its bio-waste to be transformed into more fuel, thus helping to form the beginnings of an industrial ecology.¹⁹

In each case, the leaders helped to set the vision and create the appropriate support and restraint systems (i.e., encouraging what they wanted to enable and what they wanted to protect), and then empowered people to develop their own self-organizing solutions.

(9) Connecting Needs with Potentials

In both urban planning cases, the leaders understood that they could not sustainably work on enabling the higher order potentials of their communities if they did not also work on meeting the base-needs of their community members. Rather than merely trying to balance between these two, however, both sets of leaders found ways to link the two together in ways that leveraged the effectiveness of their efforts.

For instance, in Noisette, the leaders used the issue of high utility bills as a platform for developing their sustainability institute. The success of this non-profit lies in its ability to directly help people in the community by lowering their monthly expenses while also working to educate and inspire a more sustainable approach to home building and maintenance. If they just worked on the lower-order need, the program would not have continued to evolve. Likewise, if they had just tried to work on the higher order potential, they most likely would not have attracted the level of participation and involvement that they have in the community.

In Curitiba, the food-for-trash program is a good example of meeting base-needs while also working on evolving the higher-order potential of their community. Rather than just respond to the pressing health issue of trash build-up in the favelas, the leaders helped to turn the issue into an opportunity to elevate the lives of these inhabitants and their prospects for finding employment, feeding their families, and becoming more integral members of the community as a whole.

(10) Integrating Functions

Both sets of leaders worked to free up resources and reduce waste by integrating the functioning systems of the community. In Noisette, the leaders spoke of this process as one of developing a sustainable partnering of resources. In Curitiba, Jaime Lerner spoke of it as a process of regrouping functions so as to free up energy in the system.²⁰ In both cases this process of working involved the development of a mind that could see things in interconnected terms.

Key External Processes

The following is a synthesis of the key process dimensions and elements that were evident in both case studies. To reiterate, external success factors are defined as the explicate steps engaged in by a person and/or group in order to implement a particular process at a given standard of quality. This involves looking at 'what one does' in order to successfully carry out this process.

Phase One: Growing a Regeneration-able Team

In both case studies, the leaders had to develop a certain level of holism in their working capacities, skills, and team processes in order to even create the opportunity to engage at this level of work. Key elements involved in this dimension of work were

- Gathering together a multi-dimensional, whole systems team of people who have a shared cause and purpose

- Developing a values-based, learning organization
- Evolving aims and capacities through iterative practice

Phase Two: Building a Field of Realization in the Community

In both cases, the leaders invested heavily in a realization process in order to envision a higher order potential for their city. They engaged in these processes both within their team and with key stakeholders in the community. The critical importance of this dimension is that it enables people to see new possibilities and develop higher-order aspirations. Without this step, any effort to actualize change in the community would have led to more of the same. By investing in realization work, these leaders helped to bring about a shift in orders, in terms of the collective aims that the community was striving toward accomplishing. Key elements involved in this dimension included

- Developing a generative infrastructure for envisioning the community's future
- Developing a core understanding of place through a systemic assessment process
- Engaging citizens in co-responsible planning and managing partnerships

Phase Three: Regenerating Patterns Through Urban Acupuncture

In both cases, leaders sought to actualize a transformation in community behavioral patterns and consciousness through focalized intervention projects. Key to these interventions were the following elements:

- Identifying key focal points in the system for leveraging change and transform them into regenerative nodes
- Systemically linking systems, resources, and partners so that each intervening focal point works on and integrates multiple systems at multiple levels
- Elevating the generative potential of each center through educational and resource support systems

Phase Four: Instituting an Evolving Legacy

In both case studies, the leaders saw the need and importance of developing structures, systems, and processes for sustaining and evolving this work through time. Key elements for working on this involved:

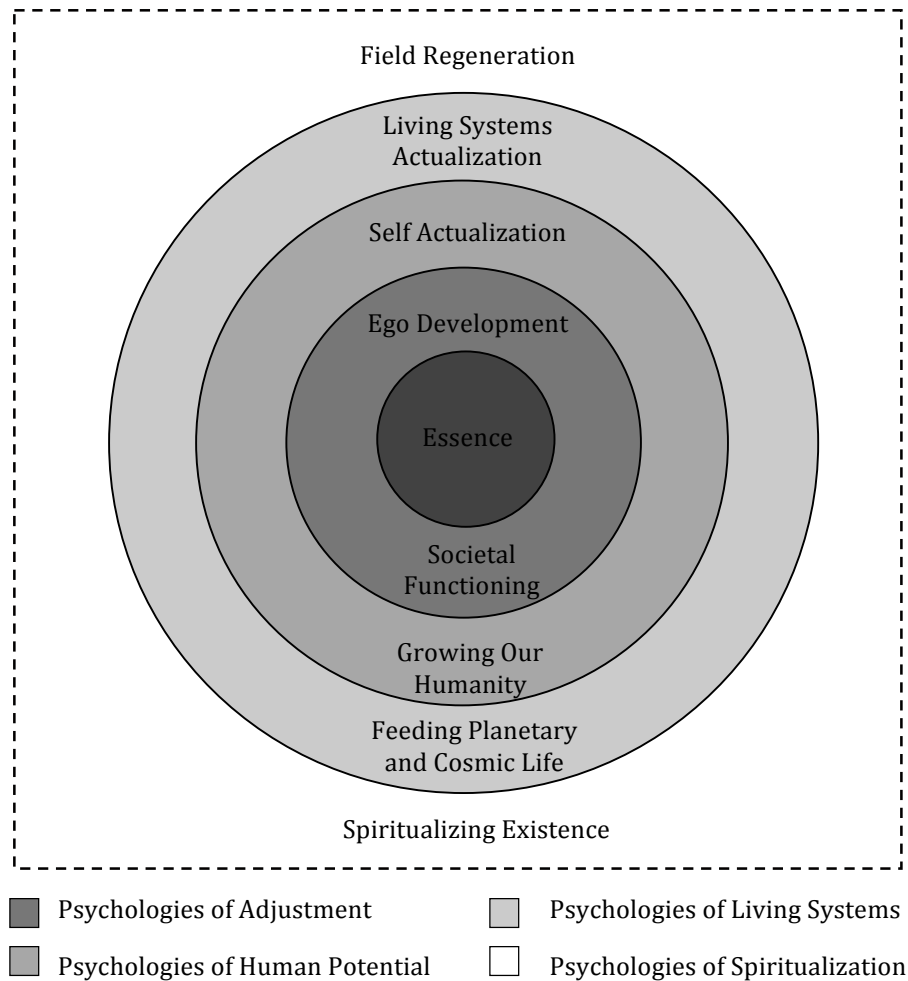
- Developing a research and planning infrastructure that works on continually evolving theory and practice in ways that lead to ongoing, on-the-ground improvements in civic quality of life.
- Developing a set of holistic indicators and monitoring systems for ongoing evaluation of progress toward articulated goals
- Developing processes for cultivating the next generation of planning leaders

Theory Development

In chapter one, the author presented a theory of four orders of work toward which psychological development has, and can be, directed. These four orders were depicted in a nested diagram, which is presented again on the following page (Figure 27). These four orders of psychological work are a derivation from Krone's more generalized systems framework entitled "levels of work."²¹ In chapters three and four, this theory was further explored and developed by looking at the relationship between these orders of psychological thought processes to how we live in place and how we plan and build our communities.

In light of the case study research narratives and findings, this theory can now be reevaluated. This is done in the following format. First, this section looks at a summary of the theory. Excerpts are used to help capture the state of thinking that the researcher developed before the research studies. Second, this section looks at what was found, in terms of the research narratives and findings. Third, this section looks at an analysis of the first two, in terms of alignment and/or divergences and their significance. This three-part structure is then applied successively to each of the four orders of the theory. In order to give a fresh perspective, this discussion will begin in reverse order with the fourth, most encompassing order and work back to the first.

Figure 24.
Four Orders of
Psychological
Development



Fourth Order Work: Spiritualizing Existence through Field Regeneration

This fourth order of psychology, which interpenetrates the three other levels of work, aims toward the spiritualization and regeneration of life. Throughout the ages and throughout different cultures, human beings have continued to be drawn toward the creation of artifacts and ways of living that breathe new life into the spiritual dimensions of existence. According to many different spiritual teachers across different cultures, the act of spiritualizing life comes not from us but through us. As such, we are not the source of spirit and godliness, but rather can become an instrument for this source and in so doing give back to it what it has given freely to us.

In terms of place, this fourth order of work relates to sacred and spiritualizing places. Every place or region on the planet has a unique spirit that energizes the mind and peoples who live there in a particular way. In our everyday hustle and bustle of modern life, it is sometimes difficult to slow down enough to consciously experience these rhythms of the place we live within, but when we do they are still pervasively present.

What many ancestral traditions teach us is that (a) each place has a unique spirit that affects and influences our emotional/mental being in particular ways, (b) right action involves living in harmony with and being in service to the spirit of the place in which one is situated, (c) certain places can be experienced as more powerful and more spiritual in their emanations than others, thus deeming them particularly sacred or holy places, (d) the spiritual health of human and planetary community depends upon the continued contact and right balancing of these different sacred energy sources, and (e) humans have a role in maintaining and regenerating these spiritual forces through such means as sacred architecture and devotional ceremony.²²

[The] practice of building in resonance with the spirit of a place is in fact a common theme among spiritual architecture around the world; its purpose being to structurally embody and amplify the spirit of that place.²³

Founded on this wisdom, regenerative planning involves a process of re-connecting to the spirit and essence of a place and allowing it to source our planning and decision-making processes. Regenerative planning is first and foremost a process for becoming receptive to, and in service of, the spirit of place. When we do so, inspiration can come which opens our imagination to new possibilities and elevates our collective psyche. Great architects design structures in ways that speak to and elevate the dreams of a people and their place. Such structures are healing in the sense that they move us to greater wholeness by elevating in our minds that which is greater than the sum of the parts, that which we love about a place and feel called to serve.

Two planning tools that are important to this fourth level of planning are what this dissertation refers to as (a) embodied dreaming and (b) eupsychian structures. The term embodied dreaming speaks to processes that help create the appropriate space and mental state in which designers, planners, and citizens are enabled to reconnect to the spirit of a place and allow this source to inform and inspire their design work.

This nature of process allows the place to dream through us. As such, we become instruments for place and its ongoing evolution.

The term eupsychian structures speaks to a particular means, historically used by great architects, for taking this inspiration and developing it into manifestable projects that speak to and help lift up the essence dreams of a people and their place. As such, they act as acupuncture-like interventions in which a single new development can spur the awakening of a collective community and region in imagining new orders of possibilities of health and wholeness. Such structures help to regenerate a people's story and relationship to place.

Research Findings. Of the list of critical regenerative planning capacities that were identified in these studies, two speak to this fourth order of work. They are (1) balancing realization and actualization work and (2) faith and courage to marshal a vision. By creating space to dream and envision the deeper potential of their community, each set of leaders worked to honor and appreciate the spirit of their place. Jaime Lerner spoke of this process as one of “interpret(ing) the collective dream.”²⁴ In Noisette, one of the leaders refers to this process as that of translating the “wisdom of its people and the place...into a future vision that is rooted in the place deeply.”

In both cases, these leaders sought to connect to the spirit and soul of the place. Jaime Lerner refers to this “soul of a city” as being “the strength that makes it breath, exist, and progress” and that this collective soul “resides in each one of its residents.”²⁵ John Knott also recognizes this spiritual relationship with place when he speaks of how “people used to have a spiritual connection with the land they lived on.”²⁶

Through connecting to the unique spirit of their place, these leaders then sought to translate this “wisdom” or “dream” into tangible, symbolic structures that elevate and inspire the people of their community. As Lerner stated

A city is a collective dream. To build this dream is vital. Without it, there will not be the essential involvement of its inhabitants. Therefore, those responsible for the destinies of the city need to draw scenarios clearly—scenarios that are desired by the majority, capable of motivating the efforts of an entire generation.²⁷

Many of the structures that have been built in Curitiba do just this. The ecological parks, the human-scale pedestrian malls, the stunningly beautiful cultural centers built out of all recycled materials, and the light-house library havens in each neighborhood, to name a few, have all lifted up the dreams of Curitiba in terms of who they are and what they can become as individuals, families, and as a community as a whole.²⁸ Yet, what is striking about each of these developments is that they are grown from, and speak to, the unique the soul of that place. As Lerner describes it, “memory is the soul of cities, it is our identification, it is belonging. When you achieve this in a city, you have come a long way.”²⁹

In Noisette, the leaders have worked to translate the “wisdom of its people and place” into a beacon project that celebrates the community’s roots while setting forth a bold, new future.³⁰ In doing so, they have helped to give the community a renewed sense of inspiration and hope. As their mayor puts it, “There is light at the end of the tunnel and it’s not a train. It’s a light opening on what we can be and can become.”³¹

And through this process of community transformation, the Noisette leaders overtly speak of their intention to help bring not only economic, environmental, and social renewal, but also to create “a community whose beauty and sense of sanctuary offer spiritual renewal to its inhabitants.”³²

Analysis. It is evident that in both case studies, the leaders devoted time and energy to the work of connecting to the unique spirit and wisdom of the place and its people. In doing so, they both spoke of their work as a process of translating these wisdom and dreams into symbolically inspiring plans and structures that could be manifested in their community. This evidence tends to corroborate the hypothesis put forth in this dissertation that both place-based visioning (i.e., embodied dreaming) and eupsychian structures are integral tools for regenerative planning.

Third Order Work: Feeding Planetary Life through Living-Systems Actualization

This third order of psychological development relates to the capacity to co-evolve in harmony with, and care for, the greater living systems of which a person is a part. This involves the inner capacity to experience and develop understanding of the energetic and systemic patterns of life that are continuously generating living systems of interrelationship and reciprocal nurturance. Metaphorically speaking, it is a shift

from focusing on the growth of the tree to that of improving the health of the forest as a whole. By better understanding the greater systems of which we are a part, we can develop and evolve our value adding roles within these systems. Value-adding in this sense is defined as that which increases systemic capacity for vitality, viability, and evolution of life.

Place, when looked at from this level, is an evolving socio-ecological whole involving both people and the natural ecosystems in which they live. What this implies is that humans are not separate from the planetary places in which they live but rather have a value-adding role to serve within them. In other words, rather than seeking to minimize our impact on the planet, at this level humans actively work to help enable and even improve the workings of natural living systems.

Leopold argued that what is centrally missing in our Western culture today is a land ethic.³³ According to Leopold, ethical values are what hold a community together and allow its members to cooperatively co-exist. A land ethic would involve living rightly with the land. Doing what is right in this case can be evaluated in terms of whether or not an action maintains and adds value to the systemic generative capacity of the land for supporting and evolving life.

To bring about such a new world view requires, first and foremost, a transformation in our cultural values and our ways of interrelating with the socio-ecological places that we live within. As Leopold stated, “it is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its [intrinsic] value.”³⁴ This goes beyond the vision of creating green, energy self-sufficient cities to that of creating urban socio-ecological landscapes that are not isolated islands but rather integral members and contributors to the ecological systems in which they exist.

In planning, this involves developing a community’s sense of identity and vocation in a particular place based upon a holistic understanding of the place, its right working and the right working of people in relationship to that place. It involves people developing a role in improving and adding value to the places in which they live as opposed to merely seeking to arrest disorder and tread lightly on the planet.

Two planning tools that are important to this third level of planning are a systemic assessment process and story of place. A systemic assessment process involves deeply studying and understanding the way in which a particular socio-ecological system has worked through time. When taken from the perspective of tens of thousands of years, a planner can begin to see the larger core patterns of a place and

how humans have worked with or against these patterns through time. Such an in-depth, systemic assessment of place enables a comprehensive socio-ecological understanding of how human inhabitation within a place can serve to enable the growing health of the land through time.

A story of place then serves to translate this complex, systemic understanding of place into core metaphors that speak to the heart of a community and bring the essence of a place alive. It helps to create a common sense of identity and caring for where they live and how they live there. Three critical elements of a good story of place are that it regenerates a shared sense of identity and meaning, it regenerates vocation and purpose, and it inspires people to act and make the story their own.

Research Findings. Of the list of critical regenerative planning capacities that were identified in these case studies, two speak to this third order of work. They are (1) understanding and appreciating the unique heritage, identity, and vocation of a place and its people and (2) living systems thinking and healing. In both case studies, the leaders placed a great deal of emphasis on the importance of understanding the place and how it organically worked. In Noisette, the leaders specifically engaged in an assessment process that looked at the place and its patterns over a ten thousand year period. In Curitiba, the leaders spoke of engaging in a process of strange archeology in order to understand the working flows and networks of the city and the land.

In both cases, the leaders worked to translate these assessment studies into core patterns for understanding the workings of their place. By doing so, they were able to develop planning and design concepts that were aimed at working with and in support of the land and its natural systems. In Noisette, this involved developing a plan for re-knitting and restoring 70% of the critical environmental corridors that flowed through their land. In Curitiba, this involved buying up land around each of their river corridors and turning them into natural floodways and parks so that the river could continue to meander naturally.

Both sets of leaders also spoke of the need to go beyond just good, ecologically-minded design to that of bringing about a transformation in the culture and its relationship to place. In Curitiba, the leaders spoke of this as a process of reconnecting to, and growing, people's sense of memory, identity, and vocation in relationship to place. Many of their projects and initiatives worked on telling and building a collective story of their city's past and potential future. In Noisette, the leaders engaged the community in a master planning process that began with the telling of stories. The aim of such events was to begin to build a shared sense of

community roots and values. This created the ground from which they then sought to develop a common vision for their future.

In both cases, underlying this approach was a living systems philosophy and way of thinking. Both sets of leaders saw their community as a living system in which humans and the ecology of place ultimately cannot be separated. They therefore sought to plan and develop projects in ways that appreciated the triple bottom line of economy, society, and environment.³⁵

Analysis. It is evident that in both cases studied, a great deal of emphasis and investment was made toward actualizing their community as a living system in connection with the natural environment. It could even be argued that a big part of what sets these cases apart from most planning and development initiatives is their work on (1) reintegrating the built environment with the natural environment and (2) regenerating a culture that appreciates and stewards this connection.

The findings from these case studies also corroborate the hypothesis put forth in this dissertation that two critical tools for living systems planning are holistic, place-based assessment processes and story-making processes that build a community's sense of shared identity and vocation.

Second Order Work: Growing our Humanity through Self-Actualizing Processes

A psychology of human potential looks at the world in terms of the development of our humanity through self-actualization processes. Ideally, this order of psychological development enables a person to become more human through becoming more compassionate, more reflective, and more integral. It works toward the greater individuation of people and their unique contributions to the world.

At this level, humans as individuals, communities, and societies seek to create environments that nurture and reinforce particular states of being and particular qualities of interrelationship between people. In this sense, we create human places that are conducive to particular experiences and ways of living. As such, each cultural landscape, to the degree in which it is integral, helps to support a particular way of life and a particular way of experiencing one's lived world. This is a step beyond merely focusing on functional use of space to that of seeing the effects that a structured space has on one's psyche and wellbeing. Does a place

feed one's inner life or does it stifle it? Does it help one feel more human and alive or does it deaden the spirit and harden the heart? A healthy place at this level can be defined as that which creates cultural landscapes that are conducive to people's self-actualization.

In the planning field, there has been a growing movement toward increasing community participation and collaboration in the planning process. This is based on the understanding that building structures are instruments that, no matter how well they are crafted, are only as good as the people who use them. From this perspective, good planning requires more than just good technical design and management. It also requires the engagement of stakeholders in ways that develop their sense of co-stewardship in the planning process.

As such, planners are beginning to expand their envisioned role from one of being expert engineer to that of being facilitator of a community-wide process in which a broader set of expertise and insight can be woven into the process. This shift requires a shift in the capability of planners from merely functional expertise to that of process facilitator and community engager in developmental visioning processes. Such planning moves from merely seeking to manage hazards that threaten the potential operability of the community to that of seeking to use the planning process as a developmental tool for its citizens and their involvement in the community.

One important tool used in planning today to creatively engage stakeholders in the process is that of the charrette: "A charrette is a brief but intense design workshop in which stakeholders and interested citizens are invited to contribute to the work of an interdisciplinary team of urbanists during the earliest stages of design and planning."³⁶ What this allows for is a much more co-creative and less top-down approach to planning. In addition, the designs and plans that come out of such a process, tend to have more stakeholder buy-in than ones that are merely drawn up in a black box and then handed to the community by the team of experts.

Research Findings. Of the list of critical regenerative planning capacities that were identified in these studies, four speak to this third order of work. They are (1) continual commitment to learning, improving, and evolving, (2) building solidarity through compassion and respect, (3) translating solidarity into partnerships of co-responsibility, and (4) generating a field of self-organizing creativity and resourcefulness. In both case

studies, the leaders sought to directly involve their fellow community members in the planning and development of their city through charrette-like processes. In this, the leaders saw themselves as catalyzers and facilitators as opposed to the “experts” with all the ideas. As one Noisette leader states it

I think of community development as a conversation. We are not doing something to the community; we are developing in concert with the community. Any communication that is one way is not a conversation.³⁷

And in both cases, the leaders sought to develop mentoring partnerships with citizens in ways that developed co-responsibility. Through these partnerships, they sought to help develop the self-actualizing capacities of their citizens.

In addition, both sets of leaders saw the need for continual development of their own internal team capacities as well. Both spoke of the process as a learning journey, in which a passionate dedication, caring, and love for what they were doing was critical to their success. In other words, they were continually involved in their own processes of self-actualization at the same time that they sought to engage others.

In each case, they were seeking to draw out the wisdom and creative contribution of people and place. They understood that the vision they were seeking to bring about could only be realized through a collective involvement on the part of the whole community and that this involvement required the ongoing development of their capacities.

Underlying this engagement process, in both case studies, was the development of a compassionate and caring relationship between the planning professional and the community. Without this felt sense of solidarity and trust, none of this would have been possible.

Analysis. It is evident in both these cases that these leaders held a clear value for enabling self-actualizing development of their team and their fellow citizens. Furthermore, both sets of leaders understood the importance of compassion as a foundation for engaging in this level of work. It is also evident that the charrette process of bringing together various stakeholders in a co-creative planning process was an essential tool for engaging people at this level of work. In addition to the charrette, a second mechanism has been elucidated through the research findings. This second instrument has to do with the development of structural partnerships of co-responsibility. In both case studies, these partnerships helped to take the

energy and creative ideas that were generated in the charrette process and translate them into ongoing developmental relationships for implementing and maintaining these community inspired initiatives.

First Order Work: Improving Societal Functioning through Operational Development

The first order of psychological work relates to the development of one's capability to function and participate in societal life. The aim at this level of work is to enable individual entities (i.e., persons, families, organizations, municipalities, etc.) to function at a desired standard of operation. As a result of this focus, this order of psychology tends to work on managing variances that threaten to disrupt ongoing functioning capability. Ideally, this level of psychology helps enable entities to develop strong functioning capabilities with which to manage and engage in their environment.

In relationship to place, humans at this level of work learn to manage themselves and their environments in ways that enable and support their functioning capability. In this sense, we seek to create operational spaces for ourselves to live within. A society, for instance, organizes development in a region based in part on the need to support and fulfill its functions. The organization and supply of food, water, shelter, transportation, and fuel are all operational needs of any human settlement. In this, a society will either adjust to the patterns and constraints of the existent ecosystems that it inhabits, and/or it will seek to adjust these patterns to better meet its societal demands and needs.

In the modern era, our capacity as humans to reorganize our environment to meet the operational needs of our society has grown astronomically. With these new technological powers comes a great deal of opportunity, as well as a great deal of danger for the continued development and evolution of the socio-ecological places in which we live and for life on this planet as a whole. Both these opportunities and dangers depend on the nature of mind that we as a society and globalizing world bring to the ongoing development and use of these technologies.

There are many dangers that the operational mind, when left to its own devices, can fall into, but there is also a value and opportunity in the appropriate growth and development of this mind. When guided by the higher and more encompassing levels of mind, the operational mind can be employed to create and design functional space that works with and supports the patterns and dynamics of a given regional place.

Most of the field of urban and regional planning, when evaluated through this framework, can be seen as operating at this adjustment level of psychology. Three of the primary mechanisms used in planning today are that of zoning laws, building codes, and policy legislation. By their nature, they serve to standardize land development practices within a given area. They are employed in the effort to manage potential hazards (short and long term) that could disrupt civic life.

Research Findings. Of the list of critical regenerative planning capacities that were identified in these studies, two speak to this third order of work. They are (1) connecting needs with potentials, and (2) integrating functions. In addition to these two listed capacities, the process element of developing a new set of standards for measuring and monitoring progress also relates to this order of work.

In both cases studied, the leaders worked to establish a new set of standards for planning and development in their communities.³⁸ They did this through the development of new zoning laws, new standards for building and development, and new metric systems for measuring and monitoring progress. In doing this, they helped to raise the bar in their communities for what was socially acceptable and desirable in terms of land-use and community practices.³⁹

These leaders, upon setting new standards for success, then worked to improve functioning capability in their civic systems through the integration of functions. By reintegrating fragmented silos of operations, these leaders helped to free up resources and energy that could then be reinvested into improving the overall development of their community and its quality of life. As Jaime Lerner stated, “Good planning will encourage the bringing together of functions...[because] a city that regroups its functions will save a great deal of energy.”⁴⁰

In both cases studied, these leaders also sought to leverage the effectiveness of their work by linking needs and potentials. Rather than just engaging in hazard management work to address existing needs or just working on the development of potential, these leaders found that the most effective solutions linked and integrated these two. Doing so helped to ensure that their work on developing the functioning capabilities of the communities was not reactive in focus but rather much more proactive and systemic.

Analysis. It is evident in both these cases that the respective leaders, like most planners, worked to improve the functioning capabilities of their communities. What distinguishes the leadership involved in these two cases, however, is their work to raise the societal standards for operation by holistically linking their work at the functional level with their work at higher orders. In other words, only through connecting to the unique soul and spirit of the place and its people were they able to realize a new higher order vision for their community. Only by seeing and relating to their cities as living systems, were they able to identify and integrate the different functions of their cities into a more effective and efficient working whole. Further, only by engaging their citizens in this process and trying to use every needs-based crisis as an opportunity for developing greater potential, were they able to help build the will and capacity of their communities to begin to operate at this new standard of operation. These findings, therefore, help to corroborate the hypothesis put forth in this dissertation that regenerative planning requires the integration of all four of these levels of work.

Critical Perspective

While the analysis in the sections above has demonstrated that all four levels were present in the thinking of the Curitiban and Noisette planning leaders, valid criticism can be made that both of these case studies tend to be still too anthropocentric in their perspective. In both cases, for instance, interviewees and document sources focused most of their attention on the human dimensions, with much less attention given to the ecological dimensions of place. Likewise, in both cases, the extant interview transcripts and document sources tended to speak more to the social engagement aspects of their work and less to the spiritual dimensions of place. Because of this, the criticism can be made that the ecological and spiritual dimensions, while present in the case narratives (as demonstrated in the preceding analysis sections), were less represented and elaborated upon than the human-social dynamics in each case study. Therefore, one source of limitation was the content of the data sources themselves.

It is important to point out that while these cases were selected because they push the edge in terms of the degree of holism with which planning is practiced, they are merely road markers on an evolutionary

path and therefore should not be viewed as an idealized destination by any means. One of the interviewees from Noisette articulated this understanding quite well when he stated:

A lot of what we talk about is the journey to sustainability; we believe that no one is there. A lot of people think we are one of the real leaders and yet if I had to go as a percentage of how far along the journey we are, I would say 10% toward that goal.

These cases, therefore, do not so much define what sustainable and regenerative planning are as help to indicate the direction toward which the field can and, in the opinion of this author, should be evolving towards.

Furthermore, this critical perspective helps to underscore the challenge that is confronted in this dissertation in stepping beyond modern society's current anthropocentric tendencies in language and thought. As environmental psychologist James Swan stated:

What is needed is a new legitimate paradigm to 'mind the Earth,' as Joseph Meeker calls human-nature harmony. New words and concepts must be conceived and integrated into a new Earth language which can articulate a consciousness rooted in an honest experiencing of place.⁴¹

The humble attempt of this dissertation has been to help move us forward in this direction by seeking to contribute to the articulation of this "minding the Earth" consciousness and through developing concepts and frameworks for helping planners (and for that matter all land-users) who seek to regenerate an "honest experiencing of place."

Recommendations for Future Research

This theoretical and case study research project was designed as an initiatory study from which further research in the newly defined field of regenerative planning could be developed and pursued. The following recommendations for continuing and extending this research are described below:

1. Identify and extend this research to a greater number of case studies to test, strengthen, and refine these findings. This would help to further define and expand upon the understanding of what a regenerative planning process is and what the critical success factors are for its implementation
2. Conduct a longitudinal case study to track the evolution of thinking and lessons learned as a community regeneration planning process is implemented over a period of several years. This would help to capture critical learnings, pitfalls, and key process dimensions as they are developed in present time as opposed to capturing them through reflections on the past, which often generalize learnings and lose sight of specific elements that were critical at the time.
3. Expand the scope of interviewees in future case studies to include not only the core leadership team but also their key partners in the community. This would help to develop a more comprehensive and holistic understanding of the regenerative planning process.
4. Expand sources of data to include more “other-than human” perspectives. For example, use natural history data as a means for uncovering and conveying the core patterns of a place.
5. Develop and record dialogues between regenerative planning leaders so as to more fully engage them in the process of defining and refining understanding of regenerative planning as a developing field.
6. Conduct cross-industry case comparisons between, for instance, leadership processes in regenerative land-use planning case studies and leadership process in regenerative business planning.
7. Employ the theoretical framework developed in this dissertation as an instrument for conducting a meta-analysis of community planning case studies.

8. Develop an action research project, where the theoretical framework and findings from this dissertation form the basis for engaging a team of planners in developing and implementing a regenerative planning project.
9. Conduct a comparative case study measuring the effectiveness of non-regenerative planning processes as compared to regenerative ones.

Conclusion and Significance

In the introduction of this dissertation, the author posited that a city is more than just bricks and mortar; that a city is a living being in dynamic relationship with a living place. Furthermore, the author posited that work on regenerating the life of a city requires more than just good engineering and policy; it requires a psycho-spiritual understanding, caring, and vision for one's community and its inhabitants. While politicians and novelists often talk about this sense of spirit in people and place, there has been little systematic study of this psycho-spiritual phenomenon in relationship to urban planning.

This dissertation, through a combination of theoretical and case-based research, has sought to create a foundation for developing more systematic theory by defining and studying "regenerative planning" as a systemic process. The core theoretical framework developed in this dissertation offers a systemic thinking tool for defining, developing and auditing a holistic planning process that weaves together the functional with the psycho-spiritual. In other words, this tool offers planners a means for ordering their thinking and ensuring that all four levels or dimensions of regenerative planning, as detailed in the framework set forward in chapter four, are present at each step of the process. In addition, the case study research conducted in this dissertation elucidated critical process elements for regenerative planning that help to offer planners a means for organizing their thinking in terms of process phasing and implementation. Thirdly, the elucidated critical leadership capacities for regenerative planning help to orient planners towards developing their internal and team capabilities to lead and deliver such a process.

This dissertation, therefore, is a first foray into a cross-disciplinary field that, in the opinion of this author, desperately needs to be brought into existence. Such a field, that this author has entitled regenerative planning, would seek to integrate the psycho-spiritual with the physical dimensions of land use planning and development. It would focus on the study of universal processes for creating and implementing holistic planning solutions versus merely studying and critiquing past planning ideas and solutions. Toward this end, the theoretical framework presented in this dissertation offers a foundation for defining the field and its scope of study.

As Mumford reminds us, the city was in its origins a sacred place in which nomadic tribes gathered for religious ceremony, trade, and social exchange.⁴² The new field of regenerative planning poses the question: How can we reclaim and regenerate our cities as the sacred places they once were, and potentially can be again?

NOTES

¹ Beatley & Manning, 1997

² Leff, 1990

³ As cited in Whitehouse, 2005

⁴ Goode, 1990

⁵ O'Meara, 1999

⁶ Goode, 1990; O'Meara, 1999

⁷ Goode, 1990, p. 1

⁸ Jefferson cited in Frumkin, Frank, & Jackson, 2004, p. 30

⁹ Lerner cited in Utne, 2005

¹⁰ Mumford, 1961, pp. 9-10

¹¹ O'Meara, 1999, p. 136

¹² O'Meara, 1999, p. 150

¹³ Utne, 2005, p. 63

¹⁴ Berg, 1990, p. 285

-
- ¹⁵ O'Meara, 1999, p. 147
¹⁶ Orr, 2002, p. 21
¹⁷ Orr, 2002, p. 23
¹⁸ Berry, 1988, p. 113
¹⁹ Lerner cited in McKibben, 1995, p. 99
²⁰ Interviewed in Swan, 1991c, p. 314
²¹ Matsubayashi, 1991, pp. 339-340
²² Interviewed in Swan, 1991c, p. 308
²³ Lerner cited in McKibben, 1995
²⁴ Utne, 2005, p. 61
²⁵ Morre, 1994
²⁶ Hawken, Lovins, & Lovins, 1999
²⁷ Cunningham, 2004, p. 4

CHAPTER ONE

- ¹ Goleman, 1993; Wilber, 1993
² Baldwin, 1913, p.1
³ Frankfort, H., Frankfort, M. H., Wilson, J. A., & Jacobsen, T, 1949; Schwaller de Lubicz, 1957
⁴ Kim, Yang, & Hwang, 2006
⁵ Fadiman & Frager, 2002
⁶ Daniels, 1997
⁷ Capra, 1982
⁸ Freud, 1930/1961
⁹ Ramos, 1981
¹⁰ E.g. Watson, 1970; James, 1890; Skinner, 1938; Galton, 1973; Binet & Simon, 1916
¹¹ E.g. Gilbreth, 1921; Taylor, 1911; Scott, 1911; Munsterberg, 1913
¹² Freud, 1961
¹³ E.g. Fromm, 1955; Maslow, 1968; Rogers, 1961; Bugental, 1965
¹⁴ Rogers, 1961; Bugental, 1978; Maslow, 1968
¹⁵ Roszak, 1995; Metzner, 1999
¹⁶ Hillman, 1995; Roszak, 1995
¹⁷ Abrams, 1996; Naess, 1989; Sewall, 1995; Fox, 1995
¹⁸ Fernandez, 1998; Hillman, 1995; Roszak, 1995
¹⁹ Bohm, 1985

-
- ²⁰ Fernandez, 1998; Deloria & Wildcat, 2001; Peat, 2002
- ²¹ Huxley, 1945; Wilber, 2000
- ²² Steiner, 1990; Bennett, 1964
- ²³ Bennett, 1964, p. 9
- ²⁴ Deloria & Wildcat, 2001; Fernandez, 1998; Vasquez, 1996
- ²⁵ Krone, 2005, p. 5
- ²⁶ Bennett, 1964, p. 9
- ²⁷ Bohm, 1985, Laszlo, 2004
- ²⁸ Bennett, 1964, p. 11
- ²⁹ E.g., Maslow; 1968; Steiner, 1997; Wilber, 2000; Nielsen, 2008; Bennett; 1994
- ³⁰ Krone, 1997
- ³¹ Maslow, 1968; Montessori, 1912; Murphy & Marvick, 1998
- ³² Freud, 1961, p. 110
- ³³ American Psychiatric Association, 1994, p. xxi)
- ³⁴ Freud, 1961
- ³⁵ Maslow, 1968; Mack, 1993; Ouspensky, 1981
- ³⁶ Anthony, 1995
- ³⁷ Fromm, 1955, p. 71
- ³⁸ Maslow, 1993
- ³⁹ Rogers, 1980
- ⁴⁰ Maslow, 1968, p. 5
- ⁴¹ Maslow, 1993
- ⁴² Easwaran, 1978
- ⁴³ Metzner, 1999
- ⁴⁴ Orr, 1994; Lovelock, 1979
- ⁴⁵ Hillman & Ventura, 1992, p. 3
- ⁴⁶ Roszak, 1995
- ⁴⁷ Fernandez, 1998; Hillman, 1981; Brown, 1993; Deloria & Wildcat, 2001
- ⁴⁸ Abrams, 1996; Orr, 1994; Vasquez, 1996
- ⁴⁹ Fernandez, 1998
- ⁵⁰ Krone, 2005
- ⁵¹ Brown, 1993; Anderson, 2005
- ⁵² See Sahtouris, 2000
- ⁵³ Laszlo, 2004; Bennett, 1964; May, 1982
- ⁵⁴ Huxley, 1945; Wilber, 2000
- ⁵⁵ Puthoff, 1991

-
- ⁵⁶ Deloria, 2001, p. 25-26
⁵⁷ Bohm, 2003
⁵⁸ Aristotle, 1962
⁵⁹ Deloria & Wildcat, 2001, p. 96
⁶⁰ Vasquez, 1996; Fernandez, 1998; Deloria & Wildcat, 2001
⁶¹ Bohm, 1985; Peat, 2002; Laszlo, 2004
⁶² Sahtouris, 2000
⁶³ Playfair, 2002; Braud, 1992; Dossey, 1993; Byrd, 1988
⁶⁴ Maslow, 1968, p. iii-iv
⁶⁵ Roszak, 1993; Kremer, 1998; Fox, 1995
⁶⁶ Krone, 2005
⁶⁷ Apffel-Marglin, 1994, p. 9
⁶⁸ Berry, 1996; Jackson & Jackson, 2002; Leopold, 1949; Hawken et al., 1999; Naess, 1989

CHAPTER TWO

- ¹ Apffel-Marglin, 1998
² Berry, 1996
³ Allison, 2007
⁴ Wilson, 2001
⁵ Berry, 1987; Berry, 1996
⁶ See Brown, 2008; Beatley, 2004; Orr, 1994
⁷ Beatley, 2004
⁸ Stegner cited in Berry, 1995
⁹ Stegner cited in Berry, 1995, p. 62
¹⁰ Kilborn, 2005
¹¹ Adelson et al., 2008
¹² Beatley, 2004; Steele, 1981
¹³ Online Etymology Dictionary, 2006; Webster Online Dictionary, 2007
¹⁴ See Seamon, 2000
¹⁵ Lukermann, 1964
¹⁶ Online Etymology Dictionary, 2006
¹⁷ Tuan, 1977, p. 136
¹⁸ Tuan, 1977, p. 167
¹⁹ Seamon, 1979
²⁰ Heidegger, 1975, p. 154

-
- ²¹ Relph, 1976, p. 49
- ²² Beven, 2000; Cresswell, 2004
- ²³ Creighton & Baumgartner, 1997
- ²⁴ Hillier & Rooksby, 2005; Bourdieu, 1990
- ²⁵ Robertson, 2007
- ²⁶ Chase & Liebold, 2003, p. 5
- ²⁷ Casey, 1997, p. 288
- ²⁸ Bachelard, 1964, p. xxxii
- ²⁹ Bachelard, 1964, p. 193
- ³⁰ Casey, 1997, p. 48
- ³¹ Bachelard, 1964, p. 150
- ³² Chase & Liebold, 2003
- ³³ McPhee, 2003
- ³⁴ Gay, 2001
- ³⁵ Wade, 2005, p. 84
- ³⁶ Burrus, 2009
- ³⁷ Murphy & Marvick, 1998
- ³⁸ Alexander, 2002, p. 85
- ³⁹ Alexander, 2002, p. 91
- ⁴⁰ Tuan, 1977, p. 138
- ⁴¹ Lukermann, 1964
- ⁴² Leatherman, 2001
- ⁴³ Clement, 1916
- ⁴⁴ Clement, 1916; Robertson, 2007
- ⁴⁵ Lucas, 2006, p. 1
- ⁴⁶ Reveal, 2009
- ⁴⁷ Bennett, 1966
- ⁴⁸ Bertalanffy, 1968
- ⁴⁹ Relph, 1976
- ⁵⁰ Beatley, 2004, p. 52
- ⁵¹ Tuan, 1977, p. 136
- ⁵² Cresswell, 2004; Mayeroff, 1990
- ⁵³ Beatley, 2004, pp. 25-26
- ⁵⁴ Tuan, 1977, p. 6
- ⁵⁵ Fox, 2006
- ⁵⁶ Deloria cited in Swan, 1991a, p. 10

-
- ⁵⁷ Beatley, 2004; Tuan, 1977
- ⁵⁸ Trafford, 2000; Berkman, 1995; Greene, 2000; Frumkin, 2001; Baker, 2002; Wells, 2000
- ⁵⁹ Matsubayashi, 1991, pp. 339-340
- ⁶⁰ Tuan, 1977, p. 138
- ⁶¹ Matsubayashi, 1991, p. 340
- ⁶² Beatley, 2004; Cresswell, 2004
- ⁶³ Matsubayashi, 1991, p. 340
- ⁶⁴ Beatley, 2004, p. 31
- ⁶⁵ Day cited in Seamon, 2000
- ⁶⁶ Kukai cited in Matsubayashi, 1991, p. 340
- ⁶⁷ Baldursson, 2009
- ⁶⁸ Dillbeck, Banus, Polanzi & Landrith, 1988; Hagelin et. al., 1993; Hatchard, 1996
- ⁶⁹ Beatley, 2004
- ⁷⁰ Bonnemaïson, 2005, p. xi
- ⁷¹ Johnston, 1994
- ⁷² Nostrand, 1996, p. 214
- ⁷³ Bonnemaïson, 2005, pp. 74-75
- ⁷⁴ Bauman, 1993
- ⁷⁵ Cresswell, 1996
- ⁷⁶ Bonnemaïson, 2005, p. 17
- ⁷⁷ Baldursson, 2009
- ⁷⁸ Leopold, 1949
- ⁷⁹ McGray, 2007
- ⁸⁰ McDonagh, 1986
- ⁸¹ Beatley & Manning, 1997; Brown, 2008
- ⁸² Berry, 1996
- ⁸³ Brown, 2008
- ⁸⁴ Kaiser et al., 1995
- ⁸⁵ Nabhan in Ives, 1997
- ⁸⁶ Thompson, Sorvig, & Farnsworth, 2000
- ⁸⁷ McHarg, 1971; Thompson et al., 2000
- ⁸⁸ Mumford cited in Kunstler, 1993, p. 10
- ⁸⁹ Kunstler, 1993; Beatley, 2004
- ⁹⁰ Relph, 1976, p. 79
- ⁹¹ Day, 1990, p. 24
- ⁹² Day, 1990, p. 113

-
- ⁹³ Bennett, 1966, p. 15
- ⁹⁴ Bennett, 1966
- ⁹⁵ Cresswell, 2004; Day, 1990
- ⁹⁶ Seamon, 2000; Day, 1990
- ⁹⁷ Beatley, 2004, p. 33
- ⁹⁸ Fuerst, 2004
- ⁹⁹ Day, 1990
- ¹⁰⁰ NewUrbanism.org, 2006, p. 1
- ¹⁰¹ Anderson, 2005
- ¹⁰² Anderson, 2005, p. 120
- ¹⁰³ Dernbach, 2002; McHarg, 1971
- ¹⁰⁴ Beatley, 2004; McHarg, 1971; Leopold, 1949
- ¹⁰⁵ Leopold, 1949, p. 224
- ¹⁰⁶ Anderson, 2005; Fernandez, 1998
- ¹⁰⁷ Anderson, 2005, pp. 2-3
- ¹⁰⁸ Leopold, 1949, p. 216
- ¹⁰⁹ Leopold, 1949, p. 216
- ¹¹⁰ Leopold, 1949, p. 205
- ¹¹¹ Leopold, 1949, p. 204
- ¹¹² Leopold, 1949, p. 201
- ¹¹³ Leopold, 1949, pp. 224-225
- ¹¹⁴ Brown, 1993, p. 74
- ¹¹⁵ Brown, 1993, p. 72
- ¹¹⁶ Brown, 2008; Berry, 1996
- ¹¹⁷ Mollison, 1997
- ¹¹⁸ Steiner, 2005; Joly, 2007
- ¹¹⁹ Dale & Robinson, 1996
- ¹²⁰ Brown, 2008
- ¹²¹ Leopold, 1949, p. 223
- ¹²² Orr, 1994; Roszak, 1993; Metzner, 1999; Abrams, 1996
- ¹²³ Fernandez, 1998, p. 127
- ¹²⁴ Lake, 1991
- ¹²⁵ Swan, 1991a, p. 1
- ¹²⁶ Swan, 1990; Bonnemaïson, 2005
- ¹²⁷ Schwaller de Lubicz, 1957
- ¹²⁸ Schwaller de Lubicz, 1957

-
- ¹²⁹ Swan, 1991a
¹³⁰ Schwaller de Lubicz, 1957
¹³¹ Swan, 1991b, p. 72
¹³² Swan, 1991b
¹³³ Lake, 1991, p. 55
¹³⁴ Deloria, 1991, p. 30
¹³⁵ Lovelock, 1988
¹³⁶ Hughes, 1991, p. 25
¹³⁷ Vasquez, 1996, p. 1
¹³⁸ Vasquez, 1996, p. 6
¹³⁹ Deloria & Wildcat, 2001; Vasquez, 1996; Roszak, 1993; Metzner, 1999
¹⁴⁰ Brown, 2008
¹⁴¹ Berry, 1996
¹⁴² Louv, 2005

CHAPTER THREE

- ¹ Branch, 1970, p. 11
² Cavin, 2003, p. vii
³ Scott, 1969, p. 2
⁴ Cavin, 2003, p. vii
⁵ Howell cited in Scott, 1969, p. 110
⁶ Cavin, 2003, p. vii
⁷ Beatley & Manning, 1997, p. 1
⁸ Calthorpe & Richmond, 1993, p. 700
⁹ See Jacobs, 1961; Beatley & Manning, 1997
¹⁰ Adeleye & Olayiwola, 2007, p. 1
¹¹ Cavin, 2003
¹² See Michael, 1973
¹³ See Dunn, 1971; Michael, 1973
¹⁴ Michael, 1973, p. 17
¹⁵ Michael, 1973, p. 17
¹⁶ Beatley, 2004, p. 99
¹⁷ Michael, 1973
¹⁸ Dunn, 1971
¹⁹ Morris, 1997, p. xiv

-
- ²⁰ Landry, 2006
- ²¹ Altshuler, 1965, p. 1
- ²² Landry, 2006
- ²³ American Planning Association, 2007, p. 1
- ²⁴ Landry, 2006, p. 299
- ²⁵ Dunn, 1971, p. 215
- ²⁶ Musty, 2007, p. 1
- ²⁷ McHarg, 1971; Beatley, 2004
- ²⁸ See Wackernagel & Rees, 1996; Brown, 2008
- ²⁹ Reed, 2007, p. 1
- ³⁰ Landry, 2006
- ³¹ Morris, 1997
- ³² See Berry, 1995
- ³³ Chapman, 2003
- ³⁴ Gruenberg, 1955, p. 133
- ³⁵ Zukin, 1995
- ³⁶ See McHarg, 1971
- ³⁷ Beatley & Manning, 1997
- ³⁸ United Nations World Commission on Environment and Development, 1987, p. 43
- ³⁹ U.S. National Research Council, 1992, p. 18
- ⁴⁰ Sanford, 2007
- ⁴¹ See Bateson, 1972; Argyris & Schön, 1978; Senge, 1990
- ⁴² Argyris & Schön, 1978, p. 18
- ⁴³ Argyris & Schön, 1978, p. 18
- ⁴⁴ Sanford, 2007
- ⁴⁵ Regenesis, 2007, p. 1
- ⁴⁶ Forbes, 2006, p. 53
- ⁴⁷ Forbes, 2006, p. 54
- ⁴⁸ See Prectel, 2004
- ⁴⁹ As cited in Thompson, 2004
- ⁵⁰ Thompson, 2004
- ⁵¹ See Bonnemaïson, 2005
- ⁵² Shea, 2005
- ⁵³ See Prectel, 2004
- ⁵⁴ Heller & Roth, 2000
- ⁵⁵ Interviewed in Swan, 1991c, p. 314

-
- ⁵⁶ Wren, 1965, p. 351
⁵⁷ Maslow, 1998, p. xxiii
⁵⁸ Maslow, 1998, p. xxiii
⁵⁹ Maslow, 1998, p. xxiii
⁶⁰ See Lerner, 2003
⁶¹ See Reed, 2007
⁶² Landry, 2006, pp. 235-236
⁶³ See Sparks, 2006
⁶⁴ Landry, 2006

CHAPTER FOUR

- ¹ Pierce, 1990
² Hawken et. al., 1999, p. 288
³ Ribeiro & Tavares, 1992; MacLeod, 2002
⁴ Pierce, 2000
⁵ Hawken, et. al., 1999
⁶ MacLeod, 2002
⁷ Ribeiro & Tavares, 1992; MacLeod, 2002
⁸ MacLeod, 2002
⁹ Pierce, 2000
¹⁰ Wright, 1996
¹¹ McKibben, 1995
¹² Xavier cited in McKibben, 1995, p. 105
¹³ Tacla cited in McKibben, 1995, p. 106
¹⁴ Schwartz, 2004
¹⁵ Lerner cited in McKibben, 1995, p. 64
¹⁶ Lerner cited in McKibben, 1995, p. 66
¹⁷ Lerner cited in McKibben, 1995, p. 66
¹⁸ Lerner cited in McKibben, 1995, p. 77
¹⁹ Lerner cited in McKibben, 1995, p. 68
²⁰ Ribeiro & Tavares, 1992, p. 12
²¹ Ribeiro & Tavares, 1992
²² Taniguchi cited in Leadbeater, 2006, p. 236
²³ Taniguchi cited in Leadbeater, 2006, p. 244

-
- ²⁴ Lerner cited in McKibben, 1995, p. 99
- ²⁵ Lerner cited in Meadows, 1995, p. 2
- ²⁶ Pierce, 2000, p. 1
- ²⁷ Lerner cited in Vaz & Vaz del Bello, 2006
- ²⁸ Lerner cited in Young, 2008, p. 1
- ²⁹ As cited in Vaz & Vaz Del Bello, 2006
- ³⁰ Lerner cited in McKibben, 1995, p. 74
- ³¹ Lerner cited in McKibben, 1995, p. 75
- ³² Lerner, 2003, p. 1
- ³³ Ribeiro & Tavares, 1992, p. 31
- ³⁴ Lerner, 2007b, p. 1
- ³⁵ Lerner, 2007b
- ³⁶ Ribeiro & Tavares, 1992, p. 10
- ³⁷ McKibben, 1995, p. 89
- ³⁸ Lerner in Ribeiro & Tavares, 1992, p. 7
- ³⁹ Ribeiro & Tavares, 1992
- ⁴⁰ Stevens & Arruda, 2008
- ⁴¹ Hawken et al., 1999, p. 290
- ⁴² Pierce, 2000, p. 2
- ⁴³ Irazabal, 2005
- ⁴⁴ Hawken et al., 1999, p. 307
- ⁴⁵ Hawken et al., 1999, p. 307
- ⁴⁶ Irazabal, 2002
- ⁴⁷ Hawken et al., 1999, p. 308
- ⁴⁸ Lerner cited in McKibben, 1995, p. 115
- ⁴⁹ Lerner cited in McKibben, 1995, p. 78
- ⁵⁰ Lerner cited in McKibben, 1995, p. 68

CHAPTER FIVE

- ¹ West, 2001, p. 1
- ² Cunningham, 2004, p. 1
- ³ Scott, 2003, p. C3
- ⁴ Cunningham, 2004, p. 4
- ⁵ Knott, 2006, p. 1
- ⁶ Knott, 2006, p. 1

-
- ⁷ O'Malley cited in French, 2007, p. 1
- ⁸ O'Malley cited in French, 2007, p. 1
- ⁹ Knott, 2006, p. 2
- ¹⁰ Quick, 2002, p. 1
- ¹¹ Knott, 2006, p. 2
- ¹² French, 2007, p. 148
- ¹³ West, 2008
- ¹⁴ Knott, 2006; Dougal, 2005
- ¹⁵ Noisette Co., 2008; Lawrence, 2005
- ¹⁶ Ward, 2008
- ¹⁷ Yudelson & Fedrizzi, 2007; Knott, 2006
- ¹⁸ West, 2008
- ¹⁹ Noisette Co., 2008
- ²⁰ Knott, 2006
- ²¹ Architecture Week, 2005
- ²² Ward, 2008
- ²³ Kallenbach & Wallace, 2008
- ²⁴ Knott cited in French, 2007, p. 1
- ²⁵ Knott cited in French, 2007, p. 1
- ²⁶ Hoffer cited in Knott, 2007, p. 3
- ²⁷ Noisette Co., 2003, p. i.1
- ²⁸ Noisette Co., 2003
- ²⁹ Noisette Co., 2003, p. i.1
- ³⁰ McCune, 2002, p. 1
- ³¹ Knott cited In McCune, 2002, p. 1
- ³² Noisette Co., 2008, p. 24
- ³³ Noisette Co., 2008, p. 3
- ³⁴ Augustin cited in Noisette Co., 2003, p. i.3
- ³⁵ Urban Land Institute, 2001; National Renewable Energy Laboratory, 2008
- ³⁶ Knott cited in Cameron, 2005, p. 1
- ³⁷ Noisette Co., 2008, p. 10
- ³⁸ Noisette Co., 2003, p. 10.2
- ³⁹ Noisette Co., 2003, p. 10.2
- ⁴⁰ as cited in West, 2008, p. 1
- ⁴¹ Noisette Co., 2008, p. 11
- ⁴² Noisette Co., 2008, p. 11

-
- ⁴³ Noisette Co., 2003, p. i.1
- ⁴⁴ Noisette Co., 2003, p. i.2
- ⁴⁵ Noisette Co., 2003, p. i.2
- ⁴⁶ Noisette Co., 2003, p. i.2
- ⁴⁷ Noisette Co., 2003, p. i.2
- ⁴⁸ Noisette Co., 2003, p. i.2
- ⁴⁹ Noisette Co., 2003, p. 1.3
- ⁵⁰ Noisette Co., 2003, p. 1.4
- ⁵¹ Noisette Co., 2003, p. 1.4
- ⁵² Noisette Co., 2003, p. 1.4
- ⁵³ Noisette Co., 2003, p. 1.4
- ⁵⁴ Noisette Co., 2003, p. i.2
- ⁵⁵ Noisette Co., 2003, p. i.2
- ⁵⁶ Knott cited in McCune, 2002, p. 1
- ⁵⁷ Noisette Co., 2003, p. 1.4
- ⁵⁸ Noisette Co., 2003, p. 10.2
- ⁵⁹ Noisette Co., 2003, p. 10.2
- ⁶⁰ Noisette Co., 2008, p. 37
- ⁶¹ Noisette Co., 2008, p. 24
- ⁶² Sustainability Institute, 2008, p. 1
- ⁶³ Noisette Co., 2003, p. i.2
- ⁶⁴ Noisette Co., 2003, p. i.1
- ⁶⁵ Noisette Co., 2003, p. i.2
- ⁶⁶ Noisette Urban Alliance, 2008, p. 1
- ⁶⁷ NUA, 2008, p. 1
- ⁶⁸ Noisette Co., 2008, p. 9
- ⁶⁹ Noisette Co., 2008, p. 29
- ⁷⁰ Noisette Foundation, 2008, p. 1
- ⁷¹ Michaux Conservancy, 2008, p. 1
- ⁷² Noisette Co., 2008
- ⁷³ Noisette Co., 2003, p. i.2
- ⁷⁴ Noisette Co., 2008, p. 36
- ⁷⁵ Noisette Co., 2008, p. 38
- ⁷⁶ Associated Press, 2005
- ⁷⁷ Dougal, 2005
- ⁷⁸ Behre & Scott, 2005

⁷⁹ Wise, 2006; Scott, 2007

⁸⁰ Dougal, 2005, p. 1

⁸¹ Taylor cited in Petersen, 2009, p. 1

⁸² Taylor cited in Petersen, 2009, p. 1

CHAPTER SIX

¹ Krone, 2005, p.1

² Krone, 2005, p.1

³ Gurdjieff, 1975, p. xiii

⁴ Lerner cited in McKibben, 1995, p. 75

⁵ Ribeiro & Tavares, 1992, p. 31

⁶ Ribeiro & Tavares, 1992, p. 31

⁷ Noisette Co., 2008, p. 24

⁸ Ribeiro & Tavares, 1992, p. 10

⁹ Knott cited in Niemenen, 2005, p. 2

¹⁰ Knott cited in Elmore, 2003, p. 18

¹¹ Knott cited in Niemenen, 2005, p. 2

¹² Lerner, 2003, p. 1

¹³ Lerner, 2003, p. 1

¹⁴ Knott cited in McCune, 2002, p. 1

¹⁵ Ribeiro & Tavares, 1992, p. 30

¹⁶ Noisette Co., 2003, p. i.1

¹⁷ John Knott, 2007, p. 6

¹⁸ Leadbeater, 2006, p. 235

¹⁹ Noisette Co., 2008; Coast Brewing Company, 2009

²⁰ Lerner, 2003

²¹ Krone, 1997

²² See Swan, 1990; Lake, 1991; Fernandez, 1998; Deloria & Wildcat, 2001

²³ Swan, 1990; Schwaller de Lubicz, 1957

²⁴ Lerner cited in McKibben, 1995, p. 99

²⁵ Lerner, 2007a, p. 1

²⁶ Knott cited in Siegel, 1999, p. 1

²⁷ Lerner, 2007a, p. 1

²⁸ McKibben, 1995; Vaz & Vaz, 2006

²⁹ Lerner cited in Pedriera & Goodstein, 1992, p. 1

-
- ³⁰ West, 2008
- ³¹ Summey cited in Elmore, 2003, p. 23
- ³² Knott cited in Elmore, 2003, p. 23
- ³³ Leopold, 1949
- ³⁴ Leopold, 1949, p. 223
- ³⁵ Vaz & Vaz, 1996; Elmore, 2003
- ³⁶ Musty, 2007, p. 1
- ³⁷ Augustin cited in Elmore, 2003, p. 20
- ³⁸ Vaz & Vaz, 2006; Architecture Week, 2005
- ³⁹ McKibben, 1995; West, 2008
- ⁴⁰ Lerner in Ribeiro & Tavares, 1992, p. 7
- ⁴¹ Swan, 1990, p. 76
- ⁴² Mumford, 1961

BIBLIOGRAPHY

- Abrams, D. (1996). *The spell of the sensuous: Perception and language in the more-than-human world*. New York: Vintage Books.
- Adams, J. (1998). *Transforming leadership* (2nd ed.). Alexandria, VA: Miles River Press.
- Adeleye, O. A., & Olayiwola, L. M. (2007). *Town planning instruments as a strategy for disaster risk reduction in Nigeria*. Retrieved December 18, 2007, from http://www.fig.net/pub/accra/papers/ts07/ts07_01_adeleye_olayiwola.pdf
- Adelson, G., Engell, J., Ranalli, B., & Van Anglen, K. P. (2008). *Environment*. New Haven, CT: Yale University Press.
- Agar, M. H. (1980). *The professional stranger: An informal introduction to ethnography*. San Diego, CA: Academic Press.
- Alexander, C. (1987). *A new theory of urban design*. New York: Oxford University Press.
- Alexander, C. (2002). *The nature of order: The phenomenon of life*. New York: Oxford University Press.

-
- Ali, J. (2004, August 6). Solar system could be 'unique.' *BBC News Online*. Retrieved April 13, 2009, from <http://news.bbc.co.uk/2/hi/science/nature/3532440.stm>
- Allison, M. (September 6, 2007). Sip Starbucks, access iTunes. *The Seattle Times*. Retrieved April 13, 2009, from http://seattletimes.nwsouce.com/html/business/technology/2003870859_starbucks06.html
- Altshuler, A. A. (1965). *The city planning process*. Ithaca, NY: Cornell University Press.
- American Heritage Dictionary. (2006). Retrieved December 16, 2006 from <http://www.bartleby.com/61/53/N0095300.html>
- American Planning Association (2007). *Considering a career in planning?* Retrieved December 18, 2007, from www.planning.org/careers
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Anderson, J. R. (2004). *Cognitive psychology and its implications*. New York: Macmillan.
- Anderson, M. K. (2005). *Tending the wild: Native American knowledge and the management of California's natural resources*. Berkeley, CA: University of California Press.
- Anthony, C. (1995). Ecopsychology and the deconstruction of whiteness. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the earth, healing the mind*. (pp. 263-278). San Francisco: Sierra Club Books.
- Apffel-Marglin, F. (1994). Development or decolonization in the Andes. *Daybreak* 4(3), 6-10.
- Apffel-Marglin, F. (1998). Introduction: Knowledge and life revisited. In F. Apffel-Marglin (Ed.). *The spirit of regeneration: Andean culture confronting Western notions of development* (pp. 1-50). London: Zed Books.
- Architecture Week. (2005). *American landscapes award, 2005*. Retrieved January 26, 2008, from http://www.architectureweek.com/2005/0907/news_1-2.html
- Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison Wesley.
- Aristotle. (1962). *The politics*. London: Penguin Books.
- Associated Press. (2005, July 3). Developer's record worries North Charleston politicians. *Augusta Chronicle*. Retrieved January 26, 2009, from http://chronicle.augusta.com/stories/070405/met_4567644.shtml
- Bachelard, G. (1964). *The poetics of space* (E. Gilson, Trans.). New York: Orion
- Baker, B. (2002, June 4). Happy by nature: Fondness for plants and animals may be hard-wired. *The Washington Post*, p. F1.
- Baldursson, S. (2009) *The nature of at-homeness*. Retrieved April 13, 2009, from <http://www.phenomenologyonline.com/articles/baldursson.html>
- Baldwin, J. M. (1913). *History of psychology: A sketch and an interpretation*. London: Watts.

-
- Bateson, G. (1972). *Steps to an ecology of mind*. San Francisco: Chandler.
- Bauman, Z. (1993). *Postmodern ethics*. London: Routledge
- Bayes, K. (1970). *The therapeutic effect of environment on emotionally disturbed and mentally subnormal children*. London: Gresham Press.
- Beatley, T. (2004). *Native to nowhere: Sustaining home and community in a global age*. London: Island Press.
- Beatley, T., & Manning, K. (1997). *The ecology of place: Planning for environment, economy, and community*. Covelo, CA: Island Press.
- Behre, R., & Scott, J. (2005, March 25). Noisette chief attempts to heal rift, regain city's trust. *Charleston Post and Courier*. Retrieved January 26, 2009, from http://www.noisettesc.com/press_news_article.html?id=38
- Berkebile, B. (2008). *The city as a living system*. Retrieved April 20, 2009, from http://www.greenarchitext.com/living_buildings/
- Berkman, L. F. (1995). The role of social relations in health promotions, *Psychosom Medicine*, 57(3), 245-254.
- Bennett, J. G. (1964). *A spiritual psychology*. Lakemont, GA: CSA Press.
- Bennett, J. G. (1966). *The dramatic universe volume III: Man and his nature*. Charles Town, WV: Claymont Communications
- Bennett, J. G. (1994). *Deeper man*. Santa Fe, NM: Bennett Books.
- Berg, P. (1990). A green city program with a bioregional perspective: Developing the San Francisco green city plan. In D. Gordon (Ed.), *Green cities: Ecologically sound approaches to urban space*. (pp. 281-288). New York: Black Rose Books.
- Berry, T. (1988). *The dream of the earth*. San Francisco: Sierra Club Books.
- Berry, W. (1995). The obligation of care: Saving the planet means sticking with a place – and each other. *Sierra*, 80(5), 62-67.
- Berry, W. (1987). *Home economics*. New York: North Point Press.
- Berry, W. (1996). *Unsettling of America: Culture and agriculture*. San Francisco: Sierra Club Books.
- Bertalanffy, L. V. (1968). *General system theory: Foundations, development, applications* (Rev. ed.). New York: George Braziller.
- Beven, K. J. (2000). Uniqueness of place and process representations in hydrological modeling. *Hydrology and Earth System Sciences*, 4(2), 203-213.
- Binet, A., & Simon, T. (1916). *The development of intelligence in children*. Baltimore: Williams & Wilkins.
- Bohm, D. (1985). *Unfolding meaning: A weekend of dialogue*. London: Routledge.
- Bohm, D. (1998). *On creativity*. New York: Routledge.
- Bohm, D. (2003) *The essential David Bohm*. New York: Routledge.

-
- Bohm, D., & Peat, F. D. (2000). *Science, order, and creativity* (2nd ed.). New York: Routledge.
- Bonnemaïson, J. (2005). *Culture and space: Conceiving a new cultural geography* (J. Penot-Demetry, Trans.). London: I. B. Tauris.
- Bourdieu, P. (1990). *The logic of practice* (R. Nice, Trans.). Stanford, CA: Stanford University Press.
- Branch, M. C. (1970). *Comprehensive urban planning*. Beverly Hills, CA: Sage Publications.
- Braud, W. G. (1992). Human interconnectedness: Research indications. *Revision*, 14(3).
- Breuer, J., & Freud, S. (2000). *Studies on hysteria*. New York: Basic Books Classics. (Original work published 1895)
- Brown, L. R. (1995). Ecopsychology and the environmental revolution: An environmental forward. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the earth, healing the mind*. (pp. xiii-xvi). San Francisco: Sierra Club Books.
- Brown, L. R. (2008). *Plan b 3.0: Mobilizing to save civilization*. New York: W.W. Norton and Company.
- Brown, L. R., & Flavin, F. (1999). A new economy for a new century. In L. Starke (Ed.), *State of the world 1999: A Worldwatch Institute report on progress toward a sustainable society*. (pp. 3-21). New York: W.W. Norton & Company.
- Brown, T. (1993). *Grandfather: A Native American's lifelong search for truth and harmony with nature*. New York: Berkley Books.
- Bugental, J. F. T. (1965). *The search of authenticity*. New York: Holt, Rinehart & Winston.
- Bugental, J. F. T. (1978). *Psychotherapy and process: The fundamentals of an existential-humanistic approach*. New York: Random House.
- Burrus, J. (2009, April/May). Defining terroir. *Flavor Magazine*. Retrieved April 13, 2009, from <http://www.flavormags.com/stories/DefiningTerroirAM09.pdf>
- Byrd, R. C. (1988). Positive therapeutic effects of intercessory prayer in a coronary care population. *Southern Medical Journal*, 81(7), 826-829.
- Calthorpe, P., & Richmond, H. (1993). *The next American metropolis: Ecology, community and the American dream*. Princeton, NJ: Princeton Architectural Press.
- Cameron, K. (2005, December 19). John Knott: Urban planning. *Metropolismag.com*, Retrieved December 21, 2008, from <http://www.metropolismag.com/story/20051219/john-knott-urban-planning>
- Capra, F. (1975). *The tao of physics*. Boston: Shambhala.
- Capra, F. (1982). *The turning point: Scientific society and the rising culture*. New York: Simon and Schuster.
- Capra, F. (1996). *The web of life: A new scientific understanding of living systems*. New York: Anchor Books.
- Carson, C. (2001). *The autobiography of Martin Luther King, Jr.* New York: Grand Central Publishing.
- Casey, E. (1997). *The fate of place: A philosophical history*. Berkeley, CA: University of California Press.

-
- Cavin, A. I. (2003). Preface. In A. I. Cavin (Ed.), *Urban planning*. (pp. vii). Chicago, IL: H.W Wilson Co.
- Chapman, A. (2003, May 28). On the water front: As its liquid assets dry up, Texas is awash in troubles. *Fort Worth Star-Telegram*, p. 5.
- Chase, J.M., & Liebold, M.A. (2003). *Ecological niches: Linking classical and contemporary approaches*. Chicago: University of Chicago Press.
- Clements, F. E. (1916). *Plant succession: An analysis of the development of vegetation*. Washington D.C.: Carnegie Institution of Washington.
- Coast Brewing Company (2009). *About coast: Local, creative, dynamic*. Retrieved April 18, 2009, from <http://www.coastbrewing.com/about.php>
- Coon, D. (2001). *Introduction to psychology: Gateways to mind and behavior* (9th ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Creighton, J. H., & Baumgartner, D. M. (1997). *Wildlife ecology and forest habitat*. Retrieved December 16, 2006, from <http://cru.cahe.wsu.edu/CEPublications/eb1866/eb1866.pdf>
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Cresswell, T. (1996). *In place/out of place*. Minneapolis: University of Minnesota Press.
- Cresswell, T. (2004). *Place: A short introduction*. Oxford, UK: Wiley-Blackwell.
- Cunningham, S. (2004). The Noisetette project: Revitalizing a distressed community through restorative development. *Getting Smart*, 7(3), 1-6. Retrieved December 18, 2007, from <http://www.noisettesc.com/pdf/news/18411419710442311.pdf>
- Daniels, V. (1997, April 26). *Psychology in Greek philosophy*. Paper presented at the Western Psychological Association Conference. Retrieved Oct. 9, 2006, from <http://www.sonoma.edu/users/d/daniels/Greeks.html>
- Dale, A., & Robinson, J. B. (1996). *Achieving sustainable development: A project of the Sustainable development research institute*. Vancouver, Canada: University of British Columbia.
- Day, C. (1990). *Places of the soul: Architecture and environmental design as a healing art*. Wellingborough, Northamptonshire, England: Aquarian Press.
- Deloria, V. (1991) Reflection and revelation: Knowing land, places, and ourselves. In J. A. Swan (Ed.), *The power of place: Sacred ground in natural and human environments*. (pp. 28-40). Wheaton, IL: Quest Books.
- Deloria, V., & Wildcat, D. R. (2001) *Power and place: Indian education in America*. Goden, CO: Fulcrum Resources.
- Denzin, N. (1970). *The research act: A theoretical introduction to sociological methods*. Chicago, IL: Aldine.
- Dernbach, J. C. (2002). *Stumbling toward sustainability*. Washington D.C.: Environmental Law Institute.

-
- Dillbeck, M. C., Banus, C. B., Polanzi, C., & Landrith, G. S. (1988). Test of a field model of consciousness and social change: The transcendental meditation and TM-Sidhi program and decreased urban crime. *The Journal of Mind and Behavior*, 9(4), 457-486.
- Dossey, L. (1993). *Healing words of prayer and the practice of medicine*. San Francisco: Harper.
- Dougal, J. (2005, November 15). The Noisette development slams headfirst into greed and personal motive. *IGreenBuild*. Retrieved January 26, 2009, from http://www.igreenbuild.com/_coreModules/content/contentDisplay_print.aspx?contentID=1776
- Drucker, P. F. (2003). *A functioning society: Selections from sixty-five years of writing on community, society, and polity*. Piscataway, NJ: Transaction.
- Dunn, E. (1971). *Economic and social development: A process of social learning*. Baltimore, MD: John Hopkins.
- Easwaran, E. (1978). *Gandhi the man*. Peteluma, CA: Nilgiri Press.
- Elmore, C. (2003). Reweaving the fabric of a naval town. *Marketwise*, 3, 14-23. Retrieved December 21, 2008, from http://www.richmondfed.org/publications/community_development/marketwise/2003/mwise2003-3.pdf
- Fadiman, J., & Frager, R. (2002). *Personality & personal growth* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Fechner, G.T. (1966). *Elements of psychophysics, volume I*. New York: Holt, Rinehart and Winston.
- Fernandez, E. G. (1998). Development or cultural affirmation in the Andes? In F. Apffel-Marglin (Ed.), *The spirit of regeneration: Andean culture confronting Western notions of development*. (pp. 1247-145). London: Zed Books.
- Forbes, P. (2006). *What is a whole community: A letter to those who care for and restore the land*. Fayston, VT: Center for Whole Communities.
- Fox, W. (1995). *Toward a transpersonal ecology*. New York: State University of New York.
- Fox, M. (2006). The a.w.e. project: Reinventing education, reinventing the human. Kelowna, BC, Canada: CooperHouse.
- Frankfort, H., Frankfort, M. H., Wilson, J. A., & Jacobsen, T. (1949). *Before philosophy*. Baltimore, MD: Penguin Books.
- French, D. (2007). *Proactive community builder*. Retrieved December 18, 2007, from http://www.uli.org/Content/ContentGroups/Publications/UrbanLand/2007/June1/UL_07_06_French.pdf
- Freud, S. (1961). *Civilization and its discontents*. New York: W.W. Norton & Company. (Original work published 1930)
- Fromm, E. (1955). *The sane society*. Greenwich, CT: Fawcett Publications.
- Frumkin, H., Frank, L., & Jackson, R. (2004). *Urban sprawl and public health: Designing, planning, and building for healthy communities*. Washington D. C.: Island Press.

-
- Fuerst, J. S. (2004). *When public housing was paradise: Building community in Chicago*. Urbana, IL: University of Illinois Press.
- Fulton, W. B. (2001). *The reluctant metropolis: The politics of urban growth in Los Angeles*. Baltimore, MD: John Hopkins University.
- Galton, F. (1973). *Inquiries into human faculty and its development*. New York: AMS Press.
- Gay, K. (2001). *Rainforests of the world: A reference handbook*. Oxford, UK: ABC-CLIO
- Gilbreth, L. M. (1921). *The psychology of management*. New York: Macmillan Company.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Goldsmith, E. (1993). *The way: An ecological world-view*. Boston: Shambhala.
- Goleman, D. (1993). Psychology, reality, and consciousness. In R. Walsh & F. Vaughan (Eds.), *Paths beyond ego: The transpersonal vision* (pp. 18-20). Los Angeles: Perigee Books.
- Goode, D. (1990). Introduction: A green renaissance. In D. Gordon (Ed.), *Green cities: Ecologically sound approaches to urban space*. New York: Black Rose Books.
- Greene, J. (2000). Prescribing a healthy social life: A robust social network is important in healing-and staying well. *Hippocrates*, 14(8). Retrieved December 16, 2006, from <http://www.janwrites.com/hippocratesperscr.html>
- Gruenberg, S. M. (1955). The challenge of the new suburbs. *Marriage and Family Living*, 17(2), 133-137.
- Gummesson, E. (2000). *Qualitative methods in management research* (2nd ed.). London: Sage Publications.
- Gurdjieff, G.I. (1975). *Life is real only then, when 'I am.'* London: Penguin Books.
- Hagelin, J. S., Rainforth, M. V., Orme-Johnson, D. W., Cavanaugh, K. L., Alexander, C. N., Shatkin, J. L., et al. (1993). Effects of group practice of the Transcendental Meditation program on preventing violent crime in Washington, DC: Results of the national demonstration project, June-July 1993. *Social Indicators Research* 47, 153-201.
- Hall, E. T. (1977). *Beyond culture*. New York: Doubleday.
- Hastenrath, S. (2001). *Climate dynamics of the tropics*. New York: Springer.
- Hatchard, G. (1996). Decreased crime rate in the vicinity of increased coherence: The study on Yogic Flying in the Maharishi European Sidhaland and decreased Merseyside crime rates. *Psychology, Crime, and Law*, 2(3), 165-174.
- Hawken, P., Lovins, A., & Lovins, L. H. (1999). *Natural capitalism: Creating the next industrial revolution*. Boston: Little, Brown and Company.
- Heidegger, M. (1962). *Being and time*. New York: Harper and Row.
- Heller, S., & Roth, J. (2000). *Swastika: Symbol beyond redemption?* New York: Allworth Press.

-
- Hendrix, G., & Fadiman, J. (1976). *Transpersonal education: A curriculum for feeling and being*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Hillier, J., & Rooksby, E. (2005) *Habitus: A sense of place* (2nd ed.). Aldershot, UK: Ashgate Publishing
- Hillman, J., & Ventura, M. (1992). *We've had a hundred years of psychotherapy and the world's getting worse*. San Francisco: HarperSanFrancisco.
- Hillman, J. (1995). A psyche the size of the earth: A psychological forward. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the earth, healing the mind*. (pp. xvii- xxiii). San Francisco: Sierra Club Books.
- Hughes, D. (1991). Spirit of place in the western world. In J. A. Swan (Ed.), *The power of place: Sacred ground in natural and human environments*. (pp. 15-27). Wheaton, IL: Quest Books.
- Huxley, A. (1945). *The perennial philosophy*. New York: Harper and Brothers.
- Inhaber, H. (1998). *Slaying the NIMBY dragon*. New Brunswick, NJ: Transaction Publishers.
- Irazabal, C. (2002). *Curitiba and Portland: Architecture, city-making, and urban governance in the era of globalization*. Berkeley, CA: University of California.
- Irazabal, C. (2005). *City making and urban governance in the Americas: Curitiba and Portland*. London: Ashgate.
- Jackson, D. L., & Jackson, L. L. (2002). *The farm as natural habitat: Reconnecting food systems with ecosystems*. London: Island Press.
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Vintage Books.
- James, W. (1884). What is emotion? *Mind*, 19, 188-205.
- Johnston, R. J. (1994). *The dictionary of human geography* (3rd ed.). Cambridge, MA: Blackwell Publishers.
- Joly, N. (2007). *What is biodynamic wine: The quality, the taste, the terroir*. London: Clairview Books.
- Kaiser, E. J., Godschalk, D. R., & Chapin, F. S. (1995). *Urban land use planning*. Urbana, IL: University of Illinois Press.
- Kallenbach, L., & Wallace, K. (2008, January). America's top ten green housing developments. *Natural Home*. Retrieved January 26, 2009, from http://www.naturalhomemagazine.com/Inspiration/2008-01-01/Top_10.aspx
- Kanner, A. D., & Gomes, M. E. (1995). The all-consuming self. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the earth, healing the mind*. (pp. 77-91). San Francisco: Sierra Club Books.
- Kilborn, P. T. (2005, June 1). The five-bedroom, six-figure rootless life. *The New York Times*. Retrieved April 13, 2009, from <http://www.nytimes.com/2005/06/01/national/class/01ALPHARETTA-FINAL.html>
- Kim, U., Yang, K. S., & Hwang, K. K. (2006). *Indigenous and cultural psychology: Understanding people in context*. New York: Springer.

-
- Knott, J., Jr. (2006). Noisette– City-crafting the new American city. In Earth Day New York (Ed.), *Lessons learned: The costs & benefits of high performance buildings*. (pp. 39-42). New York: Earth Day New York. Retrieved December 16, 2006, from <http://www.noisettesc.com/pdf/news/29159161010643190.pdf>
- Knott, J., Jr. (2007, June 1). *Healing the social, environmental and economic fabric of cities: "City Crafting" the new American city*. Paper presented at the Smart Growth BC Conference, Vancouver, Canada. Retrieved December 21, 2008, from <http://www.smartgrowth.bc.ca/Portals/0/Downloads/John%20Knott2.pdf>
- Kremer, J. W. (1998). *The shadow of evolutionary thinking*. In D. Rothberg & S. Kelly (Eds.), *Ken Wilber in dialogue: Conversations with leading transpersonal thinkers*. (pp. 237-258). Wheaton, IL: Quest Books.
- Krone, C. G. (May, 1997). *West Coast Resource Development: Session Notes #124*. Unpublished transcription of dialogue by members of the Institute for Developmental Processes.
- Krone, C. G. (March, 2005). *West Coast Resource Development: Session Notes #186*. Unpublished transcription of dialogue by members of the Institute for Developmental Processes.
- Kunstler, J. H. (1993). *The geography of nowhere: The rise and decline of America's man-made landscape*. New York: Simon & Schuster.
- Lake, M. G. (1991). Power Centers. In J. A. Swan (Ed.), *The power of place: Sacred ground in natural and human environments*. (pp. 48-60). Wheaton, IL: Quest Books.
- Landry, C. (2006). *The art of city making*. London: Earthscan.
- Laszlo, E. (2004). *Science and the akashic field: An integral theory of everything*. Rochester, VT: Inner Traditions.
- Lawrence, R.G. (2005, January). The new American city. *Natural Home*. Retrieved January 26, 2009, from <http://www.naturalhomemagazine.com/Inspiration/2005-01-01/Can-This-City-Be-Greened.aspx?page=2>
- Leadbeater, C. (2006). The socially entrepreneurial city. In A. Nicholls (Ed.), *Social entrepreneurship: New models of sustainable social management* (pp. 233- 246). New York: Oxford University Press.
- Leatherman, S. P. (2001). Social and economic costs of sea level rise. In B. C. Douglas, M. S. Kearney, & S. P. Letterman (Eds.), *Sea level rise: History and consequences* (pp. 181-224). New York: Academic Press
- LeCompte, M. D. & Preissle, J. (1993). *Ethnography and qualitative design in educational research* (2nd ed.), San Diego, CA: Academic Press.
- Leff, E. (1990). The global context of the greening of cities. In D. Gordon (Ed.), *Green cities: Ecologically sound approaches to urban space* (pp. 55-66). New York: Black Rose Books.
- Leopold, A. (1949). *A Sand county almanac: And sketches here and there*. New York: Oxford University Press.
- Lerner, J. (2003). *Acupuntura urbana*. Sao Paulo, Brazil: Editora Record.
- Lerner, J. (2007a). Forward – the honorable Jaime Lerner. In Worldwatch Institute (Ed.), *State of the world 2007: Our urban future*. Retrieved December 21, 2008, from <http://www.worldwatch.org/node/4854>

-
- Lerner, J. (2007b, February). *Jamie Lerner: Sing a song of sustainable cities*. Paper presented at the TED Conference February, 2007. Retrieved December 21, 2008, from http://www.ted.com/index.php/talks/jaime_lerner_sings_of_the_city.html
- Lewin, K. (1999). *The complete social scientist: A Kurt Lewin reader*. (M. Gold, Ed.), Washington, D. C.: American Psychological Association.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books.
- Lovelock, J. E. (1979). *Gaia: A new look at life on earth*. New York: Oxford University Press.
- Lovelock, J. E. (1988). *The ages of Gaia: A biography of our living earth*. New York: W.W. Norton & Co.
- Lucas, C. (2006). *Self-organizing systems (sos) faq*. Retrieved December 16, 2006, from <http://www.calresco.org/sos/sosfaq.htm#2.8>
- Lukermann, F. (1964). Geography as a formal intellectual discipline and the way in which it contributes to human knowledge. *Canadian Geographer*, 8(4), 167-172.
- Mack, J. E. (1993). Forward. In R. Walsh & F. Vaughan (Eds.), *Paths beyond ego: The transpersonal vision* (pp. xi-xiv). Los Angeles: Perigee Books.
- MacLeod, K. (2002). *Orienting urban planning to sustainability in Curitiba, Brazil*. Retrieved May 10, 2005, from <http://www3.iclei.org/localstrategies/pdf.curitiba.pdf>
- Mahoney, C. (1997). Common qualitative methods. In J. Fretchling & L. Sharp (Eds.), *User friendly handbook for mixed-method evaluations*. Retrieved October 7, 2007, from <http://www.nsf.gov/pubs/1997/nsf97153/start.htm>
- Marshall, C. & Rossman, G. B. (1995). *Designing qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York: Von Nostrand Reinhold.
- Maslow, A. H. (1971). *The farther reaches of human nature*. New York: Viking Press.
- Maslow, A. H. (1993). *The farther reaches of human nature*. New York: Arkana.
- Maslow, A. H. (1998). *Maslow on management* (A. Kaplan, Ed.). New York: John Wiley & Sons.
- Matsubayashi, K. (1991). Spirit of place: The modern relevance of an ancient concept. In J. A. Swan (Ed.), *The power of place: Sacred ground in natural and human environments*. (pp. 334-346). Wheaton, IL: Quest Books.
- May, G. G. (1982). *Will and spirit: A contemplative psychology*. San Francisco: Harper & Row.
- Mayeroff, M. (1971). *On Caring*. New York: HarperPerennial.
- McCullough, D. (1993). A sense of time and place. In A. J. Lee (Ed.), *Past meets future: Saving America's historic environments*. New York: John Wiley and Sons.

-
- McCune, H. (2002, February 1). John Knott: Holistic development. *Professional Builder: Your online source for professional solutions*. Retrieved December 21, 2008, from <http://www.housingzone.com/probuilder/article/CA462718.html>
- McDonagh, S. (1986). *To care for the earth: A call to a new theology*. Santa Fe, NM: Bear & Company.
- McGray, D. (2007, April 24). Pop-up cities: China builds a bright green metropolis. *Wired Magazine*. Retrieved April 15, 2009 from http://www.wired.com/wired/archive/15.05/feat_popup.html
- McHarg, I. L. (1971). *Design with nature*. Garden City, NY: Doubleday & Company.
- McKibben, B. (1995). *Hope, human and wild: True stories of living lightly on the earth*. Saint Paul, MN: Hungry Mind Press.
- McMurray, A. (2006). *Community health and wellness: A socio-ecological approach*. Chatswood, Australia: Elsevier.
- McPhee, J. (2003, August). Biodiversity: The big (and even bigger) picture. *The Science Creative Quarterly*. Retrieved December 16, 2006, from <http://www.scq.ubc.ca/?p=528>
- Meadows, D. (1995). The city of first priorities. *Whole Earth Review*. Retrieved December 21, 2008, from <http://www.globalideasbank.org/site/bank/idea.php?ideaId=2236>
- Merriam, S. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass.
- Metzner, R. (1999). *Green psychology: Transforming our relationship to the earth*. Rochester, VT: Inner Traditions Press.
- Michael, D. M. (1973). *Learning to plan and planning to learn: The social psychology of changing toward future-response societal learning*. San Francisco: Jossey-Bass.
- Michaux Conservancy. (2008). *Michaux conservancy: A center for urban coastal ecosystems*. Retrieved January 26, 2009, from <http://www.michauxconservancy.org/>
- Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage.
- Mollison, B. (1997). *Permaculture: A designers' manual*. Tyalgum, Australia: Tagari Publications.
- Montessori, M. (1912). *The Montessori method*. Cambridge, MA: Robert Bentley.
- Moore, C. (1991). Greenest city in the world. *International Wildlife*, 40(3), 38-45.
- Morris, T. (1997). *If Aristotle ran General Motors: The new soul of business*. New York: Holt.
- Morton, A. (2005). *Splitting the atom*. London: Evans Brothers.
- Mousalli, M.S. (1992). Inadequacies of master planning. *Architecture and Planning*, 4, 3-34.
- Mumford, L. (1961). *The city in history: Its origins, its transformations, and its prospects*. San Diego, CA: Harcourt Brace Jovanovich.
- Munsterberg, H. (1913). *Psychology and industrial efficiency*. Boston: Houghton Mifflin Company.

-
- Murphy, T., & Marvick, V. (1998). Patterning as process. *Permaculture Activist*, 39, 30-34.
- Musty, P. J. (2007). *A charrette is an urban design and planning process*. Retrieved December 17, 2007, from <http://www.charrettecenter.com/newlongview/newlongview.asp?a=spf&pfk=1&gk=7>
- Naess, A. (1989). *Ecology, community, and lifestyle* (D. Rothenberg, Trans.). Cambridge, UK: Cambridge University Press.
- National Renewable Energy Laboratory. (2008). *A renewable energy community: Key elements*. Retrieved January 26, 2009, from <http://www.nrel.gov/vehiclesandfuels/hev/pdfs/42774.pdf>
- National Research Council. (1992). *Restoration of aquatic ecosystems: science, technology, and public policy*. Washington DC: National Academy Press.
- NewUrbanism.org (2006). *New urbanism*. Retrieved December 16, 2006, from <http://www.newurbanism.org/>
- Nicoll, Maurice. (1984). *Psychological commentaries on the teaching of Gurdjieff and Ouspensky*. Boston: Shambhala Publications.
- Niemenen, R. (2005). The culture of sustainability. *EnvironDesign Journal*, Spring. Retrieved December 21, 2008, from <http://www.noisettesc.com/pdf/news/14541526410541451.pdf>
- Noisette Co. (2003). *The new American city: Noisette community master plan*. Retrieved December 21, 2008, from <http://www.noisettesc.com/masterplan.html>
- Noisette Co. (2008). *Our journey to sustainability 2001-2007*. Retrieved December 21, 2008, from <http://www.noisettesc.com/pdf/news/36391515910832881.pdf>
- Noisette Foundation (2008). *About the foundation*. Retrieved January 26, 2009, from <http://www.noisettefoundation.org/about.html>
- Noisette Urban Alliance. (2008). *Making sustainable attainable*. Retrieved December 21, 2008, from http://www.noisettesc.com/comm_what.html
- Normann, R. (1970). *A personal quest for methodology*. Stockholm: Scandinavian Institutes for Administrative Research.
- Nostrand, R. L. (1996). *The Hispano homeland*. Norman, OK: University of Oklahoma Press.
- O'Meara, M. (1999). Exploring a new vision for cities. In L. Starke (Ed.), *State of the world 1999: A Worldwatch Institute report on progress toward a sustainable society* (pp. 133-150). New York: W.W. Norton & Company.
- Online Etymology Dictionary (2006). Retrieved December 16, 2006, from <http://www.etymonline.com/index.php?term=place>
- Orr, D. W. (1994). *Earth in mind: On education, environment, and the human prospect*. Covelo, CA: Island Press.
- Ouspensky, P.D. (1981). *The psychology of man's possible evolution*. New York: Vintage Books.
- Packer, M. J., & Addison, R. B. (1989). Introduction. In M. J. Packer & R. B. Addison (Eds.), *Entering the circle: Hermeneutic investigation in psychology*. Albany, NY: State University of New York Press.

-
- Patton, M. Q. (1980). *Qualitative evaluation methods*. Beverly Hills, CA: Sage.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Pavlov, I. P. (1927). *Conditioned reflexes*. New York: Oxford University Press.
- Pearsall, P. (1998). *The heart's code: Tapping the wisdom and power of our heart energy*. New York: Broadway Books.
- Peat, F. D. (2002). *Blackfoot physics*. Boston: Weiser.
- Pedriera, M., & Goodstein, C. (1992, July/August). Blueprint for an eco-safe city. *Americas*. Retrieved December 21, 2008, from http://findarticles.com/p/articles/mi_go2043/is_/ai_n28617942
- Peirce, N. (2000). *World's best managed city?* Retrieved May 10, 2005, from <http://www.newhorizons.org/trans/international/pierce.htm>
- Petersen, B. (2009, January 19). Keeping them out of jail: Inmate program has had success, has been hurt by Madoff scandal. *Charleston Post and Courier*. Retrieved January 26, 2009, from http://www.charleston.net/news/2009/jan/19/keeping_them_out_jail68837/
- Playfair, G. (2002). *Twin telepathy: The psychic connection*. London: Vega Books.
- Prechtel, M. (2004). *Long life honey in the heart: A story of initiation and eloquence from the shores of a Mayan lake*. Berkeley, CA: North Atlantic Books.
- Prinz, J. J. (2004). *Gut reactions: A perceptual theory of the emotion*. New York: Oxford University Press.
- Puthoff, H. E. (1991). Zero-point energy: An introduction. *Fusion Facts* 3, 3(1). 29.
- Qureshi, M., & Velde, D. W. T. (2008). *Working smart and small: The role of knowledge-based and service industries in growth strategies for small states*. London: Commonwealth Secretariat.
- Quick, D. (Nov. 4th, 2002). Noisette Co. takes major steps toward "new American city," *Charleston Regional Business Journal*. Retrieved December 18, 2007, from http://www.charlestonbusiness.com/pub/5_22/news/2397-1.html
- Ramos, A. G. (1981). *The new science of organizations: A reconceptualization of the wealth of nations*. Toronto, Canada: University of Toronto Press.
- Reed, B. (2007). *Ecodesign collaborative*. Retrieved December 17, 2007, from <http://www.ecodesign.org/EDC/Collaborators/bill-reed.html>
- Regenesis. (2007). *Integral Assessment of Place*. Unpublished manuscript. Santa Fe: NM: Regenesis Group.
- Relph, E. (1976). *Place and placelessness*. London: Pion Limited.
- Reveal, J. L. (2009). *Biomes of North America*. Retrieved April 13, 2009, from <http://www.plantsystematics.org/reveal/pbio/biome/monttext.html>
- Ribeiro, J.A., & Tavares, N. (1992). *Curitiba: A revolução ecológica* (N. Torres, Trans.). Curitiba, Brazil: Prefeitura Municipal de Curitiba.

-
- Rittel H., & Webber, M. (1972). *Dilemmas in a general theory of planning* (Institute of Urban and Regional Development Working Paper No. 194). Berkeley, CA: University of California.
- Robertson, M. (2007). *Sustainable futures: Teaching and learning: a case study approach*. Camberwell, AU: ACER Press.
- Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Rogers, C. R. (1969). *Freedom to learn: A view of what education might become*. Columbus: OH: Charles E. Merrill Publishing Company.
- Rogers, C. R. (1980). *A way of being*. Boston: Houghton Mifflin.
- Rosser, C. (1970). Action planning in Calcutta: The problem of community participation. In R Apthorpe (Ed.), *People planning and development studies* (pp. 121- 139). London: Frank Cass and Company.
- Roszak, T. (1993). *The voice of the earth: An exploration of ecopsychology*. New York: Touchstone.
- Roszak, T. (1995). Where psyche meets Gaia. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the earth, healing the mind* (pp. 1-20). San Francisco: Sierra Club Books.
- Sahtouris, E. (2000, May 13). *Living systems, the internet, and the human future*. Paper presented at the 2000 Planetnetwork, Global Ecology, and Information Technology conference, San Francisco. Retrieved October 9, 2006, from <http://www.ratical.org/LifeWeb/Articles/LSinethHF.html>
- Sanford, C. (2007). *Sustainability is only half the answer*. Unpublished manuscript.
- Sardello, R. & Thomas, G. (Eds.). (1986). *Stirrings of culture: Essays from the Dallas Institute*. Dallas, TX: Dallas Institute Publications.
- Saybrook Graduate School and Research Center. (2008). *Saybrook core research competencies*. Retrieved April, 3, 2008, from https://www.saybrook.edu/research_materials/index.asp?strContent=seq&strSequence=comp
- Saybrook Graduate School and Research Center. (2008). *SIRB: The Saybrook Institutional Review Board*. Retrieved April, 18, 2009, from <https://www.saybrook.edu/SIRB/index.asp?strContent=faqs#1>
- Schwaller de Lubicz, R. A. (1957). *The temple of man*. Rochester, VT: Inner Traditions.
- Schwartz, H. (2004). *Urban renewal, municipal revitalization: The case of Curitiba, Brazil*. Alexandria, VA: Schwartz.
- Scott, J. (2003, June 27). Noisette project. *Charleston Post and Courier*, pp. C1, C3.
- Scott, J. (2007, November 24). Noisette deal to go before council. *Charleston Post and Courier*. Retrieved January 26, 2009, from http://www.charleston.net/news/2007/nov/24/noisette_deal_go_before_council23153/
- Scott, M. (1969). *American city planning since 1890*. Berkeley, CA: University of California Press.
- Scott, W. D. (1911). *Increasing human efficiency in business: A contribution to the psychology of business*. New York: The Macmillan Company.
- Seamon, D. (1979). *A geography of the lifeworld*. New York: St. Martin's.

-
- Seamon, D. (2000). Phenomenology, place, environment, and architecture: A review. *Environmental & Architectural Phenomenology Newsletter*. Retrieved December 16, 2006, from http://www.arch.ksu.edu/seamon/articles/2000_phenomenology_review.htm
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. London: Random House.
- Sewall, L. (1995). The skill of ecological perception. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the earth, healing the mind*. San Francisco: Sierra Club Books.
- Shea, P. D. (2005). *Liberty rising: The story of the statue of liberty*. New York: Henry Holt and Company.
- Siegel, S. (1999, February 23). Developer advocates 'spiritual approach' to building. *CNN.com*. Retrieved December 21, 2008, from <http://www.cnn.com/NATURE/9902/23/greenprints/index.html>
- Skinner, B.F. (1938). *The behavior of organisms*. New York: Appleton – Century- Crofts.
- Sparks, R. E. (2006). Rethinking, then rebuilding New Orleans. *Issues in Science and Technology*, 22(2), 33-39.
- Spradley, J. P. (1980). *Participant Observation*. New York: Holt, Rinehart & Winston.
- Stake, R. E. (1994). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 236-247). Thousand Oaks, CA: Sage.
- Steele, F. (1981). *The sense of place*. Boston, MA: CBI Publishing Company.
- Steiner, R. (1990). *Psychoanalysis and spiritual psychology*. New York: Anthroposophical Press.
- Steiner, R. (1997). *The roots of education*. Hudson, NY: Anthroposophic Press.
- Steiner, R. (2005). *What is biodynamics?: A way to heal and revitalize the earth*. Herndon, VA: Steiner books.
- Stevens, A. & Arruda, J. (2008). *Carlos Richa: Mayor of Curitiba*. Retrieved December 21, 2008, from http://www.citymayors.com/mayors/curitiba_mayor.html
- Sustainability Institute. (2008). *Home*. Retrieved December 21, 2008, from <http://www.sustainabilityinstitutesc.org/>
- Suzuki, D. & Knudtson, P. (1992). *Wisdom of the elders: Honoring sacred native visions of nature*. New York: Bantam.
- Swan, J. A. (1991a). Introduction. In J. A. Swan (Ed.), *The power of place: Sacred ground in natural and human environments* (pp. 1-14). Wheaton, IL: Quest Books.
- Swan, J. A. (1991b). The spots of the fawn: Native American sacred sites, cultural values and management issues. In J. A. Swan (Ed.), *The power of place: Sacred ground in natural and human environments* (pp. 63-81). Wheaton, IL: Quest Books.
- Swan, J. A. (1991c). Design with spirit: Interview with Lawrence Halprin. In J. A. Swan (Ed.), *The power of place: Sacred ground in natural and human environments* (pp. 305-314). Wheaton, IL: Quest Books.
- Taylor, F. W. (1911). *The principles of scientific management*. New York: Harper & Brothers Publishers.
- Thayer, R. L. (1999). *Lifeplace: A bioregional approach to planning, education and stewardship*. Berkeley, CA: University of California Press.

-
- Thompson, J. W., Sorvig, K., & Farnsworth, C. D. (2000). *Sustainable landscape construction: a guide to green building outdoors*. Washington D.C.: Island Press.
- Thompson, R. H. (2004). Overcoming barriers to ecologically sensitive land management: Conservation subdivisions, green developments, and the development of a land ethic. *Journal of Planning Education and Research*, 24, 141-153.
- Trafford, A. (2000, October 3). The healing power of friendship. *The Washington Post*, p. F5.
- Tuan, Y. (1977). *Space and place*. London: University of Minnesota Press.
- Urban Land Institute. (2001). *Awards for excellence: 2001 winner*. Retrieved January 26, 2009, from <http://www.uli.org/sitecore/content/ULI2Home/AwardsAndCompetitions/AwardsForExcellenceProgram/2001/Deweese%20Island.aspx>
- Utne, L. (2005). The urban green revolution. *Utne Magazine*, 131, 60-63.
- Van Putten, M. (1996). Living up to our legacy. *National Wildlife*, 34(5), 6.
- Varela, F. J., Maturana, H. R., & Uribe, R. (1974). Autopoiesis: The organization of living systems, its characterization and a model. *Biosystems*, 5, 187-196.
- Vasquez, G. R. (1996). Culture and biodiversity in the Andes. *Development*, 4, 34-38.
- Vaz, M.T. (Producer), & Vaz Del Bello, G. (Director). (2006). *A convenient truth: Urban solutions from Curitiba, Brazil* [Motion Picture]. United States: Del Bello Pictures.
- Wackernagel, M., & Rees, W. (1996). *Our ecological footprint: Reducing human impact on the earth*. Philadelphia, PA: New Society.
- Wade, P. (2005). *Place-based policies for rural development: Crete, Greece (case study)*. Retrieved December 16, 2006, from <http://www.oecd.org/dataoecd/50/7/35930384.pdf>
- Ward, L. (2008). Our annual top ten neighborhoods for 2008. *Cottage Living*. Retrieved January 26, 2009, from <http://www.cottageliving.com/cottage/travel/article/0,21135,1808929,00.html>
- Watson, J. (1970). *Behaviorism*. New York: W. W. Norton. (Original work published in 1925)
- Webster Online Dictionary. (2007), Retrieved January 13, 2007, from <http://www.webster.com/dictionary/place>
- West. K. (2001, April 23). Noisette project. *Charleston regional business journal*. Retrieved December 18, 2007, from http://www.charlestonbusiness.com/pub/4_9/news/1529-1.html
- West. K. (2008). *Report cites sustainable revitalization of North Charleston Noisette community*. Retrieved December 18, 2007, from http://www.westcoastgreen.com/ee/index.php/press-room/article/the_noisette_companys_sustainability_report_our_journey_to_sustainability_2
- Whitehouse, D. (2005, May 19). Half of humanity set to go urban. *BBC News*. Retrieved March 20, 2008 from <http://news.bbc.co.uk/1/hi/sci/tech/4561183.stm>
- Wilber, K. (1993). Psychologia perennis: The spectrum of consciousness. In R. Walsh & F. Vaughan (Eds.), *Paths beyond ego: The transpersonal vision* (pp. 21-34). Los Angeles: Perigee Books.

-
- Wilber, K. (2000). *Integral psychology: Consciousness, spirit, psychology, therapy*. Boston: Shambhala.
- Wilson, E. O. (2001, December 12). Vanishing point: On Bjorn Lomborg and extinction. *Grist: Environmental news and commentary*. Retrieved December 16, 2006, from <http://www.grist.org/advice/books/2001/12/12/point/>
- Wise, W. (2006, January 3). Blight giving away to light in lower North Charleston. *Charleston Post and Courier*. Retrieved January 26, 2009, from http://www.noisettesc.com/press_news_article.html?id=49
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, CA: Sage.
- Wren, C. (1965). *Parentalia*. Farnborough, England: Gregg Press.
- Wright, C.L. (1995, November). *Synergistic alternatives for solving urban transportation problems*. Paper presented at the Sixth Consultative Meeting on the Environment, Curitiba, Brazil.
- Wundt, W. (1904). *Principles of physiological psychology* (E. B. Titchener, Trans.). New York: Macmillan.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). London: Sage Publications.
- Young, P. (2008). Curitiba's mr. clean: Community, environmental design. *Design21*. Retrieved December 16, 2006, from <http://www.design21sdn.com/feature/11>
- Yudleson, J. & Fedrizzi, S.R. (2007). *The green building revolution*. Washington D.C.: Island Press.
- Zukin, S. (1995). *The culture of cities*. London: Blackwell.