2010

The relevance of the natural environment to social work : a comparison of fields that consider the natural environment in social problems : a project based upon an independent investigation

John D. Ritchie
Smith College

J. Daniel Ritchie
The Relevance of the Natural Environment to Social Work: A Comparison of Fields that Consider the Natural Environment in Social Problems

ABSTRACT

Given the natural environment's importance to humans, this study was undertaken to understand how social work has considered the natural environment in approaching social problems compared to other fields that consider the natural environment. In addition, comparing literature from several fields, the author sought to evaluate the adequacy of social work's attention to the natural environment as the field analyzes and conceives solutions to social problems and carries out its mission.

The study examined the gaps in social work literature regarding the natural environment. The author compared published literature from social work, psychology, environmental health and medicine, and environmentalism to understand how the other fields can inform social work on levels from micro to macro.

Apparently little literature attends to the natural environment in social work despite the field's origination in response to problems due to urbanization and industrialization. The study gives greater attention to social work scholar John Coates's (2003) comprehensive new paradigm for social work and the natural environment. The selected comparison fields provide perspective and information (both scientific and philosophical) on the natural environment's relevance in social work's domains including ecological systems approach (person-in-environment), child development, social welfare policy, environmental justice, and clinical practice. In addition, current global challenges

call on social workers to collaborate with environmental and social activists and participate in community led responses.

THE RELEVANCE OF THE NATURAL ENVIRONMENT TO SOCIAL WORK:

A COMPARISON OF FIELDS THAT CONSIDER THE NATURAL ENVIRONMENT

IN SOCIAL PROBLEMS

A project based upon an independent investigation,
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work.

J. Daniel Ritchie

Smith College School for Social Work
Northampton, Massachusetts 01063

2010

ACKNOWLEDGEMENTS

I could not have accomplished this thesis without the assistance and support of several people whose contributions I would gratefully like to acknowledge.

Thank you to my research advisor, Claudia Bepko, for her patient and reliable guidance and advice from start to finish; to my research professor, Gail McCarthy, for her support and guidance in my search for a topic; to my field supervisor, John Christopher, for keeping life sane at placement; to Liane Hartman for technical support and caring enough to create templates; to Ken Powell for proofreading and suggestions; to my parents for their love and support; to the Earth without which nothing; and to Lisa for always being there for me.

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

Beyond the Social Environment

Social work has distinguished itself from psychiatry, psychology, and counseling by looking beyond the individual. The field has led the way in applying systems theory by considering how the social environment impacts individuals, families, and communities. Social workers consider the role of the social environment in problems and interventions. As social workers look broadly to understand human problems, there may be good reason to look beyond the social environment. Humans evolved in intimate relation to our natural, or ecological, environment. It is this environment that provides for human life and that needs to be sustained and replenished to continue providing. Problems in the natural environment can mean problems for people. The ecological crisis – human-induced destruction of ecosystems, loss of topsoil, pollution of all parts of the environment including food and human bodies, extinction of species, resource depletion, and especially the current focus on climate change – has led to a global awareness of the need for large-scale societal change. These problems clearly have a direct impact on people's daily lives and abilities to survive and negotiate societal systems. To understand social problems then, it follows that it may be valuable for social workers to consider the *full scope* of the human—and social—environment which includes our natural world. To what degree has social work considered the natural environment? Including the natural

environment within the scope of social work may provide a more realistic and accurate model with which to understand social problems and devise solutions.

Research Questions and Their Development

The question I will examine and answer contains two parts. First, how has the field of social work considered the natural environment in its approach to social problems compared to other fields that consider the natural environment? Second, in analyzing and conceiving solutions to social problems, does social work give the natural environment adequate attention in carrying out its mission?

In social work, *environment* is generally used to represent a person's family and other relationships, community and societal structures and systems, and perhaps physical living spaces. When social workers refer to a person's environment, it seems that they are not usually referring to the natural environment. I will define natural environment in this proposal broadly as the Earth's living and nonliving systems and elements (e.g. forest ecosystems, animals, water, land, climate, etc.). Other important terms are defined later in this chapter.

Based on my social work education, social work theory and practice do not appear to have considered the natural environment to any meaningful degree in approaching social problems. The biopsychosocial model of assessment used in clinical social work, for example, may allow for discussion of problems related to the natural environment, but this is a domain that could be ignored in that model. Cooper and Lesser (2008), for example, say that a psychosocial study should include assessment of a client's "environmental strengths" (p. 51). However, they seem to use environment generically to

describe a person's relationship with anything outside their body, such as "mastering the environment" and adapting to and changing their environment (Cooper & Lesser, 2008, p. 55). From context this does not seem to contain any expectation of reference to the natural environment per se. Cooper and Lesser (2008) recognize the importance of understanding the impact of immigrating to a new community, but this seems to be the closest they come to expressing a *person-in-natural environment* perspective, and here again, community is more likely to be understood to refer to people and social institutions and systems. Another class in the writer's experience was on a global perspective on women and social policy. The curriculum included the natural environment such as the relevance of agriculture and natural resources to women's livelihood, well being, and participation in decision making and leadership (Cornelius, 2009).

In social work it seems that human problems are considered in individual, family, community, or societal contexts that rarely consider the larger natural environment context. There are some exceptions. Examining the role of social welfare in government policy, Blau (2007) includes the natural environment in discussion about environmental regulations for the protection of air and water and maintenance of parks for recreation. Blau also discusses the natural environment in the context of economic markets' inadequacy for consideration of the health of the natural environment as it affects people.

Because human well being clearly depends on the natural environment, the role of the natural environment in social work's mission and scope should be an important issue. Due to the broad nature of the social work field from micro (clinical) to macro practice (policy and administration) and the differences among these layers, understanding social work's consideration of the natural environment may be a complex task. I will review the

literature to gain a general understanding of the field's perspective on the natural environment's relevance. As I will show, some other fields and movements seem to have considered and incorporated the natural environment as a concern for humans and connected it directly to social problems. Fields or movements such as environmental science, ecopsychology, and environmentalism as a sociopolitical movement may start from a perspective in which the natural environment plays a key role or is even at the heart of problems that affect humans and that could therefore be considered social problems. For example, researchers in one university's commerce department showed how Nepal's forest management policies were keeping some mountain communities in a state of poverty and unemployment (Dhakal, Bigsby, & Cullen, 2007). The researchers suggested changes that could ameliorate such problems.

Premise: The Natural Environment's Role in Social Problems

It is a premise of this thesis that the natural environment plays a substantial role in social problems and that the field of social work does not adequately consider this role in analyzing and conceiving solutions to social problems. The natural environment provides what we need to live – clean air, water, soil, etc. – and is the source of our material world (at least). Humans and our complex brains and nervous systems evolved in a natural environment that is very different from the environment in which many people spend the majority of their time. Degradation of the air, water, and land and destruction of natural systems impact human life and our social systems. Additionally, any specific locality of the Earth can only indefinitely sustain a limited human population, so extensive dense populations strain their relationship with the land over time and therefore, arguably, strain

themselves. Given this dependent relationship, what would constitute an adequate, appropriate, and useful consideration of the natural environment on the part of social work?

Johnson noted that the organization People for Community in Recovery (PCR) was organized in a housing project built on a garbage dump with a mission to educate the public about the dangerous impact of such conditions, particularly for low-income communities (as cited in Park, 1996). In this case, it is clear that low-income housing communities and policies—areas of concern for social work—intersect with the impact of societal waste systems. Founded by Hazel Johnson, PCR is an example of how the natural environment—and its degradation—may be important to consider in analyzing social problems. In another example explored in more depth in Chapter IV, Gatersleben (2008) presents environmental psychology research findings that demonstrate benefits to human well being from contact with the natural environment. Such examples may indicate how the natural environment is relevant to clinical social work.

The research questions lend themselves to a theoretical thesis since the research involves examining social work and other fields in broad context for inclusion of the natural environment and its relevance to social problems. The thesis examines literature from social work and other fields to assess and compare consideration of the natural environment and its impact on social problems. The literature includes sources from areas such as social work history, theory, research, and practice; psychology history, theory, research, and practice; environmental science history and movements; ecopsychology; and environmental medicine and health. I will compare social work literature with literature from other fields that directly examines the natural environment

as it affects human and social well being. Through this comparison, I will examine how and whether social work's approach to social problems seems to incorporate appropriate attention to natural environmental concerns or whether more attention might lead to better solutions to social problems.

Since the literature of many areas of study is vast, the most appropriate literature available was sought and chosen in a process that narrowed the focus to a few comparison areas. Additional questions that bear on the primary questions include: What is the domain of social work and what cost is there in including or excluding consideration of the natural environment? What criteria or contexts should be considered in determining whether social work gives adequate attention to the natural environment? How do differing worldviews affect conceptions of an appropriate role for the natural environment in social work? In what ways is social well being sacrificed by neglecting natural environmental concerns? What benefit would likely come from social work's incorporation of natural environmental concerns? What are the premises of different worldviews of scholars who have considered similar questions? I will not examine all of these questions in depth, but they highlight some of the issues relevant to the thesis questions.

To begin to answer the research questions, Chapter III will examine what the literature says about the role of the natural environment in social work history, theory, research, and practice. Chapter IV presents findings from the literature of other fields—specifically psychology, public health and medicine, and environmentalism—on how these fields implicate the natural environment in social problems and how it may be part of solutions.

Defining Terms

Shaw (2006) points out that the social work profession generally uses 'environment' to mean psychosocial environment (p. 4-5). The word environment has been used for a variety of meanings in social work literature which are elaborated in Chapter III. To prevent confusion and as mentioned before, for the purposes of this paper the term *natural environment*, or occasionally *natural world*, will refer generally to any nonhuman nature – the Earth's living and nonliving systems and elements (e.g. forest ecosystems, animals, water, land, climate, etc.), not including the built environment. *Built environment* will refer to human-made structures such as houses and cities and their elements. (The term built environment has been in use at least since the early 1970s when psychologists and architects held conferences on the physical environment and psychology (Canter & Lee, 1974).) *Physical environment* will generally be used more broadly to include built and natural physical parts of our world not including humans, living animals, or nonphysical aspects such as relationships or social systems. The term *environment* will generally refer in the broadest way to everything outside an individual (or family or community as the case may be) that may affect or be affected by an individual or collective, or as specified by cited sources. When other writers have not defined environment and its qualifiers clearly or have defined them differently from above, any meaning stated or inferred from the source context will be noted (e.g. social, psychosocial, social institutions, etc.). For example, Germain (1983) notes that she generally includes structures built by humans in her concept of a natural environment, yet she may differentiate at other times. *Eco-* and *ecology* and their derivatives can also create confusion given their primarily biological origins and occasional use in social

work to refer generally to social systems. The terms *ecosystems approach* and *ecological social work* will be used to refer to a specific systems theory based on an ecology (biological use) metaphor. *Ecosocial work* will be discussed in Chapter V.

In the next chapter, Conceptualization and Methodology, I will lay out the theoretical framework for the thesis and the plan for analysis of the two theories. Following the two theory chapters, Chapter V will present a comparison and analysis of the two theories, review of critiques from within the field of social work, discussion relating to the thesis questions, and additional questions and areas for further scholarship.

CHAPTER II

RESEARCH CONCEPTUALIZATION AND METHODOLOGY

Conceptualization

The purpose of this thesis is to discuss how and to what degree the field and profession of social work consider and incorporate the natural environment in social work theory, practice, and education. As a profession that developed to focus on human well being, social work should incorporate as part of its theoretical base an understanding of the full scope of the context for human well being. Given humans' integral part in nature, the role of nature in human well being and social problems—and therefore in social work—could be important knowledge for social workers to understand.

How has the field of social work considered the natural environment in its approach to social problems compared to other fields that consider the natural environment? Furthermore, in analyzing and conceiving solutions to social problems, does social work give the natural environment adequate attention in carrying out its mission?

Psychology, environmental health and medicine, and environmentalism were chosen as comparison fields for their direct relationship to the research questions. I have included psychology in the 'other fields' (as opposed to combining it with social work) because social work has defined itself as a distinct profession despite much current overlap (psychotherapy and relevant psychological theories); as a distinct profession, I want to analyze social work's consideration of the natural environment exclusive of other

professions. Psychology (and related areas) was also chosen as a comparison field specifically because of its close relationship with clinical social work. Psychology and social work are fields and professions that share some common theoretical foundation for their psychotherapy and clinical work and yet are still separated by their own professional organizations, licensure boards and processes, university programs, and other distinct purposes. Within psychology, ecopsychology is an area covered in this thesis that overlaps with environmentalism as well as ecology and relates human and social problems to the natural environment. Environmental health and medicine were chosen as other fields for their clear interest in the relationship between the natural environment and human health, also an area in which social workers work. Finally, environmentalism, the philosophy and movement to protect the natural environment, was chosen for its concern for the natural environment and potential connections to social problems. Environmentalism and social work also share social movements as a common component, overlapping especially in the environmental justice movement.

The specific literature selected from social work was chosen for several reasons: its coverage of the history of the field, explanations of current theory, mention of the natural environment or its elements, and current scholarship or practice that considers the natural environment. The specific literature from other fields was selected as a comparison to social work for its study of current theory, consideration of the natural environment, and study of the relationship between the natural environment and human/social problems, health, and well being. It should be clear that I am not attempting to examine or assess the various other fields for their overall consideration of the natural environment; I am looking specifically at the ways in which each field has

considered the natural environment's relation to social problems and to compare that position to the general position of social work, to the degree possible in this thesis. To that end, I have only chosen sources from the other fields that do include discussion of how the natural environment may or may not relate to social problems.

Theoretical Framework

Specific components of each theory/field that will serve as points of comparison to answer the research questions include the history/evolution of consideration of the natural environment in social problems, consideration of the natural environment in current theories of mind/psychology, consideration of the natural environment in conceptualizations of self and identity, different aspects of the natural environment (e.g. nonhuman animals), environmental justice, use of the natural environment in practice, and theoretical arguments for consideration of natural environment.

Some components or sub-areas in each theory/field do not have a clear correspondent in the other theory/field for comparison. Although sources on corresponding components simply may not have been uncovered in the research process, this absence may also be real and therefore noteworthy for discussion. These areas include history of the natural environment in social work; social work's theories that are distinct from psychology; large studies of practitioners' attitudes toward the natural environment; and child development.

Plan of analysis

General Method

To answer the research questions, the method of analysis will consist of comparing and contrasting social work with other fields' attention to the natural environment in relation to social problems, going component by component. In addition, I will discuss areas lacking comparison and the significance of such absences.

To acknowledge where the field of social work has considered the natural environment, I include non-social work authors in the social work chapter when they are cited by social work scholars and authors. Otherwise, to confirm why material is included in the Social Work theory or 'Other Fields' theory, and to recognize which specific fields are examining the role of the natural environment, whenever possible I will note an author's field of study or background.

Answering Question 1

The first research question again is how has the field of social work considered the natural environment in its approach to social problems compared to other fields that consider the natural environment? To answer this question, in Chapter III, I will examine and summarize social work's attention to the natural environment in literature on the field's history and in current theory and practice. In Chapter IV, I will examine and summarize selected literature from the other fields' that consider the natural environment and its role and impact on people. In Chapter V, I will compare social work to the other fields in how each relates the natural environment to social problems and examine advantages and disadvantages, or general apparent usefulness of each theory's approach.

Answering Question 2

In Chapter V, I attempt to evaluate the adequacy of social work's consideration of the natural environment and answer question two: In analyzing and conceiving solutions to social problems, does social work give the natural environment adequate attention in carrying out its mission? The discussion will assess how the various fields' consideration of the natural environment strengthens or weakens the components of the theories and how this relates to social work. The goal will be to evaluate whether social work could be more effective in its mission and purpose by changing its consideration of the natural environment's role. In what areas and in what ways could it be more effective?

Potential Methodological Biases

In examining these research questions, my interest in the role of natural environment in social problems should be made clear. I have a strong interest in protecting and improving the health of the natural environment for its own sake and believe in its importance to human life and well being. With such views on the natural environment, as a social work student I may be especially critical of the field and profession about its consideration and incorporation of the natural world. I have further expectations that humans' treatment of the natural environment is likely a larger part of the cause of environmental problems than we tend to admit and that the harm we do reflects back to harm us more than we realize. Based on these views and my values and beliefs about humans' relationship to the natural environment, my views on how humans should live in and treat the Earth, including our lifestyle, may be quite different from the views of other social workers. My views figure prominently in my interest in examining

how social work considers the natural environment and may bias my analysis of the theories. Specifically, my assessment of social work in question two may reflect my bent toward making space in the field for the natural environment.

Strengths and Limitations of the Study Methodology

Strengths

This thesis' methodology has numerous advantages for answering the research questions. The theoretical methodology should allow for broad consideration of the field and literature. In contrast, a qualitative or even quantitative survey of a relatively small number of social workers would provide limited data on the topic and seems less likely to gather the fuller view of the field that the research questions seek. A theoretical thesis also necessitates a comparison theory which, in this case, means considering the questions from relevant and informative points of view outside social work. Additionally, this method creates flexibility for selecting comparison fields that seem most relevant. The theoretical methodology allows for a focus on scholarly perspectives that are grounds for practice, including a look at the historical evolution of response to social problems. Finally, a theoretical study may expand our conception of what may be possible beyond what is done in day to day practice.

Limitations

There are many other fields and areas of study and practice that could be considered as comparisons to social work; comparison with other fields would yield different answers to the research questions. The lack of social work research on this topic

and the large number of other fields that have studied the natural environment suggest that an initially broad search was a good way to begin to answer the research questions. However, the constraints on completing a thesis and necessity of limiting its scope mean narrowing the possibilities of comparison fields. A theoretical study is limited in that is does not ask social workers, clients, or others affected by social problems about the natural environment, which might yield many other kinds of answers to the questions. The analysis and comparison of the theories is limited to the subjectivity of my perspective, including my biases.

Finally, the topic and research questions occur in the context of a social science and practice often based on experience and in which the subjective is valued. Thus space is made in the dialogue for arguments based on subjective experience and broad historical knowledge and ideas. This creates the challenge of comparing perspectives grounded in science along side philosophical arguments, individuals' ideas about the world, "paradigm change talk," etc. Comparing wide ranging bases for discussion should be done with a critical eye toward distinguishing these various forms of understanding the world while allowing the different forms their appropriate place in discussion.

The next chapter will consider what the literature has to say about social work's consideration of the natural environment, beginning with a brief look at the context in which the field began.

CHAPTER III

THE NATURAL ENVIRONMENT IN SOCIAL WORK LITERATURE

Overview

This chapter will attempt to describe a theory of the social work field's consideration of the natural environment. It will examine what social work literature has said that relates to the thesis's first question: How has the field of social work considered the natural environment in its approach to social problems compared to other fields that consider the natural environment? It begins with a brief look at the historical context in which social work as a defined field and profession developed. The spare attention to and incorporation of the natural environment is examined from social work's early days until the 1960s, when a few voices began to draw attention to its general absence. The paper proceeds to more modern theories for any incorporation of the natural environment, as well as perspectives and interventions that specifically include it. Before summarizing the chapter's findings, there is an examination of new paradigms based on Earth-centric values. The chapter concludes with a summary of findings and the current state of the field regarding the natural environment. A review of the literature found relatively few theoretical or empirical studies that address the natural environment in social work.

The Natural Environment in Social Work History

Historical Context

In considering the role of the natural environment in social work, it is useful to return to the genesis of social work and social welfare policy and their historical context. According to social work historian Ehrenreich (1985), "social work and social policy first emerged as a more-or-less conscious effort to deal with that [deep economic, social, and political] crisis in American society [from 1877 to World War I]" that developed out of industrialization of a largely agricultural and rural land and people (p. 19). In considering the origins of social policy in the United States, Ehrenreich (1985) discusses the boom in immigrants from the end of the Civil War to World War I. As with the general urban growth due to industrialization from 1865 to 1900, immigration was a movement of rural, agrarian (land-based) people to the urban environment (Ehrenreich, 1985). Blacks were the exception since American business profited from keeping them for cheap agricultural labor in the South (Ehrenreich, 1985). According to Ehrenreich (1985), "Their [immigrants'] ideas about work, time, land, money, and family had been shaped by the realities and traditions of agricultural communities" (p. 22). As of 1859, 60% of the United States' labor force were agricultural; by 1914, 69% were nonagricultural (Ehrenreich, 1985). Of these changes, Ehrenreich (1985) says, "The importance of industrialization lies…in the impact that it had on society—on social institutions, on people's lives, on people's consciousness" (p. 20). The changes took place within the span of a generation; the landscape was transformed – from a rural, small-town society to an urban culture in the 1920s (Ehrenreich, 1985). Cities grew tremendously, engine and electric-powered transportation grew, a housing crisis was created both in capacity and

adequacy, epidemics became widespread, infant mortality skyrocketed, and environmental pollution became an issue – urban areas were polluted by horse excrement and urine and dead horses (Ehrenreich, 1985). The growth of cities also led to poverty, child labor, sanitation problems, and crime (Shaw, 2006).

Early History of Social Work's Consideration of the Environment

According to Ehrenreich (1985), as social problems and needs arose in the late 19th century, Social Darwinist explanations of poverty were replaced by environmental ones, including disease, which could not be overcome by the individual alone. Some Americans had applied Darwin's ideas about evolution and survival of the fittest to the social arena creating the notion that individuals achieved their level of relative wealth or poverty from "their fitness [or unfitness] in the struggle for business survival" (Dubofsky, 1974, p. 259). Thus, poor people were blamed for their own condition of need. The rise in social problems that came with urban immigration and industrialization such as inadequate housing, workplace hazards, and health issues resulted in recognition that environmental forces and conditions played a role in people's ability to thrive (Ehrenreich, 1985). To address these environmental factors, as social work was evolving and attempting to develop its professional specialization in the late 19th and early 20th centuries, it tried its hand at both "urban mediation and social activism" (Katz, 1986, p. 165). The migration to the cities meant that people left support networks of extended family, friends, churches, and the land that provided for them, creating the need for Charity Organization Societies (COS) and Settlement Houses that developed (Shaw, 2006). During the Progressive Era (generally mid-1890s to mid-1910s), changing the

environment (used generally) was the focus of social work (Ehrenreich, 1985). Jane Addams' Hull House in Chicago and others took a holistic perspective and examined environmental causes of poverty and viewed problems of the poor as systemic problems (Shaw, 2006). These settlement house workers used political activism and community organizing to try to change conditions and provided services to meet needs (Shaw, 2006). According to Merchant, Addams was aware of and worked to address issues such as industrial pollution in the community, as well as large amounts of garbage, sanitation, adequate water supply (as cited in Shaw, 2006). According to Ehrenreich (1985) and Axin and Levin (as cited in Hoff, 1994), the Settlement House movement maintained this analysis as it focused on changing urban environmental conditions that lead to poverty, illness, and misery. Settlement House era reformers used environment to mean larger social structure (Ehrenreich, 1985). The settlement houses attempted to fill the gap of informal support networks created when people migrated to cities leaving behind extended family and community who had filled the role (Shaw, 2006). According to Germain (1983), settlement workers did recognize urban-dwellers' need for immersion in the natural world for "renewal and refreshment" (p. 124-125) and created programs for such. Otherwise, these early social workers appear to have been concerned with the physical environment including some elements of the natural environment, such as water to meet basic human needs.

The nascent field's use of "environment" changed as other ideas about analysis of problems and development of interventions gained popularity. The mental hygiene movement begun around 1908 used "environment" to refer to emotional relationships in the home (Ehrenreich, 1985). Mary Richmond and like-minded early caseworkers used it

to mean an individual's school, job, and neighborhood (Ehrenreich, 1985). According to Katz (1986), these charity organization agents "became experts on urban survival," assisting clients in accessing sources of help (p. 165). This description of their role may help illuminate the complexity of urban living experienced by immigrants accustomed to traditional rural lifestyles—to the extreme of needing professionally trained intermediaries.

The debate over whether social work should focus on people's internal causes of problems with individual casework or social causes of problems with community strategies came to an initial resolution in 1915 (Shaw, 2006). Motivated by Abraham Flexner's critique that social work was not a profession, the followers of the COS movement and individual casework model won, and social work began to follow a medical model for understanding social problems (Shaw, 2006). As social work moved toward casework, the aim was to help people change to conform to their environment rather than changing or challenging the environmental conditions (Katz, 1986). With the departure from a community and policy focus, it seems that social work narrowed its lens to look at the individual, leaving the environment largely out of consideration (Shaw, 2006). Later events including the government response to the Great Depression, the New Deal, and Johnson's "War on Poverty" re-broadened social work to include more focus on community and policy (Shaw, 2006).

The fact that problematic environmental conditions resulted largely from industrialization and urbanization leads to the question of how much the deracination of urban immigrants' from their rural natural environments, as well as the destruction of the natural environment by urban and industrial agricultural growth, played in social

problems. In general, despite this observation, social work historians' discussions of early social improvement efforts sometimes refer to problematic physical environment conditions (Ehrenreich, 1985) but rarely make direct mention of the natural environment, save the occasional reference to the provision of public parks, disease, and food inspections (see Ehrenreich, 1985; Leiby, 1978; Katz, 1986). These historians use the term environment predominantly to refer to social institutions and relationships.

The advent of Freudian psychology in the 1920s narrowed social work's focus to personality, decreasing consideration of the social and urban environments (Katz, 1986), not to speak of a broader concept of environment. The goal of professionalization added to momentum toward social work's establishing individual therapy as its primary function (Coates, 2003). The absence of "larger environmental factors" from social work continued through the Great Depression and the field's early development (Coates, 2003, p. 40-41). According to Besthorn, the post-World War II era saw few challenges to psychodynamic theory (as cited in Coates, 2003), and, as Coates (2003) says, the field ignored any "attempts…to broaden the scope of social work's consideration of the environment (Pollak 1956; Stein and Cloward 1958)" (p. 41). The 1960s brought warnings of the consequences of exploitation of the natural environment from non-social workers such as Rachel Carson (1962) whose book *Silent Spring* warned the world about the dangers of pesticides to humans and nonhuman nature. Dubos, the microbiologist turned environmental social welfare scholar, maintained that humans were outstripping their own evolved capacities in the "mass, urban, technological environments" (Germain's words) they were creating (as cited in Germain, 1983, p. 113). Dubos argued that this poor fit between humans and their dense built environments leads to physical and mental

illnesses and social disruptions (as cited in Germain, 1983). According to Coates (2003), from within the field, Briar, Fischer, and Grinnell challenged the person-centered approach, and others, Stein, Gordon, and Bartlett, challenged the dominance of the social environment, but without real change.

Impacts of Industrialization on Rural Communities

In examining the meaning of the environmental crisis to social work, McNutt and Hoff (1994) recognize that industrialism offered a higher standard of living, but the price was giving up traditional living and community. In the industrialization and migration to cities that led to a greater need for social services, an integral part of the natural support community that migrants left was the land that supported the community. The necessity of the land and the crucial connection that a people have to their land seem to be frequently overlooked in understanding the social and environmental problems of industrial society.

How much of the need for urban survival assistants—social workers—derived from a disconnection from the land and the rest of nature may be difficult to know. However, though rural living is not without its problems, it seems reasonable to presume that before industrialization, long-established rural peoples knew how to meet their needs from the land and the community. Central government efforts to fix what was left of rural communities have sometimes had the opposite effect. New policy for addressing rural poverty in the late 1930s ended up benefiting larger-scale farmers who were becoming more like businessmen than farmers (Leiby, 1978). Thus the government's social welfare efforts at that time added to the strength of industrial agriculture to acquire

more land for profit rather than leaving the land in a more sustainable relationship with the people living on it. Hoff (1994) says that social welfare and social work's development of a social scope of work that generally excludes the physical (including natural) environment has been part of the process in which developed countries have blinded their citizens to humans' dependence on the physical environment.

Social Work's Response to Industrialization and Modernism

Brown's (1995) comparison of the developing "environmental revolution" (p. xv) to the industrial revolution—from which social work sprung—seems to present a prompt for the social work profession to examine its role in each revolution, especially current developments. Coates (2003) does examine these roles. He acknowledges the ways in which social work has aided those people disadvantaged by industrialization and urbanization (Coates, 2003). However, he points out that the profession's activities have "placed the profession in a paradox that has plagued theory and practice" and supported our society's "growth and development imperative" that has resulted in "inequality and exploitation" (Coates, 2003, p. 154). The emphasis on helping people manage and fit into modern society has prevented working on problematic social structure (Coates, 2003). "Mainstream social work has failed to challenge the inherent relationship between economic growth (frequently called "progress") and the exploitation of people and the environment" (Coates, 2003, p. 153).

Modern Social Work Theories

Most modern social work theories do not seem to include the natural environment explicitly in their analyses. A search for possible references to the natural environment in several social work textbooks and a social work general reference resulted in almost no mention of the natural environment (Netting, Ketner, & McMurtry, 2004; Roberts, 2009; Specht, 1988; Thyer & Wodarski, 1998). As in earlier social work development, environment seems to be used most often to refer to traditional "social" factors (Netting et al., 2004; Thyer & Wodarski, 1998). Occasionally, writers refer to the physical environment such as how physical space is used in a city, but generally without reference to human relations with the natural environment (Netting, Ketner, & McMurtry, 2004). Some authors mention public parks or camps as community resources (H. Specht, 1988). Gitterman and Germain's (2008) work in systems theory is one exception that includes the environment more broadly. The major modern theories used in social work are summarized below and any inclusion of the natural environment is described.

Systems Theory / Person-in-Environment Perspective

Finn and Jacobson (2003) say that "ecosystems approaches have pointed to social work's historic concern for environmental conditions, as evidenced in the Settlement House Movement and its attention to issues of housing and public health" (p. 60). Gitterman and Germain's *The Life Model of Social Work Practice* (2008), first published in 1980, presents their ideas for using ecology and the natural environment first as a metaphor and model for understanding humans' interaction with our social and physical environments, but also—unlike most other theories in social work—they use

environment broadly to include the natural world we live with and in. The authors see the ecological perspective as an appropriate metaphor for social work given its focus on "the interdependence of organism and environment" (used generally) (Gitterman & Germain, 2008, p. 51). Discussing the use of social and physical environments in social work, Germain (1983) acknowledges the impact of "*macroenvironmental*" forces (e.g. pollution, energy scarcity, "necessary" unemployment rates, endangered species), which include the natural environment, on the "*microenvironment*, or the immediate *life space*, of individuals, families, and groups" (Germain, 1983, p. 111). She uses physical environment to include the Earth, its season, and all its natural elements and systems, and the universe beyond, as well as everything constructed by humans – structures, transportation systems, communication systems, etc (Germain, 1983). Germain says physical environments affect social interactions as when the environment's shape affects proximity and intimacy (Germain, 1983, p. 111). She considers these human-built structures as "natural" but distinguishes for the purpose of description and analysis, such as settlement house workers' recognition of the benefits of contact with the natural world when she does not include them (Germain, 1983, p. 124). Gitterman and Germain (2008) focus on "person:environment" (used broadly) (p. 1) exchanges that influence each other reciprocally (Gitterman & Germain (2008) use the colon when referring to "exchanges" and "fit" "to repair the conceptually fractured relationship suggested by the hyphen in person-environment" (p. 1)). Germain (1983) elaborates on the concept of "people-environment transactions," a reciprocal relationship in which a person exchanges information, energy, and matter with the environment for survival and growth (p. 115). A related concept is positive and negative feedback loops, another way living systems

receive the information they need for survival and growth (Germain, 1983). Unlike unidirectional linear concepts of cause and effect, a feedback loop describes a reciprocal process in which cause and effect become interchangeable, such as the transactions mentioned above (Germain, 1983). Each has beneficial and detrimental effects. A positive feedback loop encourages a process to continue beyond normal limits (innovatively or destructively) (Germain, 1983). A negative feedback loop maintains limits, but can create rigidity (Germain, 1983). In one example, Davenport and Davenport reported large increases in rates of crime, child abuse and neglect, and child behavioral problems in a western boom town that grew quickly during an energy-rush (as cited in Germain, 1983). Germain (1983) suggests that social workers may provide interventions to interrupt loops with negative consequences.

Gitterman and Germain (2008) argue that humans have become "dissociated from the rhythms of nature that shaped our physiology and psychology" (p. 53) and that the conditions for life we created are very different from those during our earlier evolution. Germain (1983) promotes the idea of adaptedness, or *fit*—a transactional process toward stability and variability. Good fit, as a result of transactional processes, results in benefits for both an organism and its environment. Culture is a system element, and Germain (1983) maintains that culture determines much of how people relate to the natural environment (e.g. respect, subjugate, submit to) and that it can affect culture as well. In explaining the ecological metaphor for systems theory, she discusses the evolutionary perspective that humans—as other organisms—undergo genetic change and environmental selection processes over time that permit (or don't) their survival (Germain, 1983). Germain explains that adaptations that permit survival endure not only

because they allow the species to survive, but because they allow survival in the environment in which they originated (Germain, 1983). She uses this knowledge as grounds for exploring aspects of person:environment transactions. Dubos reports that biologists have suggested that humans may need close contact with the natural environment in which they evolved for physical and mental health (as cited in Germain, 1983). Gitterman and Germain's 2008 revision incorporates the lessons from deep ecology including three deep ecology principles: interdependence of networks, self-correcting feedback loops, and "the cyclical nature of ecological processes" (p. 2).

Gitterman and Germain (2008) also include and apply principles of the ecological feminism, or ecofeminism, perspective which posits that "oppression of women and ecological degradation are intertwined: both evolve from hierarchical, male domination" (p. 2). Ecofeminism arises through women's identification with nature and Western industrial civilization's assumption of dominating nature, which ecofeminism sees as buttressing oppression of women (Gitterman & Germain, 2008). Mack-Canty argues more broadly that social justice and the Earth's well being are intrinsically bound (as cited in Gitterman & Germain, 2008). Gitterman and Germain (2008) incorporate ecofeminism in their life model for various reasons including its goal of liberation of all people from oppressive, dehumanizing institutions and structures.

Gitterman and Germain's life model (2008) addresses the natural environment more directly in considering both benefits and stressors. They consider a wide variety of aspects of the natural environment—including weather, landscape, animals, and toxins—for their impact on people's psychological and social well-being, lifestyles, and identities (Gitterman & Germain, 2008, p. 248-249). According to Germain (1983), different

environments contain nutritive and nonnutritive elements for humans. Our knowledge of what constitute these and how they function in their relation to humans is poor (Germain, 1983). Gitterman and Germain (2008) promote the necessity of respecting and maintaining contact with the natural world for its restorative and spiritual forces. They note stressors such as moving from open, natural areas to cities (especially when the move is a cultural change as well), societal institutions' disruption of natural temporal rhythms through various imposed schedules, and the pernicious effects of toxic pollution and contamination such as lead and polychlorinated biphenyls (PCBs) on humans and the environment (Gitterman & Germain, 2008). Evans has observed the psychological and social disruption and stress that occur when people find out about toxic contamination in their community (as cited in Gitterman & Germain, 2008).

As for life model-based interventions that involve the natural environment, Gitterman and Germain (2008) advocate for social workers to work with clients to use their natural environments in the form of trips to natural areas for relief from isolation and overcrowded living. People with various illnesses and conditions can benefit psychologically and socially from contact with animals and plants (Gitterman & Germain, 2008). The benefits of dogs have been especially well documented (Gitterman & Germain, 2008, p. 250).

Germain has also written earlier about time as a dimension of the environment (as cited in Germain, 1983). She says the rhythms and cycles of the natural environment have left their print on organisms' biology (as cited in Germain, 1983). She names natural rhythms and cycles as part of living beings' biology: sleep cycles, regular body temperature changes, menstruation, rhythms of lungs and heart, etc (as cited in Germain,

1983). She points out that these can be affected by social structures and processes such as night shift work and night flights (as cited in Germain, 1983).

Rogge (1994b) has also developed an expanded person-in-environment perspective specifically for use in field education to address environmental hazards. She discusses incorporating knowledge of the impact of environmental hazards on people into field education through traditional and non-traditional settings and organizations (e.g. environmental advocacy NGOs and government environmental regulatory agencies) (Rogge, 1994b). Specifically, Rogge (1994b) looks at how environmental hazards affect several social work areas including health care, rural life, and disaster preparedness. She calls for the inclusion of environmental hazards (e.g. lead and pesticide exposure) in psychosocial assessments and client education tools (Rogge, 1994b).

Psychodynamic Theory

Psychodynamic "theory" actually comprises numerous theories such as ego psychology, object relations theory, self psychology, and relational theory, as well as Freud's original psychoanalytic concepts (Berzoff, Flanagan, & Hertz, 2008). Psychodynamic theory is a way of understanding the many influences in the development of personality as manifested through behavior (Berzoff et al., 2008). Berzoff, Flanagan, and Hertz (2008) specify psychodynamic "to mean any forces, internal or external, that have an impact on mental and emotional development" (p. 5). Epstein and Brown (as cited in Cooper & Lesser, 2008) say that psychodynamic brief treatment uses "psychoanalytic principles such as uncovering, working through repressed material, analysis of defenses, transference, countertransference, and resistance" (Cooper &

Lesser's words) (p. 16). Psychodynamic theory is broader than psychoanalysis which focuses largely on the role of what Chessick calls "the dynamic unconscious" (as cited in Berzoff et al., 2008, p. 5). Psychodynamic theory's reach can encompass "external factors like culture, gender, race, class, and biology" (Berzoff et al., 2008, p. 8) as well as events that create meaning or trauma (Basham, 2008).

In an analysis of the use of social and physical environments in social work, Germain (1983) refers to the ego psychology work of psychiatrists and psychoanalysts. Searles (as cited in Germain, 1983), a psychiatrist, used an ego psychology perspective to understand "mature and disturbed relatedness to the natural world, which parallels the difference in mature and disturbed relatedness to other human beings" (Germain's words) (p. 124). Though a psychoanalyst and not a social worker, Hartmann theorized that babies are born "preadapted" with primary autonomous ego functions suited for the "expectable environment" in which their ancestors evolved (as cited in Germain, 1983, p. 113). Hartmann extended this idea to include a set of secondary ego functions that emerge through transactions between drive energy and the environment (used generally) (as cited in Germain, 1983). Basham (2008) implicitly recognizes the natural environment's psychodynamic impact in the form of natural disasters' traumatizing effects.

Structural Theory

According to Finn and Jacobson (2003), the structural approach maintains that inequity in political and economic power is at the root of social problems, and it calls for social justice to be prioritized. Structural theory's emphasis on social justice and material

factors (Finn & Jacobson, 2003) may naturally imply inclusion of the natural environment and environmental justice though they are not mentioned specifically. The authors say that structural theory and practice are marginalized in the United States (Finn & Jacobson, 2003).

Strengths-based Approach

According to Finn and Jacobson (2003), the strengths perspective complements or enhances the person-in-environment ecosystems approach. It is a solution-focused approach that recognizes "people's capacities and the potential of their circumstances" in which social workers "explore the resource potential of their [people's] environments [used generally]" (Finn & Jacobson, 2003, p. 62).

Empowerment Approach

The empowerment approach, only recently prominent in social work, is premised on analysis of power, consciousness raising through group work, and collective work to change oppressive social conditions (Finn & Jacobson, 2003). Finn and Jacobson (2003) promote it as compatible to the ecological approach, though they include no mention of the natural environment.

Modern Social Work Ideas, Perspectives, and Practices that Incorporate the Natural Environment

A small group of scholars and theorists currently include environment in broader forms. Not all are so explicit in their consideration of the natural environment yet speak in terms that at least imply environmental justice or value elements of the natural world.

Nonhumans (Animals)

Animals, especially pets, are a common part of the nonhuman natural world that people have contact with. Due to the often powerful relationships between humans and "companion animals" and the widespread keeping of pets, Risley-Curtiss (2010) recommends including companion animals in social work research, practice, and education. Her study found that most social workers do not ask people about companion animals and even fewer inquire into possible animal cruelty (Risley-Curtiss, 2010). She argues the importance of including companion animals in social work due to the challenges, coping mechanisms, and resiliency factors involved.

Wolf (2000) looks even more critically at the issue of humans' regard for nonhuman animals and suggests that social work—as a field that focuses on marginalized groups—should consider the idea of "speciesism." He defines speciesism as "discrimination based on species," akin to other forms of oppression (e.g. racism), and asks social workers to consider whether treating other species differently is justified (Wolf, 2000, p. 88). He argues that both the person-in-environment perspective and animals' importance to the natural environment support social work's consideration of

speciesism (Wolf, 2000). He discusses connections between the treatment of animals and important social work issues such as hunger, poverty, and war (Wolf, 2000).

Ecological Self

In his exploration of radical environmentalism and self-identity, Besthorn (2002) has suggested that an "ecological self" reflective of pre-Western concepts of identity is emerging. This ecological self identifies with nonhuman nature (in addition to humans) and "recognizes that nature constitutes both the beginning and the ongoing essence of full human development and potential" (Besthorn, 2002, p. 68). Besthorn (2002) sees the re-emergence of an ecological self most clearly in ecofeminism and deep ecology. He suggests numerous implications of an ecological self for social work. This new identity should push social work education from a "techno-specialist, anthropocentric" grounding to one that's more "generalist and ecologically relevant" and includes the natural environment (Besthorn, 2002, p. 62). New ways of being spiritual that include elements of the natural world are valued (Besthorn, 2002). Ideas of social justice expand and shift toward questioning hierarchical views within humans and between humans and nonhumans (Besthorn, 2002). An ecological self seeks to create policies that support human and nonhuman life (Besthorn, 2002). Development must shift from industrial economic growth standards to "ecological indicators of success" (Besthorn, 2002, p. 62). Professional ethics—in social work and beyond—must take account of "interrelationships among social, professional and ecological responsibility" (Besthorn, 2002, p. 63). Besthorn emphasizes the implications for psychosocial development models and professional practice: that humans are not independent of and superior to nature, and

therefore experiences with nature, such as wilderness practice, are a beneficial component of psychosocial and identity development (Besthorn, 2002). He believes these experiences are especially useful with youth and can range from encounters with wilderness backcountry to parks, pets, and gardens in urban or rural settings; he refers to a supportive body of research from many different fields (Besthorn, 2002). According to Cohen, wilderness practice is aimed at restoring health holistically instead of a specific malady (as cited in Besthorn, 2002). Finally, Besthorn (2002) says, "In one sense humans do not need to have more nature, but must rather begin to fully recognize that they are nature" (p. 66).

Social Worker Attitudes toward the Natural Environment

In his doctoral dissertation, Shaw (2006) set out to "gauge the environmental knowledge, attitudes and perception of professionals in the field of social work and compile methods that social workers are using to incorporate environmental issues into social work practice" (p. 4). He sought to begin a dialog that compares the "goals of environmental justice and the mission of social work" (Shaw, 2006, p. 5). In his cross-sectional survey of a random sample of 373 California NASW members he found they were, on average, "no more likely than the general population to have pro-environmental leanings" (Shaw, 2006, p. 110). For his survey, Shaw (2006) used the New Environmental Paradigm scale (NEPS), the most frequently used measure of environmental attitudes and one with internal consistency reliability, predictive validity, and construct validity with other such measures. Having used returned surveys from California social workers only, his study may be limited in the generizability of its

findings to other social worker populations. He also found that over 90 percent of respondents felt the natural environment should be discussed in relation to social work in schools of social work (Shaw, 2006). Just over two-thirds of respondents stated that no such discussion was available in their social work education (Shaw, 2006). He found respondents' consideration of the environment in their practice did not include issues other than traditional social work environmental concerns (e.g. community violence), although they did have suggestions for incorporation of the natural environment (Shaw, 2006). Shaw (2006) concludes that social work profession has not incorporated issues of the ecological environment to the extent necessary. He states, "By failing to incorporate the very real ecological issues facing us in the United States and abroad our current social policies are at best not sustainable and at worst dangerous for our continued social well being" (2006p. 115).

Social and Environmental Justice and Racism

The NASW defines environmental justice as the full and equitable inclusion of all people regardless of background in environmental law and policy (National Association of Social Workers, 2009). NASW also uses the term to refer to both management of resources and the proportionate bearing of environmental consequences of human activity, including impact on health (National Association of Social Workers, 2009). Environmental racism refers generally to the disproportionate negative impact of environmental degradation on racial and socio-economic "minorities." According to Allen (2009), environmental racism is a focus within the United States' environmental justice movement whose work counters institutionalized racism in decision-making

processes as they affect natural environmental conditions. NASW's issue statement addresses environmental racism, defined by Barker as "The practice of operating hazardous businesses or storing toxic waste products in or near areas inhabited primarily by racial and ethnic minorities groups" [sic] (as cited in NASW, 2009, p. 123). Researchers such as Morello-Frosch and Jesdale and Rogge and Combs-Orme say that poor communities, especially poor communities of color, ethnic minority groups, and rural communities are exposed to greater dangers that come from environmental degradation (as cited in NASW, 2009). Rogge (1994a) has examined environmental injustice and the exploitation of people of color and poor communities for toxic waste disposal in the context of social welfare. Bryant has done extensive work in environmental justice including research on sociocultural factors in the distribution of environmental hazards (see, for example, Mohai & Bryant, 1992).

Social Justice Principles Applied to Global Environment Issues

Social welfare scholar Hoff (1994) elaborates on the application of several social justice principles that incorporate work from theology, economics, social science, and philosophy to discuss the challenges for human society of current global environmental problems. First, Beverly & McSweeney, Daly & Cobb, and Durning have argued that equitable distribution of material goods is an essential concept in addressing wealth imbalances, poverty, and draining of natural resources (as cited in Hoff, 1994). Second, Daly and Cobb use the principle of the right to participate in work and in communal decision-making as a basis for addressing how capitalist economics damage the natural environment, workers, and communities (as cited in Hoff, 1994). Daly and Cobb propose

new economies with decentralized power to increase community participation and environmental sustainability (as cited in Hoff, 1994). Hoff (1994) uses the *priority of the common good* as described by Daly & Cobb and Sagoff to argue for creating social welfare indicators that incorporate the costs to people of environmental destruction and pollution. In addition, Brown, Flavin, & Postel have applied this principle of the common good to sustainability resulting in the concept of intergenerational justice, as Hoff (1994) says, "the moral imperative to conserve and enhance the world for coming generations" (as cited in Hoff, 1994, p. 18). These principles and their applications fit with De Rosa's (1998) advocacy for integrating the addressing of social and natural environment needs and problems.

Applying some of these principles, Pandey describes a model of simultaneous social and economic development known as social development and how it connects to the natural environment (as cited in Shaw, 2006). In one example, Pandey has described a reforestation project in Nepal in which local people, especially women, participate fully in the project's development including decisions about design, implementation, benefit sharing, and evaluation (as cited in Shaw, 2006).

Practice and Interventions

Germain (1983) cites the use of camping (Vassil, 1978 and Shearer, 1978), wilderness therapy (Cataldo, 1979), horticultural therapy (Lewis, 1976), and pets (Bikales, 1975) for the benefit of various populations and problems. Bettmann and Jasperson (2008) have explored adult attachment in the context of wilderness therapy since it involves common components of attachment needs (e.g. losses and separations).

The authors found wilderness therapy to be effective in treating adults with attachment issues (Bettmann & Jasperson, 2008). Without a thorough review of wilderness therapy literature, the extent of its inclusion by the social work profession in practice or research is difficult to assess. My searches uncovered more investigators from the fields of psychology, counseling, and experiential education than from social work.

Taking an environmental justice approach to social work, Bartlett advocates assessing environmental health hazards with clients which can empower community responses (as cited in Shaw, 2006). Bartlett offers other practical ideas for reconnecting social work with the natural environment such as developing community gardens, food banks, and other community structures and using the natural environment in "practice, education, or management through 'meditation walks' outside" and using and teaching Feng Shui (as cited in Shaw, 2006, p. 31-32).

New Paradigms that Relate Social Work and the Natural Environment

Shaw's Adaptation of Bronfenbrenner's Ecological Systems Theory

As Gitterman and Germain based their ecological perspective on Bronfenbrenner's 1979 Ecological Systems Theory (Shaw, 2006), Shaw (2006) returned to Bronfenbrenner as the framework for his research on social workers and the natural environment. Shaw (2006) incorporates the natural environment and environmental justice tenets in the theory to help social workers tune in not only to the client's relationship with her social environment, but the natural environment specifically. His adaptation (Shaw, 2006, p. 45) of Bronfenbrenner's largely social theory includes assessment for presence of harmful chemicals in the *mesosystem* (interrelations among

settings the person participates in) and the presence of pollution and availability of safe water and clean, healthy food in the *exosystem* (settings not actively involving the person but containing him – e.g. broader social system). In the *macrosystem* (laws, norms, culture, government, etc.), he incorporates environmental justice as an integral part of the legal system and the condition and availability of green space (Shaw, 2006, p. 45). His adapted model is a real, more practical, attempt to demonstrate theoretically how social work can consider the natural environment as it relates to an individual, family, and larger groups.

Coates' Ecocentric Social Work Paradigm

Coates (2003) has laid out one of the most (if not the most) comprehensive arguments for the social work profession to consider the natural environment. He argues that the "tradition [of involvement in social justice issues] has placed social work in a unique position, both in terms of analysis and action, to take a significant role in addressing the negative consequences on individual and social well-being of our culture's environmental devastation" (Coates, 2003, p. 3). However, Coates (2003) makes the point that social work "developed to meet the needs of industrial growth…through various human services" (p. 3). Since industrialization and the values that support it have led to the current environmental crisis, he says social work will therefore need to "step outside traditional modes of thinking and action embedded in the industrial enterprise" (Coates, 2003, p. 3). He believes that a social transformation needs to be grounded in a revision of, or perhaps new, core human values (Coates, 2003). He is arguing, then, that a profession that has led in social justice needs to challenge and reconsider aspects of its

own historical context and purpose to fully realize principles of environmental justice and develop an ecosocial work perspective (discussed further in Chapter V) to support such a social transformation.

Coates (2003) exposes and critiques what he sees as the problem: economics, technology, and "modernity's [underlying] values and beliefs" (p. 29). He divides the modernity perspective into two components. The first component is a *dualist* view that humans are separate from nature and that the natural world is mere background available for human *domination*. The second is a *reductionist* view in which the universe is an "unchanging" "collection of objects" based on nature's laws of cause and effect (Coates, 2003, p. 29). The reductionist view includes principles of rationalism, efficiency, standardization, bureaucratization, and centralization of control (Coates, 2003).

Coates (2003) argues that these modernist values, economics, and technology have driven the economic domination and industrialization that have resulted in increasing poverty, environmental devastation, lack of means for viability and security, and other social problems. He "draw[s] attention to the illusion created by the commitment to progress and development, and the myth that human betterment and fulfillment can be achieved through the possession of more…material creations" (Coates, 2003, p. 27). He reflects that without an alternative to the belief in the pure beneficence of science and technology, this belief has been allowed to reign as the dominant good (Coates, 2003). "Possessing" has become "the goal and source of meaning" (Coates, 2003, p. 27). He says many people are blind to the fact that "the structures and processes of everyday life…cause environmental destruction and social injustice" (Coates, 2003, p. 27). Coates (2003, p. 24) cites numerous examples of how the drive for economic growth

has led to exploitation of people (largely poorer and people of color) and natural systems on a widespread scale.

Coates (2003) proposes an "ecocentric world view" that "reintegrat[es]… individuals and human communities with 'the rest of nature'" with the goal of "maintain[ing] ecologically sustainable and just social relationships" (p. 78). The new paradigm he has developed does not simply show social workers how to incorporate the natural environment into their work. It begins with a more fundamental approach by questioning social work's societal and physical contexts and the profession's values and assumptions about humans' relationships to nature and each other. He presents five "integrative guidelines" to help social work disentangle itself from the modernist paradigm and move toward an ecocentric worldview and practice: *wisdom in nature, becoming, diversity, relationship in community, and change* (Coates, 2003, p. 78-79).

Wisdom in nature refers to the "sophisticated, interdependent, self-regulating and self-healing system" evolved over billions of years that also tends toward "wholeness,…self-organization, subjectivity, differentiation, and complexity" (Coates, 2003, p. 80-81). Coates (2003) speaks of Nature's "complex and efficient exchange of resources that supports species and ecosystem survival" (p. 80-81), similar to the "people-environment transactions" Germain (1983, p. 115) mentions. However, Coates (2003) also seems to be referring to the fact that natural systems tend to ensure the continuation of their resources rather than drain their resources as humans have been doing. In this way, he draws from the same deep ecology principles that Gitterman and Germain (2008) draw from. Through 'wisdom in nature' Coates (2003) impels social work toward what

Early called a 'systems consciousness' closely connected to nature in which technology and economics are not primary but in service of "human/Earth needs" (p. 81).

With becoming, Coates (2003, p. 82-85) reminds us that humans and our social order are in constant development, not a static endpoint of evolution. From a broad perspective of time, Coates (2003) argues that human society is disintegrating. He encourages a focus on the evolutionary work toward global consciousness and interdependence (Coates, 2003).

Coates (2003, p. 85-86) includes diversity in his guidelines because it is part of what creates a thriving natural ecosystem – an interdependent system of different parts. This applies to large Earth-scale communities as well as to individuals by creating myriad ways for them to interact within a system (Coates, 2003). Celebrating diversity helps balance the survival needs of all which ensures the whole system can continue to thrive (Coates, 2003). Social work facilitates individual-environment relationships and can nurture diversity (Coates, 2003).

Coates's (2003, p. 86-88) fourth guideline is relationship in community: an Earth-based perspective promotes concern for all and therefore the primacy of community. Individuals depend on community, so community well-being is important for individual development and well-being (Coates, 2003). Social work values a nurturing environment which comes in the form of healthy families and communities (Coates, 2003). These healthy social structures depend on healthy nature systems; social work needs to broaden its scope to include the whole Earth system (Coates, 2003). In arguing for a 'self-transcendence' that essentially places community above self, Coates (2003) is careful to maintain a class-power analysis. He calls for social work to resist the momentum of

political and monetary power structures that exploit people and nature by creating alternative systems that also incorporate a class-power analysis (Coates, 2003).

Coates's (2003, p. 88-89) final integrative guideline for an ecocentric social work is change. He refers to two natural types of Earth change: slow increments (e.g. most natural selection) and fast leaps (e.g. response to serious survival threats) (Coates, 2003). He predicts that the current ecological crisis may be leading to a new fast leap of change (Coates, 2003). Successful changes at a small level can act as what Swimme refers to as *key attractors* (as cited in Coates, 2003, p. 88). Local responses toward social-ecological justice that are successful can become key attractors that spread to other communities (Coates, 2003). In place of common interventions that try to "fix," efforts toward changing and healing people and communities should be approached with an understanding of the dynamic nature of systems in order to use natural "self-healing qualities of…living systems" (Coates, 2003, p. 89). Coates (2003) gives examples of self-healing change in social work such as self-help groups and communities.

Coates's (2003) recognition of the need to address ecological crises includes a need for global "social transformation" (p. 92). For such transformation to occur, he emphasizes the importance of a global consciousness in which people live in a manner integrated with all living things and natural systems and "rooted in the wisdom of Earth and the depth of human compassion" (Coates, 2003, p. 92). The dualist thinking that separated humans from the rest of nature has also elevated rationality and devalued intuition and emotion (Coates, 2003). This division accentuates humans' sense of individuality leading to isolation from the real world (Coates, 2003). A holistic approach grounded in the interconnectedness of all things (Coates, 2003) is essential to

transforming social work and society. Toward that end, Coates' (2003) three specific objectives for the profession are to:

1. Nurture the awareness that human actions and social structures are part of Earth's evolutionary unfolding and as such should support an opportunity for all species to flourish and continue their contribution to the creative process,
2. Awaken ourselves and others to the significance and value of the talents each has to offer, helping people and society to value all of creation as sacred, and
3. Promote the development of communities and social structures that are inclusive, egalitarian and supportive of the creative potential in each person and all life, which involves moving toward an Earth-centered ethical system to replace anthropocentric morality.

To create the holistic approach and achieve a new global consciousness, Coates (2003, p. 98-99) calls on social workers to act in three capacities—prophets, teachers, and activists—carrying out four imperatives. First, as *prophets*, (Coates, 2003, p. 98) social workers must raise awareness of our society's self- and Earth-destroying path and, as Simon says, discourage others from expecting scientific innovation to solve our problems (as cited in Coates, 2003). The second imperative is to understand that society's destructiveness is rooted in our current values and beliefs and perpetuated by economics and politics (Coates, 2003, p. 99). Third, social workers must help expand recognition of "the connectedness of all things" and where this idea leads us (Coates, 2003, p. 101). Finally, social workers need to facilitate action at all levels that are grounded in an

ecocentric perspective (Coates, 2003). To this end social workers should "enable local participation and control of local organizations for local benefit" (Coates, 2003, p. 103). Coates (2003) points out that skills, talents, and values such as love of nature and other attitudes and qualities supportive of the new paradigm have been marginalized and thus need extra support from social workers.

In outlining roles and actions for social workers, Coates (2003, p. 104-105) includes Berger and Kelly's (1993) "Ecological Credo for Social Workers." The credo includes twelve points that articulate social work's professional obligation's with respect to humans and all of nature. Some of Berger and Kelly's points relate to appreciation for interconnectedness of all things, inseparability of respect for self and nature, equal sharing of resources, concern for future generations and policies that promote sustainability and stewardship, respect for the biosphere's wholeness and limitations, the value of diversity, a view of humans as a part of and not superior to nature, and social worker's obligation to make known environmental damage and its affect on living systems (as cited in Coates, 2003).

Coates (2003) addresses social work education by encouraging educators to help students examine their experiences, theory, and practice to realize both their connection to nature and modern society's role in the scale of environmental devastation. Educators can also focus on health problems and unequal opportunity that result from poverty and environmental racism (Coates, 2003). Coates (2003) adapts work by Clinebell (1996) on steps social work educators can take to encourage students to "heal…[their] alienation from Earth and…the ability to be nurtured by nature" (p. 108).

In transforming social work, Coates (2003) suggests that many interventions are still relevant and should be modified, but social work's "direction" should no longer be "fitting in" but "participating in the unfolding of creation" (p. 111). Social workers' work should increase the field's environmental awareness and extend progress "toward ecological and social justice" (Coates, 2003, p. 111). As social work broadens its conception of the environment, Coates (2003) believes the individualism and materialism will fade and be replaced with "an understanding of the centrality of community, spirituality, participation and capacity building" (p. 135). He shifts the focus of social work from solving individual and family problems to "building the capacity of people and communities to transform themselves and society so there is a better quality of life for all on Earth" (Coates, 2003, p 112). With the addition of all of the Earth's living things and natural systems, this purpose for social work is similar to that outlined by Specht (1994).

Coates (2003) explores the implications of his ecological paradigm for social work. In the realm of community health, he points out that "Social justice in health…demands ecological justice, as healthy living conditions are a prerequisite for a healthy life" (Coates, 2003, p. 124). The physical and emotional harm that industrial pollutants cause creates a responsibility for social workers to address both the effects and the causes of pollution (Coates, 2003, p. 125). He encourages using a biopsychosocial assessment and including questions about a person living and working environments that might identify exposure to hazardous substances (Coates, 2003). Social workers should also continue to devote effort to confronting environmental racism. People of color continue to be at greater risk of exposure to hazardous chemicals (Coates, 2003).

In addressing new areas for policy change, Coates (2003) says "in fact the distinction between policy and practice blurs, as changes in personal consciousness and action to strengthen communities are essential bases for broad transformation" (p. 136). With increased globalized trade, wealthier 'developed' countries have caused most environmental destruction and benefited, while poor people, people of color, and poorer countries have borne the brunt of loss (Coates, 2003). Since problems such as climate change, pollution, and the negative effects of globalization impact social and natural environments broadly, these issues must be taken on at personal and community levels as well as larger policy levels (Coates, 2003). Coates (2003) calls on social workers—even or especially those in direct practice—to engage in policy and active change work toward an Earth- and life-valuing, sustainable society. Policy work that comes from the bottom up as opposed to more hierarchical, top down, he maintains, is congruent with nature's processes and supports life and equality (Coates, 2003). But to restore balance to humans relationship with the natural environment and within society, he says "social work must progress beyond advocating only for adjustments and improvements to market- and industrial growth-dominated social structures and move beyond focusing its critique primarily on the social…[and] challenge the core assumptions of the industrial growth model" (Coates, 2003, p. 139). All social workers must also become policy workers and present an alternative vision that emphasizes community, interdependence, and a growing human:nature relationship (Coates, 2003). To these ends he promotes participating in and developing local community capacity, such as cooperatives, and environmental advocacy (Coates, 2003). In addition, Coates (2003) names consumption and passive observing as leading to competition, exploitation, and isolation; humans need to replace

these with active cooperation in living communities and systems. In approaching community development, he emphasizes inclusiveness and processes that result in collective identity and action. Citing arguments by Swift and Tomlinson, Coates (2003) says women's involvement is an important part of improving community well-being.

Coates (2003) view of a new politics lies in encouraging globally-minded local participative democracies. He supports the use of social development models described by Hoff and McNutt and local capacity building that make ecosystems primary (Coates, 2003). Political rights should belong only to people, not corporations (Coates, 2003). Quality of life and ecosystem health should replace GDP as measures of success (Coates, 2003). Coates (2003) proposes a tax system that rewards community enhancing activities, social justice, and sustainability and raises the cost of environmentally destructive activities.

Similarly to the new politics, Coates (2003) considers economics and lays out six general principles for sustainability (the first three of which were presented by Daly and Foster (as cited in Coates, 2003)):

1. The rate at which renewable resources are used cannot exceed their rate of regeneration.
2. The rate at which non-renewable resources are used cannot exceed the rate at which alternative sustainable resources are developed.
3. Pollution and habitat destruction cannot exceed the capacity of the environment to absorb waste and rebuild habitats.
4. Avoid risk to the environment and to people.
5. Ensure that the "Earth-friendly way" is the most economical.

6. Ensure equal opportunities for education and employment.

He gives several examples of interventions that fit these conditions.

Finally, Coates (2003) address social work education and reviews the areas covered in his text that he believes are important for social work students to have knowledge of. Of utmost importance is for students and social work as a whole to have dialogue about their vision for society (Coates, 2003). Coates (2003) says such a dialogue would necessarily include a critical analysis of "modernity and social work's role within it," (p. 152) and should include examining the values and beliefs of an ecocentric, sustainable society. Education should also help students follow their own path of transformation toward an ecocentric position (Coates, 2003).

Summary

The relatively young field of social work developed to help urban dwellers struggling with problems that accompanied the rapid urbanization and industrialization of the late 19th century. Many of the problems people were experiencing were associated with hazardous conditions of the cities, economic change and instability, and drastic differences between rural and urban survival. The attempts of early human aid workers to address these problems evolved into two general modes of response: directly assisting individuals and addressing environmental conditions. Some of the founders of social work had a high consciousness of the physical environment and some recognition of the importance of the natural environment, but these perspectives diminished as the field professionalized and focused on psychosocial elements.

Most of the more commonly used theories in social work and social welfare do not appear to have taken the natural environment into account. In their development of the person-in-environment perspective, Gitterman and Germain were among the first to articulate an "ecological" perspective that used natural systems as a metaphor for human social interactions and considered the role of the natural environment. Specific attention to nonhuman animals seems to be new and rare in social work literature, but current scholars have raised questions about the importance of companion animals and the profession's position on treatment of nonhuman animals. Besthorn (2002) echoes the concern about species hierarchy in his exploration of a new ecological self, an old human identity he sees re-emerging through various cultural shifts and intellectual and activist movements seeking an interconnectedness that extends to the natural world and beyond. Many social workers appear to be open to and interested in including the natural environment in the scope of the profession (Shaw, 2006). NASW (2009) has begun to address the natural environment in a policy statement that recognizes social work's role in addressing environmental justice and environmental racism in particular. The social development model illustrated in Pandey's work stems from a social justice foundation and has been applied in ways that create environmental justice (as cited in Shaw, 2006). Social work has included to some limited degree therapeutic elements of the natural environment through means such as wilderness therapy and horticultural therapy. Shaw's (2006) adapted ecosystems theory emphasizes awareness of the natural environment in social work assessment. Coates takes several steps beyond other attempts to advocate for environmental justice or include the natural environment. His new paradigm (Coates, 2003) attempts to essentially re-create social work from the perspective of the Earth and

in service of the developing narrative of the Universe. Central to his paradigm is an idea of the primacy of community that includes a deep restoration of humans' relationships with each other, other living beings, and the Earth as a whole.

In the next chapter, I examine a selection of literature from other fields and perspectives that address the role of the natural environment in social issues.

CHAPTER IV

OTHER FIELDS' PERSPECTIVES ON THE NATURAL ENVIRONMENT'S ROLE IN SOCIAL PROBLEMS

'The greater part of the soul lies outside the body'

Sendivogius as cited in Hillman, 1995, p. xxi

Introduction

This chapter will attempt to describe major ways in which the natural environment is considered or incorporated by other fields concerned with social and psychological problems. The general fields chosen include psychology, health and medicine, and environmentalism. It will examine what literature from these fields has said that relates to the thesis's first question: How has the field of social work considered the natural environment in its approach to social problems compared to other fields that consider the natural environment? Within those fields, various theories and sub-fields are included for their significance such as object relations, ecopsychology, child development, ecofeminism, and environmental justice. I examine the more current theoretical perspectives from these fields that appeared most relevant.

In the first section, after a brief history of psychology, I look first at some current theorists' and scholars' emerging views of how child development and more recognized psychological theories can incorporate the natural environment and then progress to less mainstream areas relating to healing. Since social work concerns itself with human well-

being generally, and since social workers play an important role in hospitals and health care, I touch more briefly on developments in health and medicine. Finally, to understand the broader framework for these other fields' consideration of the natural environment, I review some of the history and philosophies of environmentalism as they relate to social problems as well as the emergence of social problems as a consideration of the environmental movement.

Psychology

What is psychology?

As a modern science, psychology began in the 19th century, but the history of thought and scholarship that are its origins extends back millennia. According to Delaney and DiClemente (2005), the origins of Western psychology may be found in Hellenic scholars' speculations about human behavior and from Judeo-Christian perspectives. As a field concerned primarily with the mind, psychology owes much to the history of philosophy as well (Fuchs & Milar, 2003). The Greeks provided the naturalistic (i.e. that reality contains only the natural, material world and nothing non-material such as spirit) perspective of behavior, for example, in Aristotle's study of learning and memory and Plato's belief that human behavior was largely a matter of knowledge of right and wrong (Delaney & DiClemente, 2005). Judeo-Christian views "endors[ed] the significance of both the natural created order and a transcendent realm" but also internal conflict (Delaney & DiClemente, 2005, p. 32). Delaney and DiClemente (2005) cite Augustine's (354-430 C.E.) writings for "The elements of a depth psychology that profoundly grappled with sexuality, ambivalence, the unconscious, and guilt" (pp.

32-33) as well as free will. Much later, Thomas Aquinas (1225-1274) sought understanding of the relation of the soul to the body, the acquisition of knowledge through the senses, and the discovery of the world's universal truths with the rational mind (Delaney & DiClemente, 2005). From the modern West, much of this early history might be referred to as "speculative philosophy" as Salter (as cited in Delaney & DiClemente, 2005) called the contributions of 18th century theologian Jonathan Edwards (p. 42).

The 19th century brought a transition to empirical psychology and regard for physical measurement. Stanley Hall, the first American doctor of psychology, founded the American Psychological Association (APA) in 1892 (Delaney & DiClemente, 2005). Seeking legitimacy and recognition as a science, the field in the United States moved quickly toward adopting logical positivism (the necessity of empirical proof) in studying what was regarded as a subjective subject (Delaney & DiClemente, 2005). Psychology researchers in the 19th century developed methods of measuring physiological response such as speeds and intensities to learn about conscious experience and mental processes such as internal perception (Fuchs & Milar, 2003). In Germany, Great Britain, and the United States, other early psychological research interests included memory, verbal learning, visual perception, "intellect," emotion, motivation, reasoning, instincts, and desires (Fuchs & Milar, 2003, pp. 6-7). The naturalistic perspective was strengthened when William James's 1890 textbook on psychology "cut the discipline's past ties to theology" (Fuchs & Milar, 2003, p. 7) although he too continued to recognize a mystical, non-material realm both in the universe and within humans (Delaney & DiClemente, 2005). Darwin's theory of evolution by natural selection and Spencer's work on

adaptability (learning) greatly expanded the areas of research for psychology including child development, individual differences, structure and function, and the animal-human continuum as psychologists considered how the mind functioned as a tool for adaptation and survival (Fuchs & Milar, 2003).

The late 19th century brought the beginning of psychodynamic theory when Sigmund Freud and Josef Breuer began developing the theory and practice of psychoanalysis based on ideas about unconscious processes involving repressed memories and their effects (Mitchell & Black, 1995). As mentioned in Chapter III, psychodynamic theory is generally considered broader than psychoanalytic theory and, in addition to unconscious processes, includes factors that are not unconscious and ones external to the individual as well. In 1917 Freud published "Mourning and Melancholia" which expanded psychodynamic theory to include "the potent idea that the nature of the relationship with an object influences the nature of psychic structure" (Flanagan, 2008, p. 126).

The 20th century brought many shifts and expansions to psychology. John B. Watson influenced the field to shift from a "science of mind and consciousness" toward a "science of behavior" (Fuchs & Milar, 2003, p. 15). In Germany, rather than breaking phenomena into parts only to re-synthesize them, *gestalt psychology* studied the mind with the premise that the organized whole had a different quality than the sum of its parts (Fuchs & Milar, 2003). Following a shift to behaviorism, the latter 20th century found psychology renewing consideration of cognition and the mental processes leading to behavior (Fuchs & Milar, 2003).

Clinical psychology is an area more closely related to social work. Early clinical psychologists focused on the study of psychometrics, intelligence, personality, and abnormal behavior (Routh & Reisman, 2003). Today their work includes aspects of many of psychology's sub-fields and focuses on helping individuals function well through various models of psychotherapy and behavior modification (Routh & Reisman, 2003). Other important areas of modern psychology include biological, social, educational, clinical, industrial-organizational, forensic, and assessment psychologies among others. Additionally, in the 1960s psychologists developed the sub-field of community psychology that overlaps with social work through its shifted focus from individuals to social systems and institutions (Fuchs & Milar, 2003). Modern psychology uses scientific methods to broaden still its reach within the domain of the mind, brain, and human behavior, and it applies clinical and other means to improve individual and social function (Fuchs & Milar, 2003). Overall, the development of psychology has involved questions about how individuals perceive, comprehend, and interact with the world; about thoughts, feelings, and behaviors; and about consciousness and how we interact with ourselves; as well as how we change in these areas.

Of specific interest to this thesis are theories and areas of psychology that in recent years have been expanded or re-considered to include the natural environment. One of these, object relations theory, continues to be one of the most important theories in psychotherapy and social work (Mitchell & Black, 1995). In the 1940s a group of British psychoanalysts developed a set of object relations theories (Mitchell & Black, 1995). They suggested that people are born "wired for harmonious interaction and nontraumatic development but thwarted by inadequate parenting" (Mitchell & Black,

1995, p. 114). A basic concept (in W. R. D. Fairbairn's view) is the development of "private presences (internal objects)…to whom one maintains a fantasied connection" (Mitchell & Black, 1995, p. 117). Fairbairn's work has also influenced the development of relational theory (Mitchell & Black, 1995), another theory recently considered in how it may be available to incorporate the natural environment. Relational theory began as the framework under the interpersonal psychoanalysis developed by Harry Stack Sullivan in the 1920s (Mitchell & Black, 1995). Sullivan believed that psychoanalysis should focus on the interpersonal field a person experiences and which develops in her interactions with others. "Sullivan came to feel that human activity and human mind are not things that reside *in* the individual, but rather are generated in interactions among individuals" (Mitchell & Black, 1995, p. 63). What follows is a review of how the natural environment has begun to be incorporated in to various areas of psychology including research.

Psychological Diagnoses and Nature

Psychologists and others interested in human development have begun to explore the role of nature in mental health and human development in recent decades. These investigations may be equally important to social work. Some researchers, educators, and activists have focused on how the natural environment impacts children's development, mental health, and developmental problems such as Attention Deficit/Hyperactivity Disorder which will be discussed in more depth in the first section. A few theoreticians have begun to incorporate nature into mainstream psychological theories such as object relations and relational theory. Psychology research is also

producing a growing body of findings on how exposure to the natural environment affects people emotionally, cognitively, and physiologically. Wilderness experiences have been of particular interest for potential therapeutic outcomes with a variety of populations. Finally, since at least the 1990s the term ecopsychology has identified a gathering of scholars, practitioners, activists, and others from a variety of fields whose interest is the relationship between psychological health and the health of the natural environment. A review of ecopsychology will lead to related areas of environmental justice, shamanic counseling, and nature in diagnoses.

The Role of Nature in Child and Human Development

Psychiatrist Harold Searles said in 1960, “The non-human environment, far from being of little or no account to human personality development, constitutes one of the most basically important ingredients of human psychological existence" (as cited in Kellert, n.d., p. 1). Echoing this sentiment, Roszak (1995) sees the way that modern adults teach children to see the world as separate from themselves as a form of "repression of cosmic empathy, a psychic numbing we have labeled 'normal'" (p. 11). Kellert (n.d.) maintains that our culture's promotion of this disconnection from and transcendence of nature is actually placing our species at risk. He reports that emerging data suggest that experiences with nature are necessary for healthy development of many of children's fundamental capacities including "physical health, emotional attachment, self concept, personal identity, critical thinking, problem solving, curiosity, imagination, even culture" (Kellert, n.d., p. 2).

In his book *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder* (2005), journalist Richard Louv reviews the research on the role of nature in the developmental lives of children and adults. He notes several important points that connect children's health, physical activity, and nature. He relates the documented fact that lack of physical activity leads to depression in children (Louv, 2005). He points out additionally that although organized sports have increased at a record rate, the trend has not stopped childhood obesity rates from increasing rapidly (he also notes the direct correlation between obesity and TV watching time) (Louv, 2005). He argues that organized sports (which are not always outdoors) provide less variety and freedom of time for "physical and emotional exercise" than playing in nature (Louv, 2005, p. 47).

According to Peter Kahn, more than one hundred studies reveal that stress reduction is one of the primary benefits of nature experiences (as cited in Louv, 2005). Studies are also pointing to nature exposure as a supplemental, and sometimes replacement, therapy for Attention Deficit Hyperactivity Disorder (ADHD) (Louv, 2005). Louv (2005) argues that in this "information age," television, the internet, and new gadgets that draw more of people's time and attention are dulling our senses, creativity, and knowledge. He also points out that changes in the use of technology are part of a bigger picture of social/environmental change that includes the recent movement from rural to urban living (Louv, 2005). Until the 1950s, agriculture was a part of most American families' lifestyles giving children opportunities for chores and "unregimented play…steeped in nature" (Louv, 2005, p. 101). He believes the lifestyle change is part of the reason for increases in attention and hyperactivity problems and echoes Kellert's (n.d.) substantiation that children need exposure to nature for healthy sense development,

learning, and creativity (Louv, 2005). Louv (2005) uses the lay term "nature-deficit disorder" to illustrate the lives of many children today, as well as a potential factor in attention problems.

Researchers at the University of Illinois (Taylor, Kuo, and Sullivan) did a carefully controlled survey of families of children (ages 7-12) with ADHD (as cited in Louv, 2005). Their study compared the effects of activities in natural, green settings to settings without greenery on these children's functioning and ADHD symptoms (Louv, 2005). They found several important effects: green nature, even viewed through a window, reduces attention-deficit symptoms; greenery settings and views may have a larger effect for girls, six to nine, including increased concentration, decreased impulsivity, and longer delay of gratification (Louv, 2005). Louv (2005) points out that these effects can help girls improve school performance, handle peer pressure better, and "avoid dangerous, unhealthy, or problem behaviors" (p. 105). The researchers use their findings as the basis for advice for parents and educators, as well as for communities to plant and care for trees and vegetation (Louv, 2005).

Acknowledging that research on nature's role in child development is in an early stage, Louv (2005) says, "More research is needed, but we do not have to wait for it" (p. 108). With the evidence building, Taylor and Kuo say that if "contact with nature is as important to children as good nutrition and adequate sleep, then current trends in children's access to nature need to be addressed" (as cited in Louv, 2005, p. 109).

Nature and Children: Object Relations Theory and the Ecological Self

Psychologist Anita Barrows (1995) sees a need for child development theory that recognizes that "the infant is born into not only a social but an ecological context" (p. 103) and that "the parent-child relationship does not proceed in a vacuum" (p. 104). Using object relations, Barrows (1995) considers the role of nature in child development. She broadens Winnicott's theory of object relations to include a relating to the natural environment (Barrows, 1995). She sees Winnicott's process of transitional object formation—in which a child invests personal meaning in something outside the body—as representative of the permeability of the self – an 'ecological self' (Barrows, 1995, p. 107). Thus she draws a parallel between this ecological self and the object-related self (Barrows, 1995). Barrows (1995) suggests that an infant's physical pleasure in contact with the world and children's attraction to stories with animals and nature may be indicators of the ecological self or "explained by children's instinctually based feelings of continuity with the natural world" (p. 107). She relates how the natural world has also acted as what Winnicott called a comforting 'holding environment' for her personally; she describes how some of her earliest memories as an infant were of elements of nature such as leaves and how such elements have become deeply meaningful and comforting (Barrows, 1995, p. 104). She proposes that an implication of the ecological self includes widening the context for nurturing the growth of children to include connection with a broader environment (Barrows, 1995).

Relational Theory and Self-in-Relation Model

Psychologists Gomes and Kanner (1995) draw from feminist psychology in their contribution to relational theory. They connect the 'self-in-relation' model of the Stone Center at Wellesley College to the natural environment (Gomes & Kanner, 1995). Relational theory challenges the Western model of health that values autonomous development, and replaces it with a model of increasing "complexity in relationships" (Gomes & Kanner, 1995). Gomes and Kanner (1995) say that the patriarchal elevation of an autonomous "hyperindividuality" encourages a competitive and hierarchical "type of relationship that denies and often destroys the larger context, whether this is a friendship, a family, or an ecosystem" (p. 117). They say the damaging consequences of humans' relationship of domination with the planet can be seen in rising rates of physical and mental illness (Gomes & Kanner, 1995). In response, Gomes and Kanner (1995) propose a broadening of the self-in-relation model to include relationships not just with other humans but the natural environment as well. They quote feminist theologian Catherine Keller: "Liberated from relational bondage, we range through an unlimited array of relations—not just to other persons, but to ideas and feelings, to the earth, the body, and the untold contents of the present moment" (Gomes & Kanner, 1995, p. 118). They draw a distinction between "empowering" growth-oriented relations and "diminishing" relations of limiting repetition (Gomes & Kanner, 1995, p. 117). Relational theorist Janet Surrey describes such healthy relationships in terms of acknowledged participation in a larger collective that increases the individual's and the group's effectiveness, power, and understanding (as cited in Gomes and Kanner, 1995). In their discussion, Gomes and Kanner (1995) refer to the bioregional movement's vision (discussed further on) of "a

change in our sense of identity, so that we allow our surroundings to grow into us, to let the land reclaim us" (p. 121). In this sense, we open ourselves to a deeper relationship with the natural environment, allowing it to affect us and our identities.

The Natural Environment in Psychology Research: Affective, Cognitive, and Stress Regulation

In her review of findings from environmental psychology research, Gatersleben (2008) discussed the ways that exposure to natural environments benefits people. Ulrich found an improved recovery response and decreased recovery duration in gallbladder surgery patients with a hospital room view of trees (as cited in Gatersleben, 2008). His (1983) Stress Recovery Theory (SRT) posits that "exposure to nature indices [sic: induces] positive emotions in people which suppresses negative emotions and can, therefore, help recovery and may even help to built [sic] a buffer against future negative emotional experiences" (Gatersleben, 2008). Kaplan & Kaplan theorize a cognitive process that they call Attention Restoration Theory (as cited in Gatersleben, 2008). Supporting this theory, Kaplan & Kaplan and Hartig et al. found that nature exposure can aid recovery from mental fatigue and improve emotional states (as cited in Gatersleben, 2008), and Leather et al. showed that nature viewing revives concentration and improves production (as cited in Gatersleben, 2008). Hartig et al. found that both affective recovery and cognitive restoration can happen simultaneously with the affective process occurring more quickly (as cited in Gatersleben, 2008).

Korpela et al. found that favorite places tend to be natural and that one purpose people have in visiting a favorite place is for affective and cognitive restoration and self-

regulation (as cited in Gatersleben, 2008). Wells found that more vegetation in a new environment following a move from an urban area correlated with higher cognitive functioning in children (as cited in Gatersleben, 2008). Wells and Evans found that larger amounts of nearby nature correlated with reduced psychological impact of stressful events on children who lived in rural areas (as cited in Gatersleben, 2008). Hartig et al. also found that exposure to a natural scene reduced blood pressure more quickly in people after a stressful task (as cited in Gatersleben, 2008). A walk in nature promoted further blood pressure decline while an urban environment did not. Lewis (1996) documented that horticultural therapy for mental health treatment has a long history and is grounded in the therapeutic effects of gardening.

Gatersleben (2008) noted that not all people prefer nature and that many people spend much time indoors even when needing restoration. Bixler et al. and Bixler & Floyd found that about twenty percent of children in their studies preferred to stay indoors rather attend a mandatory nature school trip (as cited in Gatersleben, 2008). In concluding her review, Gatersleben (2008) pointed out that most environmental psychology research has manipulated short-term variables with healthy young individuals. She believes there would be value in broadening research on nature's potential benefit to include individuals with chronic psychological problems.

The Natural Environment in Psychology Research: Wilderness Experiences

Populations of a variety of ages and mental, emotional, and physical problems (such as trauma, grief, and addiction) who have participated in wilderness therapy have experienced a variety of different benefits including self-awareness, a sense of comfort,

increased appreciation for others, and a feeling of renewal and vigor (Frumkin, 2001). It can be difficult to de-confound variables such as vacation-like quality of the experiences or group bonding effect (Frumkin, 2001). Frumkin (2001) points out that satisfying any preference people have for contact with nature can not only enhance health but can be less expensive than medication and without side effects. Many studies have documented the benefits of outdoor programs for youth. Outdoor education programs for troubled youth and those with mental health problems have been demonstrated to have therapeutic outcomes (Louv, 2005). Adventure therapy programs have yielded measured improvements in self-esteem, leadership, academics, personality, and interpersonal relations (Louv, 2005). Boss reports that a review of nearly one hundred studies showed that Outward Bound wilderness experiential education programs "stimulate the development of interpersonal competencies, enhance leadership skills, and have positive effects on adolescents' senses of empowerment, self-control, independence, self-understanding, assertiveness, and decision-making skills" (Louv's words) (as cited in Louv, 1995, p. 226). Studies have also found that benefits for people with disabilities participating in outdoor recreation and adventure activities include enhanced body image, positive behavior changes, and improved initiative and self-direction (Louv, 2005).

The study “Effects of Outward Bound Experiences as an Adjunct to Inpatient PTSD Treatment of War Veterans” (Hyer, Boyd, Scurfield, Smith, & Burke, 1996) replaced five days of two inpatient PTSD treatment programs (11 and 14 weeks) with an Outward Bound Experience (OBE) and compared results to the standard treatment regimens. Lack of random or matched assignment may have biased the results such that an actually effective PTSD treatment proved no more effective than the control treatment.

Briefly, the OBE consisted of experiential tasks in a wilderness area such as rock climbing, hiking, and camping along with reflection and discussion time. The group discussions were led primarily by OB staff and focused on the previous day's activities and emotions and were not generally clinical (addressing past trauma and symptoms) in nature. During the same week, the control groups were receiving clinical group and milieu treatment for war-related trauma, trauma coping, and stress reduction. General outcome goals of the OB courses and activities were similar for each group, but the treatments were not manualized per se. Several scales that measure change in PTSD symptoms were used. The authors found "no distinct discernable effect on general or PTSD-specific symptoms" (Hyer et al., 1996, p. 272). Although the veterans who participated reported a positive experience, results were not attributable to OBE (Hyer et al, 1996, p. 272). The authors of the Hyer et al. study (1996, p. 273) conclude that it may be difficult to discern differential impact of the inpatient treatment with and without an OBE because both treatments seem to have the greatest impact on the same outcomes, self-esteem and relationships.

Thomas (2004) examined the potential of group outdoor experiential education (OEE) programming with follow-up group work to help people with acquired brain injury (ABI) adjust to injury and improve quality of life. The OEE consisted of a 9-day Outward Bound course. This study is relevant for its use of the natural environment as a component of therapeutic intervention, although it does not seem to separate possible different effects of the group therapy and challenge activity components from the exposure to nature component. The course's physical environment is not described, but the course consisted of activities such as camping, rock climbing, and rafting that take

place in natural environments. The study used a mixed qualitative and quantitative longitudinal design with experimental and control groups. The study found significant and sustained improvements and much higher than expected effects sizes based on the Quality of Life Inventory (QOLI). Interview responses indicated significant gains in psychosocial adjustment to ABI including, for example, taking responsibility for life outcomes and learning to manage emotions such as fear and anger. The authors discuss study limitations based on differences between experimental and control groups.

In her article, "Breaking through Barriers: Wilderness Therapy for Sexual Assault Survivors," Levine (1994), who has worked as a wilderness therapist, reviewed and promoted the use of wilderness therapy with women and adolescent girl sexual assault survivors. Although not experimental, this study is relevant for its use of the natural environment as a component of therapeutic intervention and observations of the wilderness therapy experience. Like the Thomas (2004) and Scurfield et al. (1996), it does not seem to separate possible different effects of group challenge/therapy component from the exposure to nature component. This treatment “combines experiential education and appreciation for the environment with traditional therapeutic group processing” (Levine, 1994, p. 176). Assessing which activities are most effective, Levine (1994) found that overcoming fear through rappelling, rock climbing, and a ropes course experience was effective with the population. She did not discuss any standardized measures, only observation. Levine said the key to wilderness therapy is “continuity in treatments plans”: providing tools to transfer the participants’ growth to their lives back home and having the same therapist before, during, and after the experience to provide follow-up. She observed results in a one to three day experience

that she said might take six months of traditional therapy. Noticeable growth areas for some participants in every program include self-esteem, confidence, overcoming fears, giving and receiving support, trust, power and control issues, and problem-solving. There is controversy over the benefit of deliberately stressing survivors of sexual abuse, the perceived rigor of wilderness therapy, and consideration of traditional therapy that participants may be engaged in (Levine, 1994). Levine (1994) states that the use of stress is part of the change process in this form of wilderness therapy. Levine (1994) recommends wilderness therapy as a complement to other treatments.

Frumkin (2001) recommends research into nature exposures with healthy outcomes such as wilderness therapy, not just exposures that impair health. He asks such intriguing questions as, "Do inner city children who attend a rural summer camp have better health during the next semester of school than their friends who spent the summer in the city?" (Frumkin, 2001, p. 238). He asks who can benefit from these potential therapies and which exposures to nature work best and cheapest (Frumkin, 2001). Frumkin (2001) suggests that the health benefits of nature exposure imply a need to collaborate with landscape architects, interior designers, veterinarians and ethologists, and urban and regional planners to learn how best to facilitate beneficial human contact with the natural environment. In practice, he said evidence of health benefits should mean healthcare providers advise patients based on such findings (e.g. to spend time in contact with green nature or adopt a pet) (Frumkin, 2001). Likewise, Frumkin (2001) says people in a variety of fields should consider how benefits of contact with the natural world and environmental health knowledge can help make communities more healthful.

Ecopsychology

Near the end of the 20th century, a fundamental assumption of psychology—the idea that the 'me' is located within a person's skin—was challenged by philosophies such as postmodernism (Hillman, 1995, p. xvii). Introducing a major text on ecopsychology, Jungian analyst James Hillman (1995) says that although "the human subject is composed of the same nature as the world…psychological practice tends to bypass the consequences of such facts" (p. xix). Recognition of this common nature—as Theodore Roszak says, "to see the needs of the planet and the person as a continuum" (p. 14)—has brought psychology, ecology, and environmentalism together in the sub-field of ecopsychology. Various ideas and traditions led to the creation of ecopsychology. In the 1970s, Deep Ecology was created as a view of humans as one species among many within natural systems therefore rejecting the idea of humans as separate from and even superior to nature (Roszak, 1992). Begun around the same time, ecofeminism has provided insights such as the connection between domination of women and the land (Gomes & Kanner, 1995). Far from least is the continued recognition today of the wisdom of indigenous psychology referred to as shamanism. Speaking to the need for an ecological psychology, Theodore Roszak (1992) says, "If psychosis is the attempt to live a lie, the epidemic psychosis of our time is the lie of believing we have no ethical obligation to our planetary home" (p. 14). This section reviews the fundamentals of ecopsychology and what has been said by a few of its major contributors. The first part touches on ecopsychology's premises and theoretical foundations, its challenges to psychology, and the nature of the self and its relationship to the Earth and what that relationship means for healing both. The section will then look briefly at

ecopsychology's relevance to race and environmental justice, the insights of ecofeminism, the continuing relevance of shamanism, and how some ecopsychologists think about diagnoses.

Fundamentals of Ecopsychology

In 1992, historian Theodore Roszak presented a new psychology he termed "ecopsychology" in his book *The Voice of the Earth*. Roszak (1992) laid out eight principles of ecopsychology beginning with "The core of the mind is the ecological unconscious" (p. 320). Davis summarized ecopsychology's fundamental premises: 1) humans are deeply connected to the natural environment, to the Earth, 2) the forced separation of human beings from the natural environment led to "ecologically negative consequences and human psychological trauma," and 3) when humans and the natural environment reconnect, both can heal (Shaw's words) (as cited in Shaw, 2006, p. 31). Brown (1995) says, "Ecopsychologists believe there is an emotional bond between human beings and the natural environment out of which we evolve" (p. xvi). Human interaction, or transactions, with the natural world manifest "projections of unconscious needs and desires" (Roszak, 1995, p. 5). Relating to the third premise Brown (1995) says, in fact, "seeking to heal the soul without reference to the ecological system of which we are an integral part is a form of self-destructive blindness" (p. xvi). He says the environmental revolution is grounded in a change in values due to "a growing appreciation of our dependence on nature" (Brown, 1995, p. xvi). He believes that restoring humans' holistic health depends on their returning the Earth to good health (Brown, 1995). According to Brown (1995), ecopsychology is a merging of "the

sensitivity of therapists, the expertise of ecologists, and the ethical energy of environmental activists" (p. xvi). Ecopsychology draws from shamanic healing, wilderness experience, "nature mysticism as expressed in religion and art," and Deep Ecology (Roszak, 1992, p. 321).

Hillman (1995) says that from the beginning of psychology "the human subject has…been implicated in the wider world of nature" from which it comes (p. xix). He writes this in the context of his question that the field of psychology must answer to define its own boundaries: What are the limits of "me," the self? (Hillman, 1995, p. xviii). He says that Roszak's work in ecopsychology recognizes Jung's collective unconscious and Freud's id as implying "the world" (Hillman, 1995, p. xix). Hillman agrees with Roszak that the division between self and natural world is "arbitrary," and that the "natural material world" itself is part of the collective and unconscious self and a necessary part of psychological "harmony" (Hillman, 1995, p. xix). From these premises, he suggests that psychology's arbitrary isolation of the human psyche as a subject of study may render the impact of internal events on our lives as disproportionately large relative to the significance of other events in the natural world (Hillman, 1995). For example, the damage humans do to the natural environment may be as damaging to our minds as commonly recognized emotional abuses (Hillman, 1995).

Roszak (1995) notes other terms for the field include psychoecology, ecotherapy, global therapy, green therapy, Earth-centered therapy, reearthing, nature-based psychotherapy, shamanic counseling, and sylvan therapy. He acknowledges that this "new field" has its roots in aboriginal healing (often known as shamanism) which is grounded in "environmental reciprocity" (Roszak, 1995, p. 6). Related to this

ecopsychology, zoologist E. O. Wilson has put forth a hypothesis called "biophilia" that he describes as "the innately emotional affiliation of human beings to other living organisms" (as cited in Roszak, 1995, p. 4). Roszak (1995) notes that a "biophobia" was then suggested that may counter biophilia, but he points out that both are emotions of interest to ecopsychologists. These various efforts to demonstrate the mutual need of ecology and psychology for each other signify the importance of creating a new "context for defining sanity" (Roszak, 1995, p. 5).

In his earlier book, Roszak (1992) explores the current context in which we try to stay sane. He asks the reader to imagine a psychiatrist doing his utmost to cure patients with a range of severe disorders to little avail. He then expands the perspective to show that the psychiatrist's office is situated in a Nazi concentration camp. Roszak (1992) refers to the culture's obsession with profit, power, control, and practices that alienate people from the natural world and believes that, similar to the psychiatrist scene, "urban culture's psychotic habits" have been "solidly institutionalized and rationalized" (p. 220). He points out poignantly that this "crazed and crazy-making context" in which modern psychotherapy is practiced is never considered in any psychotherapy theories (Roszak, 1992, p. 220).

Roszak (1995) says ecology started as a study of many places life has taken hold and has expanded to encompass even the Earth and distant galaxies as part of an "ecological universe" (p. 8). The principles of ecopsychology are grounded in this expanded view in that life and mind have evolved from the long history of the universe (Roszak, 1992). The eighth principle is a logical extension which posits "a synergistic interplay between planetary and personal well-being"—a cooperative striving for

"salvation"—perhaps best expressed today as "the needs of the planet are the needs of the person, the rights of the person are the rights of the planet" (Roszak, 1992, p. 321).

Roszak does not take lightly the task of bridging contemporary mainstream psychological practices with traditional, Earth-based ways and healing. As he says, the alienation of modern peoples cannot "be easily remedied, say by spending a few hours in a sweat lodge" (Roszak, 1995, p. 7). He points to Freud for an understanding of how psychology and psychotherapy so clearly defined the self (ego) and external world as separate entities (Roszak, 1995). He quotes Freud: "Nature is eternally remote…She destroys us—coldly, cruelly, relentlessly," (as cited in Roszak, 1995, p. 11) and questions the usefulness in therapy of this conception of the world. However, Freud also felt that there had once been an "all-embracing, feeling…a more intimate bond between the ego and the world about it" (as cited in Roszak, 1995, p. 12). Ecopsychologists such as Shepard articulate this bond as "soft zones" of the self that mutually contact and influence the world (as cited in Roszak, 1995, p. 13).

Roszak (1995) says that, although the Gaia hypothesis controversially goes further, the more acceptable idea it contains of "ecological interdependence," or "the evolutionary heritage that bonds all living things genetically and behaviorally to the biosphere…is enough to reverse the scientific worldview and all psychology based upon it" (p. 14). He speculates that humans have an "ecological unconscious" that can be tapped to heal and re-establish harmony with the natural environment (Roszak, 1995, p. 14). Establishing the existence of a deep relationship between the human mind and the natural environment could lead to mental health and environmental policy changes akin to those based on the health dangers of chemical toxins (Roszak, 1995).

Ecopsychology, White Privilege, and Environmental Justice

Carl Anthony (1995) approaches ecopsychology from a sociological perspective informed by urban voices and a desire for environmental justice. He says ecopsychology, grounded partly in the movement for Deep Ecology, comes from a Eurocentric perspective that includes White privilege that limits its vision (Anthony, 1995). Healing and protecting the Earth requires a multicultural perspective and justice in the cities (Anthony, 1995). He points to a deep history of the ways people of color have been deracinated from or forced to flee lands that were their homes, especially through political and economic forces: small farmers getting evicted from their farms, Black people who have been threatened with violence, and Africans enslaved to toil the land who are now considered an urban group (Anthony, 1995). Anthony (1995) says Deep Ecology needs to deconstruct its White self and construct a multicultural self that includes the voices of people of color and "is in harmony with an ecological self" (p. 277). He also talks about practical problems such as rebuilding cities to use less energy and create less pollution and thereby become more livable, healthy, and just (Anthony, 1995). For him, our current environmental crisis and social justice issues go hand-in-hand: "Respect for cultural diversity, for social justice, and for multicultural leadership must be at the heart of restructuring our cities to protect and restore natural resources by meeting basic human needs" (Anthony, 1995, p. 277).

Ecofeminism in Psychology

Ecopsychology theorists from a variety of backgrounds have contributed to a growing understanding of where humans stand relative to the natural environment.

Ecopsychology draws from parts of ecofeminism and "Feminist Spirituality" in its re-evaluation of 'masculine' cultural traits that impel us to dominate nature (Roszak, 1992, p. 321). According to Gomes and Kanner (1995), ecofeminism's most important finding is that the degradation of the Earth and the domination of women are closely linked. Feminist psychology finds that men gain power through separation from others (Gomes & Kanner, 1995). When a man depends on a woman as they often do, he maintains his sense of autonomy through various forms of domination that incorporate the woman into his sense of self (Gomes & Kanner, 1995). In a similar way, humans (beginning with men) cannot be completely separate from the natural world on which they depend (Gomes & Kanner, 1995). They therefore attempt to dominate and control their natural environment to maintain the sense of autonomy (Gomes & Kanner, 1995).

Paul Shepard (1995) draws from ecofeminism as he examines humans' environmentally destructive behavior through the lens of cultural history. He finds the beginnings of human alienation from the natural environment in the development of agriculture five to ten thousand years ago (Shepard, 1995). He considers how child rearing has changed with cultural changes through history and has led to males' "fantasies of power and heroics" as well as gender role issues that ecofeminists and feminist psychologists have examined (Shepard, 1995, p. 21). In addition to a destructive capacity, Shepard (1995) also finds that humans have a natural capacity for harmony with the natural world.

Non-Western Approach: Shamanic Counseling

Leslie Gray, an Oneida/Seminole clinical psychologist, practices what she calls shamanic counseling. In an interview, she describes shamanism as "the use of altered states of consciousness for the purpose of healing" (Platek, 2009). According to Gray, anthropologists use the term s*hamanism* for similar healing techniques used by different traditional peoples (Platek, 2009). Shamanism makes use of contact with spirit helpers from various elements of the natural environment for healing, or restoring balance (Platek, 2009). Gray believes that combining the North American shamanism with Western psychology (transplanted from Europe), would yield a holistic system and "ecotherapeutic" model by integrating Western traditions with this continent's land and land-based culture (Platek, 2009, p. 7). The shamanic tradition reframes common "psychosomatic" illness as spiritual in nature and facilitates the body's natural healing abilities "with beliefs, attitudes, and connection to spirit" (Platek, 2009, p. 8). She submits that Western medicine recognizes the need for faith or hope in the healing process (Platek, 2009). She maintains that whereas Western psychology leaves the Earth out, in the Indigenous worldview the Earth is sacred, and therefore "nature's example" can yield "a model of mental health" (Platek, 2009, p. 9). Gray defers to individuals' own sense and knowledge of places and parts of nature that help them feel whole (Platek, 2009).

Specific Psychological Diagnoses and Nature

Chellis Glendinning has written about humans' "disconnection from the Earth as the 'original trauma'" (as cited in Roszak, 1995, p. 41) and the parallels between addiction

to substances and addiction to technology (Glendinning, 1995). Ralph Metzner (1995) has also examined the phenomenon of humans' tendency to disconnect from their habitat. To this end he considers possible 'diagnostic metaphors' relating humans and nature such as addiction, dissociation, autism, and amnesia (Metzner, 1995, p. 55). The next section shows how researchers and practitioners in medicine and public health are also implicating nature in human well being.

The Natural Environment in Medicine and Public Health

According to Richard Louv, who has examined the role of nature in the lives of children (2005), aspects of the natural environment such as gardens have been used deliberately to restore health for at least thousands of years. Chinese Taoists used gardens and greenhouses more than two thousand years ago (Louv, 2005). Advice on the health benefits of gardening later came from the 1699 book *English Gardner* and from American Revolution-era mental health physician Dr. Benjamin Rush (Louv, 2005). Horticultural therapy projects were conducted by the Quakers' Friends Hospital in the 1870s and by psychiatrist Carl Menninger at the Veterans Administration during World War II (Louv, 2005). More recently researchers in a variety of fields have proposed that exposure to natural environments has positive health effects (Frumkin, 2001).

Some of the literature on the health benefits of exposure to various domains of nature has been reviewed by Howard Frumkin in “Beyond Toxicity: Human Health and the Natural Environment” (2001). Frumkin (2001) points out that while the field of environmental health has learned much about how toxins to the environment also negatively impact human health, the benefits of the natural environment to human health

needs more exploration. He calls for a research agenda to address questions such as, “Can psychotherapy that utilizes contact with nature—known as ecopsychology—have an empirical basis?” (Frumkin, 2001, p. 238). He adds that such research will require unfamiliar variables such as “outcome variables that reflect health instead of disease” to be developed, defined, operationalized, and validated (Frumkin, 2001, p. 238).

Frumkin (2001) reports that there is much evidence linking animals with human health. Anderson, Reid, and Jennings found significant physiological benefits such as lower systolic blood pressure, cholesterol, and triglycerides in people who keep pets (The authors controlled for exercise levels and other potentially confounding variables) (as cited in Frumkin, 2001). Dog keepers, in particular, seem to benefit health-wise at greater levels (in the areas of heart attacks, number of doctors visits, and stress). Katcher, Segal, and Beck demonstrated that watching an aquarium helped people relax before surgery (as cited in Frumkin, 2001). Draper, Gerber, and Layng have documented that using animals for treating psychiatric illness has been well established (as cited in Frumkin, 2001).

Dr. Daphne Miller (2009), a family physician and an associate clinical professor at the University of California at San Francisco, reports that she and many doctors are prescribing "nature" and hiking to their patients. She says doctors across the United States are medicating patients with nature to prevent or treat a variety of ailments including heart disease, attention deficit disorder, diabetes, stroke, and obesity (Miller, 2009). Her prescriptions include specific distances on specific trails (Miller, 2009).

Environmentalism and Social Problems

Introduction

Why do people become "environmentalists?" Roszak (1995) expresses an emotional answer – what he suggests is a common feeling of being "trapped in an increasingly ecocidal urban, industrial society" and "alienation from the more-than-human world on which we depend" (p. 4). To understand further how the natural environment relates to social problems, it is helpful to know about the history and current state of environmentalism. As De Rosa (1998) critiques the environmental movement for its failure to connect environmental issues with social problems, numerous perspectives and movements largely outside the mainstream have been developing as responses to such critiques. Some of the responses include ecofeminism, environmental justice, ecopsychology, climate justice, bioregionalism, and relocalization.

Highlights from the History of Environmentalism and Social Problems

Environmentalism comprises a vast grouping of issues, activities, organizations, and efforts generally related to the natural elements and systems of the Earth. This movement aspires to preserve, protect, restore, and connect with the natural environment both for its own good and the well-being of humans. The range of social problems affected by or intertwined with "environmental" issues is just as vast. A few moments and issues in the history of environmentalism in the United States are highlighted here, and out of practicality, the scope of this chapter will further narrow the issues discussed to make a comparison to those laid out in the previous chapter.

Although the environmental movement is often regarded to be a recent development, related activities and values extend thousands of years back in human history (Kovarik, n.d.). A "playground movement" in the 1870s promoted natural areas rather than built playgrounds and sports fields for people's health (Louv, 2005). John Muir and President Teddy Roosevelt were responsible for the first federal wildlife refuge in 1903 (Shaw, 2006). In 1907 the word "conservation" was introduced to describe the sustainable use of resources (Shaw, 2006).

From the early 1950s, biologist Barry Commoner investigated and exposed the environmental effects of radioactive fallout from nuclear weapon tests and the implications for humans. His work was part of the beginning of the environmental movement and led to the 1963 nuclear test-ban treaty. His book, *The Closing Circle* (1971), further exposed how technology was damaging the natural environment. In it he defines ecology as "The science that studies [interspecies] relationships and the processes linking each living thing to the physical and chemical environment" (Commoner, 1971). Acknowledging that ecology is a young science without firmly established laws, he laid out four "laws of ecology": 1) "everything is connected to everything else," 2) "everything must go somewhere," 3) "nature knows best," and 4) "there's no such thing as a free lunch" (Commoner, 1971). Through these laws he explains natural processes such as feedback cycles, the recycling of all waste in natural systems as another organism's food, the likelihood that major human-made changes will damage natural systems, and the cost to be paid when humans' extract from the global ecosystem (Commoner, 1971).

In 1962, Rachel Carson's *Silent Spring* drew national attention to the pernicious effects of pesticides to the natural environment and to people. Her book led to the

banning of DDT as well as laws to protect air, land, and water. In the mid-1970s biochemist James Lovelock and microbiologist Lynn Margulis created the controversial Gaia hypothesis. They proposed that the Earth's natural systems actively self-regulate to maintain a homeostasis that allows life to continue (Roszak, 1995).

Ecopsychologists came together in 1990 at a Harvard-hosted conference called "Psychology as if the Whole Earth Mattered." Their dialogue led to a conclusion that including the natural world as part of the self would awaken people to the co-occurrence of destruction of Earth and self (Roszak, 1995). The next year, the People of Color Environmental Leadership Summit developed seventeen Principles of Environmental Justice (People of Color Environmental Leadership Summit, 1991) (see Appendix A).

Social Implications in Environmentalism Philosophy and Political Thought

From within the Australian environmental movement, De Rosa (1998) asks a question opposite, or complementary, to this thesis: How should the environmental movement consider social problems in its analysis and action. She argues that actions toward preserving the natural environment should "have deep and lasting meaning in our 'social' lives" (De Rosa, 1998, p. 21). She considers, in essence, the environmental movement's role in social work, that is, in considering marginalized people and social justice. According to De Rosa (1998), the Australian environmental movement in general has excluded social issues and focuses on preservation. From an examination of issues addressed by larger environmental organizations such as the Sierra Club and Natural Resources Defense Council, this focus on preservation seems similar in the United States, although they are addressing energy and pollution issues that affect

everyone. 'Preservationism' or "a desire to protect certain environments," is the main form of Australian environmentalism (De Rosa, 1998, p. 22). She relates that major social/environmental advocates on this issue consider human rights a precondition for environmental change (she mentions Murray Bookchin (1979, and others works), Chiah Heller (1990), David Pepper (1993), and Joe Weston (1986)).

Weston also notes how problems seen as environmental are not seen as social ones too (as cited in De Rosa, 1998). Weston says, "The victim, as the phrase, 'ecological crisis' suggests, is seen as being 'nature' – which relegates those suffering poverty, despair and hunger throughout the world to the periphery of [the greens'] concern" (as cited in De Rosa, 1998, p. 22). Eckersley and Doyle point out that mainstream environmentalism tends to advocate for protection of more appealing geographical areas and neglects to consider areas more important to people, especially where vulnerable populations such as urban and rural poor live (as cited in De Rosa, 1998). According to De Rosa (1998) sociocultural issues do not play much if any role in the preservationist analysis of environmental problems. Rainbow argues that the environmental movement in Australia has not taken into consideration urban areas—where most people live (as cited in De Rosa, 1998). Citing Caldicott, Eckersley maintains that arguments for preservation tend not to take into account cultural values and practices of indigenous peoples (as cited in De Rosa, 1998). Doyle pointed out that it is largely middle class environmentalists who emphasize nature; this population has less personal need to consider issues of poverty (as cited in De Rosa, 1998). Tighe & Taplin report that one Australian environmental organization's survey of members concerns found that social issues that might be related

to the environment, such as poverty and inequality, were not mentioned (as cited in De Rosa, 1998).

As this paper considers the scope of what *environment* means in social work, De Rosa (1998) has challenged the environmental movement's definition of environment as just the "natural world" without including humans as part of it (p. 23). She raises this issue "since environmental and social crises are intimately linked" (De Rosa, 1998, p. 23). She credits the environmental movement for its emphasis on nonhuman rights as opposed to human rights since people have generally put humans first. Her critique, however, argues for a balance, "to synthesize approaches to human and non-human nature" (p. 23). De Rosa (1998) favors the view of a "dialectic between society and ecology" (p. 23) in which each shapes the other and "nature is viewed as being socially mediated, and," as Martel says, "as having real and independent objective causal powers of its own" (as cited in De Rosa, 1998, p. 24). De Rosa (1998) points to political green parties that have formed in various countries as a way in which social and environmental issues are brought together. These parties tend to place importance on and synthesize social and ecological issues.

Brown (1995) also makes the natural environment-social problem connection when he argues that the continuation of recent trends relating to natural environment degradation such as deforestation, loss of topsoil, species extinction, greenhouse gas production, and population growth will result in the destruction of the natural systems humans depend on. He says the stage is set for an environmental revolution that he compares to the agricultural and industrial revolutions in terms of social and economic impact (Brown, 1995). However, he says the environmental revolutions will reverse

some of those changes that were brought on by the previous revolutions such as fossil fuel use and population growth (Brown, 1995). Brown (1995) argues that, to succeed, the environmental revolution must happen faster and in a shorter time frame than the former revolutions due to what is at stake.

Some Current Environmental Movements Addressing Social Issues

According to Sale, bioregionalism dissolves current social structures and redesigns human communities in line with nature and in ways that sustain the natural environment (as cited in Hoff, 1994; Gomes & Kanner, 1995). According to Sale the bioregional model is grounded in "conservation and local self-sufficiency; community and decentralized political structures; and cultural pluralism and cooperation" (Hoff's words) (as cited in Hoff, 1994, p. 16). It allows the land to inform the design and culture of the community (Gomes & Kanner, 1995). Beyond creating environmentally sustainable practices, practicing bioregionalism "involves a change in our sense of identity, so that we allow our surroundings to grow *into* us, to let the land reclaim us" (Gomes & Kanner, 1995, p. 121).

According to ActionPA.org (n.d.), environmental justice is a response to environmental racism, the disproportionate burden of environmental hazards on people of color. Among other things, The Principles of Environmental Justice (PCELS, 1991) call for an end to production of all toxins and waste hazardous to humans and the natural environment. ActionPA.org (n.d.) charges that the government's intent of "fair treatment and meaningful involvement" of people when it comes to human-created environmental hazards falls short of the goal of environmental justice to end hazardous waste

(ActionPA.org, n.d.). ActionPA.org (n.d.) refers to the government's efforts as "environmental equity," which would distribute environmental harms equally among people, as opposed to the environmental justice movement's goal to abolish environmental harms. The Principles (PCELS, 1991) also call for an emphasis in education on social and environmental issues that incorporates experiences and cultural perspectives of people of color.

In the growing movement to confront climate change and its potentially devastating consequences to humans and other species, some groups are focusing on the need for "climate justice" (Environmental Justice Leadership Forum on Climate Change, 2009). In 2009, environmental justice leaders created the Principles of Climate Justice (EJLFCC, 2009) (see Appendix B). These Principles call for federal policies to reduce greenhouse gas emissions drastically in the coming decades in a way that helps and does not disproportionately hurt vulnerable populations (EJLFCC, 2009). Organizations such as the National Association for the Advancement of Colored People (NAACP) and Women of Color United (WOCU) are raising awareness about the disproportionate impact of climate change and natural disasters on women, people of color, and poor people (Patterson, 2009).

Some urban environmental activists have begun to explore ways to bring wilderness into cities. Out of practical necessity and for psychological biophilia needs, a "zoopolis" movement has begun that incorporates natural environments through urban planning, architectural design, and public education (Louv, 2005, p. 240). Urban theory tends to neglect nonhuman species, yet some ecologists and ethicists are promoting the idea that cities can and should incorporate the natural environment (Louv, 2005). Urban

construction tends to destroy natural environments and render them sterile (Louv, 2005). Louv (2005) says that ecological theory requires urban areas to go beyond parks and preserves to include "natural corridors for movement and genetic diversity" (p. 241). He argues that transforming our urban areas in ways that incorporate wilderness can affect the "urban psyche" and help fill the nature deficit that children and people in general are experiencing (p. 241).

Another effort, sometimes known as relocalization, has sprung up in the last decade as an integrated response to social-natural environment problems. The primary model and movement, known as Transition Towns or the Transition movement, was started in England by Rob Hopkins, an ecological design teacher who wrote *The Transition Handbook* (Mooalem, 2009). The model's purpose is to organize communities in "building resiliency," Hopkins says, in the face of rising energy prices, climate change, and economic instability (as cited in Mooalem, 2009, p. 1). According to Hopkins, the process involves "unleash[ing] the collective genius of a community" to create systems of self-sufficiency and an "Energy Descent Action Plan" unique to the community that allows it to reduce its energy needs and use (as cited in Mooalem, 2009, p. 3). The Transition model aims to draw people from many perspectives and backgrounds in the community through its focus on a richer, more joyful vision of what the community could be (Mooalem, 2009).

Summary

There seems to be little evidence that psychology has incorporated the natural environment into its major theories of mind. The exceptions noted here are object

relations and relational theory. In the area of child development there are signs of a growing concern for and research into the role of the natural environment, especially as it relates to ADHD. A movement of people in environmentalism, child development, and education seems to be coalescing around the importance of getting children outdoors. Psychology research has found that exposure to natural environments plays a positive roll in human's cognitive and emotional functioning. Evidence showed decreased stress and blood pressure and buffering of stressful events, faster recovery after surgery, and decreased mental fatigue and improved concentration. Wilderness experiences are shown to have numerous broad benefits to various populations, including therapeutic outcomes for adolescents and others. Ecopsychology is a newer field that explores the relationship between human psychology and the nonhuman natural world. Ecopsychologists recognize the inherent evolved connection of humans to the Earth and that connection's importance in health and healing of people and the Earth. Identifying an ecological unconscious as the core of the human mind, ecopsychology has drawn from and revised important foundations of psychological theory such as Jung's collective unconscious and Freud's id. Through ecofeminism and shamanism, psychology has "re-discovered" older traditions that inform understanding of the natural environment-psychology connection. Environmental justice advocates also challenge these newer developments to include perspectives of people of color. Outside of psychology, environmental medicine has found evidence that exposure to nature (including pet-keeping) can improve problems with blood pressure, cholesterol, triglycerides, stress, and heart disease. Doctors also prescribe contact with nature for people with diabetes, stroke, and obesity. In the area of environmentalism, the mainstream movement often seems to exclude humans from its

definition of environment. However, a long history of social-natural environmental analysis and activism is being strengthened as recognition of the dire natural and social consequence of climate change increases. Various responses to current social-natural environmental problems are developing that attempt to address concerns for the human and nonhuman natural world by recognizing their integration and including multiple perspectives.

CHAPTER V

THE NATURAL ENVIRONMENT'S RELEVANCE TO SOCIAL WORK

Introduction

Overview

This final discussion chapter serves the purpose of drawing together knowledge and perspectives examined in the previous chapters to generate a new understanding. It will compare and contrast the consideration of the natural environment in social work, psychology, medicine, and environmentalism to finish answering the thesis' first question: How has the field of social work considered the natural environment in its approach to social problems compared to other fields that consider the natural environment? In addition, I will use these comparisons to attempt to answer the thesis' second question: In analyzing and conceiving solutions to social problems, does social work give the natural environment adequate attention in carrying out its mission.

The analysis begins with a comparison of the different fields' perspectives on the natural environment, beginning with a brief comparison of the historical roots and evolution of their approaches. The section then generally moves from micro to macro topics. I compare different theories and approaches regarding individual psychology, well being, and ideas about self and identity followed by a look at how the other fields can inform social work's therapeutic interventions and practice. The final sub-section comparing these fields broadens to consider the relevance of ecological principles to social work.

The chapter then shifts to an examination of critical perspectives that have come from within social work regarding the natural environment. This begins generally and proceeds with a more specific focus on profession, education, and policy with special attention to the important principle of environmental justice. In the final section of conclusions and discussion, I argue the importance of the natural environment to social work, how social work and the environmental movement have complementary and mutual interests, and new and future challenges for social work. The paper closes with recommendations and questions for social workers to consider and final thoughts.

Scientific vs. "Non-scientific" Perspectives

It is worth mentioning the difficulty of comparing various perspectives and arguments in a theoretical thesis such as this. Given the mix of backgrounds, perspectives, and modes of argument among those grounded in "hard" science, social theory, policy, philosophy, and values discussions (i.e. "paradigm change talk"), comparing different perspectives can be difficult. It can be difficult to fully hold and compare the various perspectives when some may be based on empirical research and others on greatly differing sets of values and assumptions about how we should live in relation to the Earth. However, social work practice itself continues to use non-evidence-based interventions and techniques, and even in fields that value one epistemology over another, important and relevant perspectives and information can come from the minority perspective. Commoner (1971) commented on this issue in *The Closing Circle*:

> The preceding pages provide a view of the web of life on the earth. An effort has been made to develop this view from available facts, through logical relations,

> into a set of comprehensive generalizations. In other words, the effort has been scientific.
>
> Nevertheless, it is difficult to ignore the embarrassing fact that the final generalizations which emerge from all this—the four laws of ecology—are ideas that have been widely held by many people without any scientific analysis or professional authorization. (p. 23)

Commoner's inductive process of producing commonly sensed generalizations from facts may feel embarrassing, but it also confirms the value of non-scientific forms of knowledge and reasoning.

Roszak (1995) also alludes to this issue when he says that the biophilia hypothesis has led to research regarded as scientific in order to examine the alienation from the natural world that people feel. He also says that Freud's and other 20th century scientists' decision to use 'hard' science to study the human mind has left a legacy based on an out of date scientific paradigm. Earlier, Roszak (1992) spoke to this issue in his seminal text on ecopsychology. He describes how for two hundred years science and rationalism have worked to keep the universe separate from the human soul and psyche (Roszak, 1992). In his attempt to reconnect them, he recognizes the "scientific purists who object to seeing their intellectual property set upon for such purposes by amateurs, even respectful ones. But great scientific ideas have rarely been allowed to preserve their virginal status for long" (Roszak, 1992, p. 16-17). Commoner's observation of using science to discover things already known and Roszak's insight into the impact of science on the human/nature relationship demonstrate how appropriate an open, inclusive epistemology is for investigating the natural environment in social work.

Comparing and Contrasting the Evolution of Ideas about the Natural World: Social Work, Psychology, Environmentalism, and Medicine

Historical Development of Approaches to the Natural Environment

Despite recognition by some early social workers of the deleterious effects on people of environmental conditions in the growing cities, social work seems to have paid little attention to such issues during its history. With the majority of Americans living in cities, or built environments, urban life has become the norm and therefore the context for much of what social workers do. Perhaps it has become so normal that even social workers—with our training to see the context of a person's life, strengths, and problems—have lost sight of the traditional rural community context in which a majority of people functioned little more than a century ago. This seems, in a way, reasonable given the powerful economic, technological, and political forces that gave rise to the modern industrial economy. So what is the role of context, in the present case of the natural environment, and of its importance to social work?

Although history is not a large focus of this investigation, how are the historical aspects discussed in the "Other Fields" chapter relevant to social work? A few historical points are worth noting before moving on to current discussions. Louv's discussion of the decrease in American families' direct experience with agricultural activities and its potential impact on child development—a decrease in opportunities for unstructured activity in nature—can be taken into account by social work and may indicate a need to address current deficiencies in child development.

Psychology, historically, has focused much on the human brain and mind and their capacities. It is largely psychology's more recent research on exposure to the natural

environment and the more theoretical and conceptual work of ecopsychology from which social work might gain insight into the relevance of the natural environment. From the brief look in Chapter IV at the history of environmentalism, it was not until the 1960s that a modern environmental movement coalesced and began to have a societal impact. By that point it seems that social work had become largely focused on individuals and families, although systems perspectives and community and policy work were growing. Overall, as will be discussed further, it does not seem that social work has paid close attention to the potential impact of natural environment changes on individuals and communities despite growing evidence of such effects.

Theories of Mind and Approaches to Psychosocial Well-being

Although some of the earliest social workers were concerned about how general environmental conditions impacted people, modern social work theorists as a whole do not appear to include the natural environment as a significant factor in human well-being. Gitterman and Germain's (2008) life model, a person-in-environment perspective first put forth in 1980, has been one attempt to include the natural environment in understanding human well-being. While the field of social work appears to have incorporated the ecological metaphor and the general systems perspective that Gitterman and Germain (2008) promoted, for example the use of the biopsychosocial assessment, the field does not seem to have integrated the natural environment itself as relevant to human well-being in the way the authors' proposed. The field of ecopsychology on the other hand holds as a premise the natural environment's inherent relevance to human well-being. Although Gitterman and Germain (2008) find the person-natural environment

relationship to be severely disrupted in modern life, their suggestions for practice seem like short-term interventions rather than the longer-term system and value changing work that Coates (2003), ecopsychologists, and others believe is necessary.

Among the theories of mind, social work has paid almost no apparent attention to the natural environment in psychodynamic theory. Germain's (1983) mention of Searles' work that compared forms of relatedness to the natural world with relatedness to other people was one of only a couple for this paper. It seems that part of psychodynamic theory's grounding was an idea of nature that must be fought against: as Roszak (1995) quoted Freud, "Nature…destroys us—coldly, cruelly, relentlessly" (p. 11). At the same time, ecopsychologist and Jungian analyst Hillman (1995) feels that ideas such as the collective unconscious and the id can be understood as conceptualizations of "the world" (p. xix). From psychology, Barrows (1995) suggested that object relations could be expanded to include relatedness to the natural environment. She describes Winnicott's transitional phenomena as "essentially the investment of subjective meaning in objective phenomena, a shadowy area of experience where there is neither me nor not-me, but rather a dynamic interpenetration between the self and something in the world" (Barrows, 1995, p. 106). There is potential for further exploration of the usefulness of her idea, especially as she suggests with children. What mental health outcomes might result from a comparison of children's time spent in nature versus time spent with video and social connection technology? Some might argue it's a stretch, but Barrow's interpretation suggests to me that Sullivan's relational idea of a mind formed by and made of our interactions with others (as cited in Mitchell & Black, 1995) may be an opening to consider the influence of other types of interactions such as those with our natural

environment. From Gomes and Kanner's (1995) discussion of relational theory, perhaps the most clearly useful idea is how hyperindividuality can lead to domination and destruction of relations—with people or nature—and how this can damage the individual in turn. How might improving people's relation to their natural environments—to practice an ethic of caring instead of domination or disregard—impact their own mental health? Louv's (2005) extensive examination of children and nature seems to lend support for exploring the usefulness of relatedness to the natural environment in various psychodynamic theories and practice.

The Natural Environment in Conceptualizations of Self and Identity

Inquiry into self and identity and their relation to the natural environment seem to have come largely from ecopsychology, with Besthorn (2002) providing one of social work's stronger recent contributions. Ecopsychologists such as Roszak (1995), Hillman (1995), Barrows (1995), and Shepard (1995) have suggested that the self is not limited to the mind or by our physical bodies. Hillman (1995) describes the boundary between self and the natural world as "arbitrary" (p. xix). Shepard offers one concept of the self as having "soft zones" that interface with the world (as cited in Roszak, 1995, p. 13). Barrows (1995) compares the notion of a permeable ecological self to an object relating self to consider the role the natural environment plays in the psychological growth and development of children. Gomes and Kanner (1995) echo this idea that our sense of self and identity may even be said to grow and change not just through expansion of and change in our relationships to people, but to the natural world as well.

Social work scholar Besthorn's (2002) exploration and description of the ecological self reinforce the work of the ecopsychologists and expand the implications for the social work domain. The emergence of an ecological identity implies a shift toward an ecocentric worldview (Besthorn, 2002). This new self suggests a larger world and new ways to practice for social work including ecological responsibilities, the incorporation of nature in practice, and "ecological indicators of success" for society and social welfare (Besthorn, 2002, p. 62). Some of these scholars' understanding of a more limitless ecological self helps make sense of the strong influence the world outside our bodies has on our feeling, thinking, personality, and behavior. It also suggests both a need for contact with that outside world and the potential for healing through contact with it, especially perhaps with the natural world. Their work suggests questions such as: What is the nature of Jung's collective unconscious in which Hillman (1995) implicates the natural world? One of the most intriguing areas for further exploration is Hillman's (1995) suggestion that events in the natural world may have a larger impact on us—in psychodynamic terms—than we have imagined or given them credit for.

Therapeutic Interventions and Practice: How Environmental Psychology and Medicine Can Inform Social Work

Although social work assessment and intervention presume to consider the person and his or her environment, the field has been critiqued from within for the narrowness of its de facto definition of environment. Hoff (1994), for example, argues that the social work profession has not used the ecological framework to incorporate the physical environment but only to move from intrapsychic models to more socially oriented

models. According to Germain (1983), different environments contain nutritive and nonnutritive elements for humans, but our knowledge of such elements and how they function in their relation to humans is poor. The experiences and findings from other fields seem to offer a broader view of environment and have much to offer social work. In the decades since Germain's (1983) work, environmental psychology and medicine have begun to understand more about what in nature is psychologically 'nutritive' for people.

Louv's (2005) review of research on nature's role in child development suggests that the ecopsychology theoretical scholars exploring these issues are on the right track in terms of the importance of the role of nature in people's lives, and perhaps especially for children. While it appears there is work to be done to draw more firm conclusions, the emerging data reported by Kellert (n.d., p. 2) on nature's role in development and the knowledge provided by Louv (2005) suggest that social workers who work with children, families, and schools consider the part nature is playing for children and in these contexts. The information presented in Chapter IV suggests that contact with green nature can be helpful for children with symptoms of ADHD. It also suggests that exposure to and play in nature can be of general benefit to children's physical and emotional development and may prevent or reduce stress, symptoms of depression, and obesity. Contact with and play in nature can and should be a regular part of social workers' assessments of children.

The many benefits of nature contact reviewed by Gatersleben (2008) are of value to social work, including stress reduction, recovery from surgery, affective and cognitive restoration and self-regulation, attention recovery, and improved cognition and stress

buffering for children. The documented benefits of group wilderness therapy programs reviewed by Louv (2005) and discussed by Frumkin (2001) are also applicable to a range of issues and populations addressed by social workers. In addition, the knowledge of health benefits of contact with animals such as keeping and caring for dogs (Frumkin, 2001) can be utilized especially by social workers in medical facilities. As we have seen, Risley-Curtiss (2010) argues for social workers to include questions about companion animals and animal cruelty. Just as physicians are prescribing activities in nature to their patients for a range of problems (Miller, 2009), so too could social workers play an important role in creating opportunities for clients, communities, and society to spend more time close to nature. As Louv (2005) reports, one way to do this is to design nature into our urban areas and communities as the zoopolis movement is doing. As Wolf (2000) has challenged social work to consider how we treat animals and how this relates to other important social work issues, ethicists and ecologists in the zoopolis movement have pointed out the neglect of nonhuman species in urban areas. These areas of common interest are examples of how new dialogue between social workers and people working on natural environment issues in other fields has the potential to create new ideas and solutions to both social and environmental problems.

Frumkin (2001), too, advocates for continued research on the effects of contact with nature in new innovative ways that cross field boundaries and in which social work could expand participation. In wilderness therapy, for example, Levine (1994) reports controversy over its perceived rigor and the benefit of deliberately stressing survivors of sexual abuse. Given the evidence for nature's effect on stress, cognition, and affective regulation, the natural environment context for these activities may compensate for their

stress and rigor. A useful study might examine the role of the natural environment as a contextual factor in the stress of wilderness therapy challenge activities. A study could compare a group participating in such activities in a natural environment to a group doing them in built or urban environment facilities such as indoor climbing gyms, indoor rappels, and urban area ropes courses.

As for social work assessments, I have reviewed Shaw's (2006) model that adapts Bronfenbrenner's Ecological Systems Theory to incorporate the natural environment. It represents a large step toward a systems perspective that could more comprehensively assess the role—benefits and problems—of the whole environment for individuals or groups. It includes principles of environmental justice and could be a powerful tool for the creation of interventions that include the natural environment. However, the model still seems to place the client at the center to be served by the natural environment rather than understanding the client as a part of a whole system in which the natural environment has needs as well.

Nature and Ecological Principles in Modern Social Work Approaches

Incorporating ecological principles. Three approaches discussed in the social work chapter were structural theory, strengths-based approach, and empowerment approach, none of which seem to have incorporated the natural environment. The analyses used by all three, however, could include the natural environment. Environmental justice specifically could be included in the structural approach's prioritization of social justice. The strengths perspective already considers a person's environmental resources in general; this could clearly be expanded. However

practitioners need to be aware of the negative impact on people of degradation of the natural environment, as well as the reduced opportunities for exposure to the natural world and its benefits in many oppressed people's living environments. The empowerment approach's analysis of power and collective work to overcome oppression could also include access to land resources or go further to embed itself within an ecocentric perspective such as ecofeminism or Deep Ecology. Anthony's (1995) multicultural approach or an anti-racism analysis could also be integrated into these to take an environmental justice stance. In this way the approaches could address the oppression and lack of power people of color have experienced specifically relating to deracination from the land, land-based communities, and sources of survival and power such as property rights.

Among social workers, Gitterman and Germain (2008) also seem to be relatively alone in their inclusion of deep ecology and ecofeminism in a *comprehensive* social work model. Coates' (2003) new paradigm and Besthorn's (2002) explication of the ecological self also include or infer these perspectives. Ecopsychology has used Deep Ecology and ecofeminism explicitly as the grounds for developing new approaches to human health, well-being, and community. Ecofeminism seems a natural fit for informing social work as well given the common analyses of patriarchal systems of power, values of women's and all people's liberation and equality, and the importance of relationships. The Deep Ecology principles relating to interdependence, natural feedback loops, and ecological systems' cyclical nature that Gitterman and Germain (2008) incorporate can help social work gain new insights into relationships among people and between people and their environments.

To look more closely at one of these principles from Deep Ecology, how have human relations to nature's feedback loops been affected by modernity, that is, the structures, practices, and systems of industrial civilization? When people acquire materials directly from their natural surroundings such as firewood for energy and non-domesticated animals for food, these people:environment transactions (The colon, again, is used to refer to "exchanges" and "fit" "to repair the conceptually fractured relationship suggested by the hyphen in person-environment" (Gitterman & Germain, 2008, p. 1) are relatively direct and immediate: the impact on feedback loops takes little time – people recognize the impact themselves relatively soon.

On the other hand, when people heat their house or drive a car with power from fossil fuels, a limited resource, the feedback loop takes longer to return information on the status of the resource due to multiple factors such as the layers of middlemen, the physical distances involved, and the perception of an unlimited resource. Therefore, people live with less awareness of how their use has impacted the resource and other parts of the natural environment and, therefore, how it will eventually impact them. Understanding humans' relation to nature's feedback loops could help community and policy social work in their analyses and interventions in facilitating healthy, resilient community development.

Nature and culture. Another potential area for exploration is the mutual influence between culture and environment that Germain (1983) mentions. Since culture is a psychodynamic factor (Berzoff et al., 2008), the natural environment-culture interaction may be worthy of increased research or at least attention from practitioners for its cultural competence value. This raises questions not explored here about social workers'

knowledge and work with natural environment-related cultural differences in the United States. Furthermore, Germain's (1983) ideas about how culture determines how people relate to the natural environment, such as respecting, subjugating, or submitting to, have important implications for social workers interested in transforming humans' relationship with the natural world. De Rosa (1998) speaks to these issues as well in her critique of environmentalism's neglect of environmental issues' interdependence with sociocultural issues and the lack of integration of marginalized populations such as urban poor and people of color. Ecopsycholgist Carl Anthony (1995) adds to the argument for the environmental movement to create a multicultural perspective. With its emphasis on marginalized populations and cultural competence, social work stands in a position to be part of this dialogue and work to integrate sociocultural and environmental issues.

Impetus and paths for social work's evolution. Social work does not seem to practice the person-in-environment and ecological systems approaches in a way that actually challenges our problems with our physical, natural, and social environment conditions. Ecopsychology asks, among many questions, how can we expect to heal people without also healing the Earth, and how can we heal the Earth without finding our proper place in it? Roszak (1992) proposes the idea that the industrial city serves as "a pathological effort to distance us from close contact with the natural continuum from which we evolve" (p. 220). And as he points out, "psychotherapeutic rites are practiced in obedience to theories that include not a single critical reflection on that context" (Roszak, 1992, p. 220).

Discussing ecopsychology's intents, Brown (1995) says, "seeking to heal the soul without reference to the ecological system of which we are an integral part is a form of

self-destructive blindness" (p. xvi). To understand one must ask, what does it mean to heal the soul? Clearly this is not a simple question. But I want to consider what it means in the context of social work in modern times. Brown (1995) is not simply referring to healing mental illness, but to "redefin[ing] sanity within an environmental context" (p. xvi). Some ecopsychologists might argue that most "mentally healthy" Americans have an "ecologically damaged" soul – that despite apparent mental stability, our behaviors are symptomatic of an ecological and "spiritual" disorder from the perspective of a model of health grounded in our historic, evolved relationship with the natural environment. As a social worker might interpret mental illness such as posttraumatic stress disorder as a natural survival response to a very unnatural or threatening situation, so an ecopsychologist might see apparently functional civilized behavior as a natural survival response to life in an ecologically damaged environment where the individual has learned to ignore and adapt to environmental destruction around her. Furthermore, the ecopsychologist might see that civilized behavior as akin to the functioning of ego defenses and as a sign of a need for healing both the person and the environment.

This paper has looked at scholarship—from social work and other fields—that does take into account the context Roszak refers to above and that questions the healthfulness of the context humans have created for themselves. The concept of good fit—the person:environment transactional process that results in benefits for both organism and its environment (Germain, 1983)—finds an application in current models and movements of living originating in environmentalism, such as bioregionalism and relocalization. The vision of these movements—informed by nature and ecological principles such as those from permaculture—relates closely to Coates's (2003) new

paradigm for social work that is grounded in arguments for humans' re-positioning themselves in their relationship to the rest of nature. They are not movements for new clinical theory or models; however, the revolutionary changes they espouse would require—and the movements could benefit from—changes in social work practice that would realign the field itself in its relationship with the Earth.

Modern Criticism from within Social Work Regarding Consideration of the Natural Environment

This section summarizes some of the criticism that has come from within the field of social work and social welfare about neglect of the natural environment. Various authors and scholars have questioned the values and practice of social work for its lack of consideration of the natural environment. The NASW has created a policy statement on the environment that will be highlighted. Finally, substantial attention is given to Canadian social work scholar John Coates's analysis of the field and his new ecocentric paradigm grounded in humans' interdependence with the rest of the natural world.

General Criticism

A few social welfare scholars who have written about the natural environment's role in social work, often, it seems, critique the profession for its lack of attention to the natural environment (see Shaw, 2006). According to Shaw (2006), in 1990, "prominent environmental justice advocate and scholar" Robert Bullard "called for 'a social work approach' to environmental equity" since social work has a history of working with vulnerable populations to overcome inequities (p. 28). McNutt and Hoff (1994) believe

that the environmental crisis demands a response from social welfare and social work in policy, theory, education, and practice (p. 297). Rogge and Cox espouse a broader use of social work's person-in-environment than is typical, to include the natural environment (as cited in Shaw, 2006). According to Matthies and Narhi, the *eco-social* approach of European social work is broad in this way (as cited in Shaw, 2006). Hoff, who views humans and physical and social environments as a single system, says the ecological model of social work practice created by Germain and Gitterman (life model) should be expanded to respond to environmental issues (as cited in Shaw, 2006). Besthorn used the term *person-with-environment* perspective to incorporate social and physical environments and the impact of environmental degradation (as cited in Shaw, 2006, p. 30). As of 1993, Berger and Kelly listed what they saw as the three greatest ways human activity is mutually damaging the natural environment and humans: population growth, toxic synthetic chemicals, and changes to the planet surface (e.g. habitat destruction such as dams and deforestation) (as cited in Shaw, 2006). Berger and Kelly discuss the geographic displacement that affects much of the human population and say that social workers can play a role in helping society address root causes (as cited in Shaw, 2006). Berger and Kelly say social work needs an ecological policy before the field can have a meaningful impact on these issues (as cited in Shaw, 2006).

Coates (2003) review (which relies largely on Besthorn's (1997) review of social work history) of social work's consideration of the "larger, nonhuman environment" concludes that it "has not entered the mainstream of social work thought and practice" (p. 44). According to Besthorn, while Richmond and Addams initiated incorporation of the physical environment, their "emphasis on the social environment laid the ground work for

the 'almost exclusive neglect of the natural elements of environment and failure to develop a more expansive sense of person in relationship to it' (Besthorn, 1997, p. 92)" (as cited in Coates, 2003, p. 40). On social work's neglect of "larger environmental factors," Coates (2003) cites numerous "radical and feminist critiques" from the 1970s onward including Bailey and Brake, 1975; Bricker-Jenkins, Hooyman, & Gottleib, 1991; Carniol, 1984; Dominelli & McLeod, 1989; Galper, 1975, 1980; Moreau, 1979; and Mullaly, 1997 (p. 44). According to Hoff and McNutt, "all forms of social work practice are affected by environmental degradation" (as cited in NASW, 2009, p. 122).

A few more recent social work scholars and practitioners have attempted to impel the field toward an environmental consciousness and ethic with their critiques. In his apparently comprehensive review of the literature, Coates (2003) cites Hoff and McNutt (1994), Garvin and Tropman (1998), and Ife (1997) as a few social work scholars who have developed critical perspectives on social work that include the natural environment. Otherwise, Coates (2003) finds that social work remains anthropocentric. According to Coates (2003), Garvin and Tropman encourage an environmental ethic in social workers, but from an anthropocentric point of view that elevates human needs. Coates (2003) points out that their consideration of the physical environment neglects to incorporate the values and beliefs he sees as necessary to protect the natural environment. Nonetheless, he credits them for recognizing that social work has an important role to play protecting people and the Earth (Coates, 2003). According to Coates (2003), Ife makes some similar points to his own including humans' disconnection from nonhuman nature, "social work's embeddedness in modernism" (Coates, 2003, p. 55), and the consequences of social word's neglect of the environmental crisis.

In an edited book on indigenous social work, Weaver (2008) discusses influences of the natural environment for Indigenous People ('people of the land') on both spirituality and lifestyle (p. 75). She observes the parallel between the importance of the natural environment to Indigenous Peoples and social work systems perspectives such as person-in-environment, which derives largely from developmental theory (Weaver, 2008). Despite the parallel, Weaver (2008) sees social work interventions as predominantly psychodynamic and individualistic. Indigenous perspectives of the environment, on the other hand, often extend beyond the social to include nonhuman entities and systems (Weaver, 2008). The importance of the natural environment for Indigenous Peoples in the United States leads them to a sense of responsibility for taking care of it (Weaver, 2008).

In their exploration of indigenous social work, Gray, Coates, and Hetherington (2008) refer to "ecosocial work" as a new perspective and analysis grounded in humans' interconnectedness with nonhuman nature which shifts the center from exclusively human toward the entire natural world:

> The literature on spirituality and environmental social work – aka 'green' or 'ecosocial work' – articulates and privileges local and Indigenous cultures, to use anti-oppressive terminology, but more importantly it is a countermovement to the universalizing movement in social work and beyond and questions the theory of globalization….Ecosocial work draws on a deep ecological awareness of our relationship with nature and makes us acutely aware of the importance of protecting and sustaining the natural environment in everyone's interests. It needs to be distinguished from ecological social work, which tends to take an anthropocentric stance focusing on the social environment from the point of view of human or individual interests (Besthorn 1997; Coates 2003). (p. 258)

Ecosocial work, as they describe, seems to correspond well to the ideas, values, and purpose of ecopsychology.

Coates suggests "encouraging an understanding of the inter-connected and social nature of human existence where we are fulfilled through connections with other individuals and our environment," examining how our lifestyle impacts the natural environment, including consumption and sustainability, and learning about global issues and incorporating this understanding in local work (as cited in Shaw, 2006, p. 32). Coates summarized his vision for the social work profession:

> In the movement to bring about a sustainable and socially just society, the profession must move away from the narrowness of individualistic and anthropocentric thinking, critique its reactive and supportive role in modern society, and become proactive in introducing and advocating new values, practices and lifestyles which are supportive of a sustainable and socially just society. (as cited in Shaw, 2006, p. 18)

Given the problem of modern industrial civilization, the mounting crises in the natural world of which humans are an inherent part, and, most importantly, given social work's human-centered goals of universal human welfare and social justice, Coates's argument is the ultimate challenge for social work; to be true to its mission, goals, and values, social work must challenge the current system rather than act in a supporting role. It must transform itself beginning at the level of values to become holistically life-supporting, which means re-establishing the primacy of the whole of the natural world, not just humans. As the Principles of Environmental Justice (People of Color Environmental Leadership Summit, 1991) touch on, social work must extend justice not just to humans, but to the whole of the natural world.

Coates's call for advocating new values must follow a re-evaluation of social work's values. The profession values social justice (NASW, 2008) which can be used as a basis not only to work for equality on behalf of vulnerable and oppressed people, but

more significantly to work to change our free market industrial economy which maintains the inequality. However, this economy is also based on an ethic that allows destruction of the natural environment on which humans depend for survival and well-being. While it could be argued that the social justice value implies an understanding of this relationship between humans and the natural environment, it does not seem that the field in general recognizes that implication. Coates's call for new values therefore should mean that social work introduce a value that leads the profession to work for human well-being in the only way that makes sense – a holistic well-being that recognizes humans' essential relationship with the Earth, our natural environment.

Finn and Jacobson (2003) argue that predominant theories of social work are failing to guide practice in addressing current problems related to globalized capitalism, growing inequality, social marginalization, and various forms of violence. Social justice, human rights, and citizenship are challenged in this modern context (Finn & Jacobson, 2003). The authors believe a new social work paradigm informed by critical social theory is needed to confront human problems "that transcend national, geographic, and cultural borders and domains of practice" (Finn & Jacobson, 2003, p. 57-58).

Finn and Jacobson's (2003) just practice theory attempts to bring together meaning, power, and history in a justice-oriented practice. The theory's structure includes five key themes: meaning, context, power, history, and possibility (Finn & Jacobson, 2003). It focuses on social/human structures, systems, and environments, but its emphasis on transforming social work into social justice work may be understood to imply inclusion of environmental justice. Given the important role that humans' relationship with the land, natural resources, and the natural environment has played in

the theory's themes of context, power, and history, as well as the others, just practice theory would be strengthened and made more useful if grounded explicitly in an understanding of our place in the natural environment.

Criticism of Profession, Policy, and Education

A small handful of social workers and social welfare scholars have called for the profession to address the environmental crisis. Berger and Kelly reflect that all social workers, no matter their form of work, may be needed to address the environmental crisis (as cited in NASW, 2009). Hoff and McNutt's edited book argues for why social work must attend to the environmental crisis (as cited in NASW, 2009). Berger calls on social workers to address "habitat destruction" (as cited in NASW, 2009, p. 123). Hoff and Rogge argued that social work must respond to "environmental injustice" (as cited in NASW, 2009, p. 123). And Coates (2003) reports that "The profession of social work…has made only limited efforts to act on a more holistic conception of environment. Mainstream social work has focused almost exclusively on a narrowly interpreted 'social environment'" (p. 38). He goes on to say, "To the extent that [social work] ignores humanity's connectedness to nature and focuses attention solely on 'adjusting and fitting into' society, without a critique of fundamental assumptions, the social work profession is a co-dependent on the road to ecological destruction" (Coates, 2003, p. 39).

Social work profession positions and criticism. In its issue statement on environmental policy, the National Association of Social Workers' (NASW, 2009) places responsibility for environmental destruction and threats to the planets habitability collectively on humans' technologies, lifestyles, and population growth. The organization

holds people in more developed areas of the planet more responsible and asserts that "Environmental justice…is consistent with the principles of social work" (NASW, 2009, p. 123). With a particular concern for oppressed and poor populations, NASW asserts that social workers have responded to environmental racism but need to more fully integrate environmental, social, and economic justice by "applying familiar social work knowledge, skills, and methods to new substantive areas and learning new applications for substantive expertise" (NASW, 2009, p. 123). One way NASW (2009) encourages social workers to address the environmental crisis is through political advocacy. NASW (2009) further asserts that "Action in support of the environment should be included in all of the profession's public and private activities" (p. 124).

NASW's (2009) Environment Policy statement states that "social workers must become dedicated protectors of the environment" (p. 124). The policy statement, first adopted in 2008, recognizes the impact of environmental degradation and pollution on vulnerable and oppressed communities and groups, healthy food, children's health, workers in hazardous jobs, and people in less wealthy countries (NASW, 2009). NASW (2009) urges use of the Precautionary Principle relating to health and the natural environment to protect children from the greater risk of impact that toxins can have during development. The principle states, in part, "When an activity raises threats of harm to human health or the [natural] environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically" (Wingspread Conference on the Precautionary Principle, 1998). The policy statement enumerates twenty positions that NASW (2009) supports including:

- "social work education at all levels" that incorporates learning about key concepts on environmentalism and that considers the natural environment (p. 124)
- consideration of the natural environment in social work practice
- training social workers to identify environmental hazards
- programs to help social workers recognize the "deeper awareness and understanding of environmental dangers" that traditional perspectives and Indigenous Peoples have to share with social work (p. 124).
- "inclusion of the natural environment as a routine part of the assessment and treatment planning activities of social workers in all settings with all clients, especially those clients most likely to be victimized by unsound and unsafe environmental practices" (p. 125).

Interestingly, these points refer explicitly to environmental dangers and hazards but not to beneficial, life-supporting, and healing elements.

Although NASW's (2009) position calls for incorporating information about the natural environment in social work education and as part of assessments, Shaw (2006) reported that less than a third of responding California NASW social workers received such education. Over 90% of Shaw's (2006) respondents felt the natural environment should be discussed in social work education.

The International Federation of Social Workers (IFSW) (2005a, 2005b) has no specific policy exclusively addressing the natural environment, but their policy statements on "Globalisation and the Environment" and "Indigenous Peoples" yield comprehension of the body's general perspective. The natural environment (along with

the built environment) affects society and individuals (IFSW, 2005b). To this end, IFSW (2005b) advocates protection and sustainable sharing of the Earth's resources. Specifically, IFSW (2005b) encourages social workers to promote recognition of the role of the natural environment in the social environment, take responsibility and care for the natural environment, advance their knowledge of the natural environment, organize communities and advocate for a "healthier environment," and expand inclusion of environmental issues in social work education (Policy Statement on Globalisation and the Environment, para. 9). In addition, IFSW (2005a) promotes protection of the rights of Indigenous Peoples whom it recognizes as "very dependent on the traditional environment in which they live" (Background: Indigenous Peoples and Human Rights section, para. 1). The organization insists on ensuring Indigenous Peoples' full participation in state bodies' policy development regarding them and their lands (IFSW, 2005a). In discussing social workers work with war refugees, Hoff (1994) has pointed out that war as well as international lending bodies' loan conditions have led to the destruction of traditional peoples and, along with them, their knowledge of sustainable living.

Criticism of social work profession's position on environmental justice. Based on citations in NASW's (2009) "Environmental Policy" and searches in academic databases, there is limited evidence (see Rogge 1994a) of the social work profession's participation in environmental justice work. Given the field's commitment to social justice, the literature may not reflect the actual involvement of practicing social workers in environmental justice. Particularly since environmental problems impact vulnerable populations disproportionately, the NASW's (2008) ethical code to promote social

justice, in addition to its Environmental Policy, does imply an ethic to also promote environmental justice.

Comparing NASW's (2009) statements on environmental racism to those of ActionPA.org (n.d.), an environmental justice organization, it appears that NASW's position may not call for the same standard as other environmental justice advocates. ActionPA.org (n.d.) makes clear their view that while people of color bear the disproportionate harm of environmental degradation, the goal of environmental justice is not "environmental equity" (Definitions, para. 1), or equity of harm, or simply full inclusion of people of color in decision making, but to bring to a halt production of all toxins, waste, and pollutants hazardous to people and the environment.

It might be easy to think that the populations that social workers work with have problems serious enough that considering the natural environment's role in their lives is a low priority. While this may be true in addressing certain problems, the tendency to disregard the environment's importance in their lives may be both a privileged perspective and a result of our general disconnection from the natural world. One could argue that the conditions of economic oppression historically endured by poor people and people of color forced them to move to cities where the environmental disconnection and degradation began. In considering social problems, it is easy to miss the forest for the few trees in the urban environment and forget that it was the industrialization, migration to cities from rural homesteads, and the city itself that precipitated many of the problems that led to the creation of social work. Urban environment, city-scape, concrete jungle – these terms may suggest the idea that the built, gray urban setting is not our natural one,

but an artificial substitute that, while offering a "higher standard of living" for some, may be for many people more harsh in some ways than where we came from.

As Frumkin (2001) asks from an environmental medicine perspective about the health costs and benefits and costs of nature exposure, social work can ask more: a principled social-environmental justice perspective means exposure to nature and a healthy environment shouldn't just be about therapy, but part of our daily lives.

Criticism of social work education. I found no information on whether or not the Council on Social Work Education (CSWE) includes that natural environment in its social work program certification requirements. Although a review of social work degree programs' inclusion of the natural environment was not part of the present study, it appears that this is an area not well addressed. However, it should be noted that the theme of CSWE's annual program meeting in 2010 is "Promoting Sustainability in Social Work" (CSWE, 2010). Within sustainability, CSWE (2010) includes "long-term environmental viability; economic sustainability (i.e. maintaining living standards over the long term), and social sustainability that promotes environmental, economic, and social justice, now and in future generations" (Promoting Sustainability in Social Work, para. 1). This conference is noteworthy as a demonstration of CSWE's commitment toward organizational consciousness and action regarding the natural environment.

Criticism of social welfare policy. Hoff, whose 1998 book looked at case studies of sustainable community development efforts, argues for social policy changes to adjust to the reality of finite natural resources (as cited in Shaw, 2006). Hoff says new policy needs to integrate environmental protection, social development, and environmentally and socially sustainable economic development (as cited in Shaw, 2006). Hoff gives six

steps to sustainable social policy: 1) prioritize and expand government funding of research for sustainable food production, renewable energy, low-pollution transportation, and housing, 2) encourage people to live in urban areas, 3) tax policy that protects the environment and resources, 4) broader regulatory powers, 5) empowerment of citizens through mechanisms for social, economic, and environmental decision making, and 6) ending consumerism and expanding community building (as cited in Shaw, 2006). Hoff's argument for living in urban areas, though perhaps based on the lower carbon footprint of people in cities, is a contentious issue (as cited in Shaw, 2006). While some side with her, others believe urban living may continue to lead us away from the essential connection with the land that some see as necessary for environmental sustainability and social and psychological health.

Hoggett presents an argument for an eco-welfare based society in which well-being is measured by the quality of people's relation with each other and with nature (as cited in Shaw, 2006). Hoggett compares this to consumerism, which measures well-being in financial and material terms, and a welfare statist perspective, which uses the amount of services received to indicate well-being (as cited in Shaw, 2006). Fitzpatrick takes a similar position against a "productivist" social welfare model and argues for development of specific ecological indicators in approaching welfare reform (as cited in Shaw, 2006, p. 34).

Conclusions and Closing Discussions

How Should Social Work Consider the Natural Environment?

What should social work's stance be toward the natural environment, the natural world? Hillman (1995) comments on the same question as posed to the field of psychology. He says psychology could define psyche narrowly, excluding the natural environment (Hillman 1995). This maintains the rigor of controllable situations and leads to development of an insular culture that might be more effective within its limits but "more wrongheaded" otherwise (Hillman, 1995, p. xxii). As Roszak (1995) defines it generally, "ecology is the study of connectedness" (p. 8), and integrating psychology with it allows for a more holistic study of both humans and nonhuman nature. The broader scope would recognize that the interior extends outward encompassing the entire world (Hillman, 1995). This perspective, he argues, allows psychology to enter the world and vice versa, "admitting that airs, waters, and places play as large a role in the problems psychology faces as do moods, relationships, and memories" (Hillman, 1995, p. xxii). He urges psychology, and specifically psychotherapy, to "wake itself up to one of the most ancient human truths: we cannot be studied or cured apart from the planet" (p. xxii). Hillman (1995) remarks, finally, that his appeal to other therapists is to prevent narrow specialization that leads to isolation and "unreality," and to instead stay open to ideas and consider the "ecological psyche" (p. xxiii).

We can certainly apply Hillman's arguments to social work in that he names psychotherapy—an area modern social work and psychology have in common. But as we discussed above regarding social change, psychotherapy is only one way social workers do their work.

The field of social work, born from the massive changes and difficulties of industrialization and urbanization, and despite holding principles of social welfare, has largely acted as a support for a societal system that puts people after profit. As discussed in Chapter III, some events in the twentieth century impelled social work to consider community and policy work as an important expansion to the micro level work that had become its focus. However, the field has continued to overlook a fundamental aspect of the origin of our social problems: our disconnection from the land and natural environment that give us life. Today, global crises that involve the natural environment are coming to a head and demand that social work expand its vision and role even while engaged in micro level work. Several scholars have spoken about the role social work serves and should serve in American society. Specht and Courtney (1994) have criticized the profession for its movement toward individual psychotherapy and private practice and away from working with the poor, older people, and children on social problems. They clarify social work's function to "help people make use of and develop community and social resources to build connections with others and reduce alienation and isolation" (Specht & Courtney, 1994). Shaw (2006) sees social work in the United States as reactive, not proactive, toward inequity. Coates (2003) says, "Social action and efforts to change policy are not extra-curricular activities; they become essential and routine aspects of social work practice" (p. 157).

Environmentalism by its nature recognizes that when we humans damage the natural environment, we damage ourselves. Ecopsychology adds that it's not just our physical well-being that we damage, but our mental and communal health as well. If social work continues to focus on psychotherapy and ameliorative aid to the exclusion of

significant energy toward changing the values and systems that created the environmental crisis, it is failing to hold true to its values. Even social policy cannot ignore or exclude the natural environment. To fulfill its commitment to human well-being and healthy-functioning social systems, social work must consider the larger context within which human society is embedded: the Earth's natural systems.

Our very way of life, values, and the economic systems that drive modern human society and in which we are immersed blind us to the fact that they are in large part the reason for many of our problems. How did/do traditional human communities that live in long-standing direct relation with the rest of the natural world deal with the problems that we in industrial civilization wrestle with? They probably did not, for many of the problems may not have existed, or perhaps existed in a form and at a scale that was more easily addressed by the community and within its proximal natural environment. Some aspects of modern life understood as problems today were probably not seen as problems in some land-based traditional communities (e.g. the modern ideas of poverty and child labor).

Over the last few decades, arguments for the importance to human health and well-being of the natural environment have been presented from various fields. More recently, empirical evidence of the "benefits" of human contact with the natural environment is beginning to accumulate. I say "benefits" because of arguments and suggestions, such as those made by biologists who Dubos refers to, that close contact with the natural environment may be necessary—not just beneficial—for physical and mental health (as cited in Germain, 1983). Likewise, Kellert (n.d.) and Louv (2005) cite evidence for and argue that such contact is essential for children's development. It's

possible that someone might argue through observational or anecdotal knowledge that many people today grow up in urban environments and modern culture with little exposure to the natural world and "turn out fine." Ecopsychologists, however, are asking deeper questions about what it means to be "sane," especially given the growing repercussions of damage we cause the Earth and ourselves. We might also ask what other problems might be ameliorated if people grew up and lived in close contact with and healthy relation to nature: would rates and severity of mental health, physical health, violence, and other problems be the same? These questions merit further investigation.

Why Social Work and Environmental Movements Need Each Other

Some early American attempts at social welfare were the utopian communities that developed during 1815-1845 – rural villages attempting to create their own self-sufficient security (Leiby, 1978). A similar concept is being revitalized in the social-environmental movements mentioned in Chapter IV such as relocalization and the bioregional model. These movements seem like a step in the direction as called for by De Rosa (1998) to include social considerations in environmentalism. As such they are an important opportunity for social work to join with environmentalism in striving for social and environmental justice and to build resilient communities. Coates (2003) says, "The task of social work" should become "nurturing community" (p. 158). Social work's concerns for diversity, inclusion, supporting vulnerable groups, and overcoming oppression need to be included in the dialogue and community organizing of these movements. Community change should be a holistic endeavor. By joining in work with environmentalism, social work helps shape the "dialectic between society and ecology"

(De Rosa, 1998, p. 23). Social workers' participation in such work also fits Specht and Courtney's (1994) articulation of the objective of social work to "strengthen the community's capacities to solve problems through development of groups and organizations, community education, and community systems of governance and control over systems of social care" (p. 26).

Social Work Mission and Future Challenges

Our social problems and therefore social work problems are changing. Global problems are affecting the community, and societal changes are affecting the individual. Today we are confronting new problems and behavior patterns related to technology such as "addictions" to video games and increasing time spent on connecting technologies (e.g. Blackberries and social networking websites). Our whole world, humans and nonhumans, are faced with a changing climate and its effects. And, related to climate change but less well known or addressed, the end of "The Age of Cheap Oil" (Hopkins, 2008, p. 17) is beginning and will have civilization-changing consequences that few people may be imagining. What do all these problems have in common? I would argue that it is humans' neglect of the natural world – the larger environment and context in which we have always lived. At a deeper level, it is neglect and a long-term growing ignorance of our relationship with our natural environment. As experts in human relations, this is a relationship social workers cannot afford to ignore. In some aspect of this relationship, and perhaps many, each of us must begin to explore, learn about, and reckon with it and what it means for our work. The more broadly and comprehensively we can grasp the meaning and impact of humans' relationship with the rest of the natural

world, the more effectively we can address the neglect and help people imagine the possibilities that will mend the social world back into the natural one.

Recommendations and Questions

Following are recommendations on incorporating the natural environmental for social work professional organizations and practitioners to consider. In addition I have listed new questions that this thesis has raised for me.

Social work education: "Social work education should bring social workers into the midst of the most serious issues and concerns facing the planet" (Coates, 2003, p. 152). Social work schools can increase awareness and incorporation of the natural environment through many means such as joint projects or courses with environment-related departments and other organizations.

Health care: Social work psychotherapists, school social workers, and social workers who may influence the location of schools, hospitals, mental health clinics, and recovery-related facilities should consider how the surrounding natural environment can be maintained and utilized for the benefit of students, patients, clients, and staff.

In the context of the ecopsychologists' and others' endeavor to define ecological sanity, there are many questions for social workers and others whose mission involves human well-being to consider. Besides those presented above, here is a small sampling of questions to consider and to stimulate more questions:

Mental health: How do a healthy person and a healthy community act toward their natural environment? How would people who experience an "environmental reciprocity" (Roszak, 1995, p. 6)—as shamanist cultures' advocate—live, act, think, and feel? Would

they continue to depend on food from far away places where they have little power to monitor and affect the health of the land that provides the food? By creating a local food economy, a community can both better assess its own needs and ensure the local land is maintained so it will continue to provide. In reestablishing such connections with the local natural environment (and local community), people may gradually rebuild their relationship with the natural environment (and each other) in ways that restore balance for both themselves and their environment.

Assessment and diagnosis: Does environmental damage affect our ecological selves? Is the ego defense of denial at work in allowing people to function day to day with the environmental destruction around them? If so, what are the limits of ego defenses in relation to environmental degradation and to the potentially real degradation of our ecological selves? Can damage to natural environments lead to posttraumatic stress symptoms in people who experience those environments?

Practice: How can clinical social workers and psychotherapists address the human relationship to the natural world, especially when it might not appear relevant to their clients?

Theory: Are particular social work theories better suited to incorporate the natural environment? For social workers who incorporate the natural environment into their work, which theories might they choose to work with?

Policy: Examining the environment of their clients, what are clinical social workers' assessments of policy, and how may it be neglecting the natural environments of their communities? What opportunities can clinical social workers find to address and advocate on policy?

Community: What opportunities can social workers at all levels find for advocating on behalf of the community to improve interdependence with the natural environment?

Final Thoughts

The difficulty some may have with seeing the importance of the natural environment to social work may lie within the underlying problem itself: human civilization has put so much effort into severing its connection to the rest of nature, controlling the rest of nature, and isolating itself from the natural world that our need for nature is no longer apparent. To expand on the expression, social work has not seen the destruction of the forest for the destruction of the trees.

Humans have created a physical façade of cities, shopping malls, highways, and digital interfaces that maintains an illusion of surviving in the real world. Numerous critical thinkers however argue that these apparently necessary means of living are temporary. Our industrial economic system created and depends on triple building crises: living in debt to the future, dependence on nonrenewable energy sources, and destruction of habitat and natural systems to extract those energy sources and other materials. In addition, climate change threatens life as we know it, and there seems to be no foreseeable stability in global economic systems. Within the industrial economic system, social work has largely maintained its attention on helping those damaged and marginalized by it and within it. As human civilization seems to face a choice of relocation within the natural world or increasing social problems and survival challenges due to its degradation, so the social work profession may choose to continue to focus on

its, albeit important, *within-system* ameliorative role or to actively take part in re-embedding humanity within the natural world. This is the critical challenge social work faces: to stop, in effect, supporting the current destructive systems and help communities to create sustainable, resilient systems that nurture life not based on destruction of the natural environment and exploitation of life—human or nonhuman. Within the scope of its purpose, social work needs to take part in rebuilding communities' deep connections with the rest of the natural world, meaning redeveloping communities' interdependence with their local environment and each other, which implies creating a restorative relationship in which the community gives back to and maintains the local environment so it is always there to support human and other life.

Should social workers get involved with what have been considered environmental movements such as movements to re-localize communities? Is this an area for "environmentalists," or is it a question of social welfare? Does it fit in the scope and mission of social work given the arguments for changing our lifestyle and culture into one that values and sustains life and recognizes the need to re-establish humans' place in the natural world? One answer, I would argue, is yes: the problems of energy costs, economic instability, and climate change will affect everyone, so social workers and the people we work with will need to respond and adjust. Not only do these challenges require a community response, but they present an opportunity for strengthening and even re-thinking community.

References

ActionPA.org (n.d.). *Environmental justice/environmental racism*. Retrieved from http://www.ejnet.org/ej/

Allen, K. R. (2009). The cultural politics of environmental justice activism: Race- and environment-making in the contemporary post-civil rights period (Doctoral dissertation, University of North Carolina at Chapel Hill, 2009). *Dissertation Abstracts International Section A: Humanities and Social Sciences, 70*(4-A), 1326.

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.

Basham, K. (2008). Trauma theories. In J. Berzoff, L. M. Flanagan, & P. Hertz (Eds.), *Inside out and outside in: Psychodynamic clinical theory and psychopathology in contemporary multicultural contexts* (2nd ed.) (pp. 411-441). Lanham, MD: Jason Aronson.

Berzoff, J., Flanagan, L. M., & Hertz, P. (Eds.). (2008). *Inside out and outside in: Psychodynamic clinical theory and psychopathology in contemporary multicultural contexts* (2nd ed.). Lanham, MD: Jason Aronson.

Besthorn, F. H. (2002). Radical environmentalism and the ecological self: Rethinking the concept of self-identity for social work practice. *Journal of Progressive Human Services, 13*(1), 53-72.

Bettmann, J. E. & Jasperson, R. A. (2008). Adults in wilderness treatment: A unique application of attachment theory and research. *Clinical Social Work Journal, 36*(1), (51-61).

Blau, J. (2007). *The dynamics of social welfare policy* (2nd ed.). New York: Oxford University Press.

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.

Canter, D. & Lee, T. (Eds.) (1974). Psychology and the built environment. New York: Halsted Press.

Carson, R. (1962). *Silent spring*. New York: Houghton Mifflin Company.

Coates, J. (2003). *Ecology and social work: Toward a new paradigm*. Halifax, Nova Scotia: Fernwood.

Commoner, B. (1971). *The closing circle: Nature, man and technology*. New York: Alfred Knopf.

Cooper, M. G. & Lesser, J. G. (2008). *Clinical social work practice: An integrated approach* (3rd ed.). Boston: Pearson Education.

Cornelius, S. (2009). Women and social policy in a postmodern world (SWPS 0562). Syllabus for course at Smith College School for Social Work, Northampton, MA.

Council on Social Work Education (2010). *Council on Social Work Education 56th annual program meeting*. Retrieved from http://www.cswe.org/Meetings/24470/About10APM.aspx

De Rosa, F. (1998). Preservationism and the place of people in the environment movement. *Social Alternatives, 17*(1), 21-24.

Delaney, H. D. & DiClemente, C. C. (2005). Psychology's roots: A brief history of the influence of Judeo-Christian perspectives. In W. R. Miller & H. D. Delaney (Eds.), *Judeo-Christian perspectives on psychology: Human nature, motivation, and change* (pp. 31-54). Washington, DC: American Psychological Association.

Dhakal, B., Bigsby, H. R., & Cullen, R. (2007). The link between community forestry policies and poverty and unemployment in rural Nepal. *Mountain Research and Development, 27*(1), 32-39.

Dubofsky, M. (1974). Socialism and syndicalism. In J. H. M. Laslett & S. M. Lipset (Eds.), *Failure of a dream? Essays in the history of American socialism* (pp. 252-285). Garden City, NY: Anchor Press/Doubleday.

Ehrenreich, J. (1985). *The altruistic imagination: A history of social work and social policy in the United States*. Ithaca, NY: Cornell University.

Environmental Justice Leadership Forum on Climate Change (2009). *Principles of climate justice*. Retrieved from http://weact.org/Portals/7/EJ%20Leadership%20Forum%20Principles.pdf

Finn, J. L., & Jacobson, M. (2003). Just practice: Steps toward a new social work paradigm. *Journal of Social Work Education, 39*(1), 57-78.

Flanagan, L. M. (2008). Object relations theory. In J. Berzoff, L. M. Flanagan, & P. Hertz (Eds.), *Inside out and outside in: Psychodynamic clinical theory and psychopathology in contemporary multicultural contexts* (2nd ed.). Lanham, MD: Jason Aronson.

Frumkin, H. (2001). Beyond toxicity: Human health and the natural environment. *American Journal of Preventive Medicine, 20*(3), 234-240.

Fuchs, A. H. & Milar, K. S. (2003). Psychology as science. In D. K. Freedheim & I. B. Weiner (Eds.), *Handbook of psychology, volume 1: History of psychology* (pp. 1-26). Hoboken, NJ: John Wiley & Sons.

Gatersleben, B. (2008). Humans and nature: Ten useful findings from environmental psychology research. *Counselling Psychology Review, 23*(2), 24-34.

Germain, C. B. (1983). Using social and physical environments. In A. Rosenblatt, & D. Waldfogel (Eds.), *Handbook of clinical social work* (pp. 110-133). San Francisco: Jossey-Bass.

Gitterman, A., & Germain, C. B. (2008). *The life model of social work practice: Advances in theory and practice* (3rd ed.). New York: Columbia University Press.

Glendinning, C. (1995). Technology, trauma, and the wild. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the Earth, healing the mind* (pp. 41-54). San Francisco: Sierra Club Books.

Gomes, M. E., and Kanner, A. D. (1995). The rape of the well-maidens: Feminist psychology and the environmental crisis. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the Earth, healing the mind* (pp. 111-121). San Francisco: Sierra Club Books.

Gray, M., Coates, J., & Hetherington, T. (2008). Hearing indigenous and local voices in mainstream social work. In M. Gray, J. Coates & M. Yellow Bird (Eds.), *Indigenous social work around the world: Towards culturally relevant education and practice* (pp. 257-270). Burlington, VT: Ashgate.

Hoff, M. D. (1994). Environmental foundations of social welfare: Theoretical resources. In M. D. Hoff & J. G. McNutt (Eds.), *The global environmental crisis: Implications for social welfare and social work* (pp. 12-35). Brookfield, VT: Ashgate.

Hopkins, R. (2008). *The transition handbook: From oil dependency to local resilience*. White River Junction, VT: Chelsea Green.

Hyer, L., Boyd, S., Scurfield, R., Smith, D., & Burke, J. (1996). Effects of Outward Bound experience as an adjunct to inpatient PTSD treatment of war veterans. *Journal of Clinical Psychology, 52*(3), 263-278.

International Federation of Social Workers. (October 25, 2005a). *International policy on indigenous peoples*. Retrieved from http://www.ifsw.org/p38000138.html

International Federation of Social Workers. (October 25, 2005b). *International policy statement on globalization and the environment*. Retrieved from http://www.ifsw.org/p38000222.html

Katz, M. B. (1986). *In the shadow of the poorhouse: A social history of welfare in America*. New York: Basic Books.

Kellert, S. R. (n.d.). Reflections on children's experience of nature. *Children and Nature Network Leadership Writing Series, 1*(2). Retrieved from http://www.childrenandnature.org/downloads/CNN_LWS_Vol1_02.pdf

Kovarik, B. (n.d.). *Environmental history timeline*. Retrieved from http://www.radford.edu/~wkovarik/envhist/

Leiby, J. (1978). *A history of social welfare and social work in the United States*. New York: Columbia University Press.

Levine, D. (1994). Breaking through barriers: Wilderness therapy for sexual assault survivors. *Women & Therapy, 15*(3/4), 175-184.

Lewis, C. A. (1996). *Green nature/human nature: The meaning of plants in our lives*. Chicago: University of Illinois Press.

Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books.

McNutt, J. G. & Hoff, M. D. (1994). Conclusion: Dilemmas and challenges for the future of social welfare and social work. In M. D. Hoff & J. G. McNutt (Eds.), *The global environmental crisis: Implications for social welfare and social work* (pp. 297-305). Brookfield, VT: Ashgate.

Metzner, R. (1995). The psychopathology of the human-nature relationship. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the Earth, healing the mind* (pp. 55-67). San Francisco: Sierra Club Books.

Miller, D. (2009, November 17). Take a hike and call me in the morning. *The Washington Post*. Retrieved from http://www.washingtonpost.com/wp-dyn/content/article/2009/11/16/AR2009111602899.htm

Mitchell, S. A. & Black, M. J. (1995). *Freud and beyond: A history of modern psychoanalytic thought*. New York: Basic Books.

Mohai, P. & Bryant, B. (1992). Environmental racism: Reviewing the evidence. In B. Bryant and P. Mohai (Eds.), *Race and the incidence of environmental hazards: A time for discourse* (pp. 163-176). Boulder, CO: Westview Press.

Mooalem, J. (2009, April 16). The end is near! (yay!). *The New York Times Magazine*. Retrieved from http://www.nytimes.com/2009/04/19/magazine/19town-t.html

National Association of Social Workers. (2008). *Code of ethics of the National Association of Social Workers*. Washington, DC: NASW Press.

National Association of Social Workers. (2009). Environment policy. In National Association of Social Workers, *Social work speaks: National Association of Social Workers policy statements, 2009-2012* (8th ed.) (pp. 121-126). Washington, DC: NASW Press.

Netting, F. E., Ketner, P. M., & McMurtry, S. L. (2004). *Social work macro practice* (3rd ed.). Boston: Pearson Education.

Park, K. M. (1996). The personal is ecological: Environmentalism of social work. *Social Work, 41*(3), 320-323.

Patterson, J. (2009). Natural disasters, climate change uproot women of color. *On The Issues Magazine*. Retrieved from http://www.ontheissuesmagazine.com/2009fall/2009fall_patterson.php

People of Color Environmental Leadership Summit. (1991). *Principles of environmental justice*. Retrieved from http://www.ejrc.cau.edu/princej.html

Platek, B. (2009, April). The good red road: Leslie Gray on rediscovering America's oldest psychology. *The Sun, 400*, 4-12.

Risley-Curtiss, C. (2010). Social work practitioners and the human-companion animal bond: A national study. *Social Work, 55*(1), 38-46.

Rogge, M. E. (1994a). Environmental injustice: Social welfare and toxic waste. In M. D. Hoff & J. G. McNutt (Eds.), *The global environmental crisis: Implications for social welfare and social work* (pp. 53-74). Brookfield, VT: Ashgate.

Rogge, M. E. (1994b). Field education for environmental hazards: Expanding the person-in-environment perspective. In M. D. Hoff & J. G. McNutt (Eds.), *The global environmental crisis: Implications for social welfare and social work* (pp. 258-276). Brookfield, VT: Ashgate.

Roszak, T. (1992). *The voice of the Earth*. 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. 1-17). San Francisco: Sierra Club Books.

Routh, D. K. & Reisman, J. M. (2003). Clinical psychology. In W. R. Miller & H. D. Delaney (Eds.), *Judeo-Christian perspectives on psychology: Human nature, motivation, and change* (pp. 31-54). Washington, DC: American Psychological Association.

Shaw, T. V. (2006). Social workers knowledge and attitude toward the ecological environment (Doctoral dissertation, University of California at Berkeley, 2006). *Dissertation Abstracts International Section A: Humanities and Social Sciences, 68* (3), 1162.

Shepard, P. (1995). Nature and madness. In T. Roszak, M. E. Gomes, & A. D. Kanner (Eds.), *Ecopsychology: Restoring the Earth, healing the mind* (pp. 21-40). San Francisco: Sierra Club Books.

Specht, H. (1988). *New directions for social work practice*. Englewood Cliffs, NJ: Prentice Hall.

Specht, H., & Courtney, M. E. (1994). *Unfaithful angels: How social work has abandoned its mission*. New York: Free Press.

Thomas, M. (2004). The potential unlimited programme: An outdoor experiential education and group work approach that facilitates adjustment to brain injury. *Brain Injury, 18*(12), 1271-1286.

Weaver, H. N. (2008). Indigenous social work in the United States: Reflections on Indian tacos, Trojan horses and canoes filled with indigenous revolutionaries. In M. Gray, J. Coates & M. Y. Bird (Eds.), *Indigenous social work around the world: Towards culturally relevant education and practice* (pp. 71-82). Burlington, VT: Ashgate.

Wingspread Conference on the Precautionary Principle. (1998). *Wingspread consensus statement on the precautionary principle.* Retrieved January 11, 2010, from http://www.sehn.org/wing.htm

Wolf, D. B. (2000). Social work and speciesism. *Social Work, 45*(1), 88-93.

Appendix A

Principles of Environmental Justice

Preamble

We The People Of Color, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to insure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:

1. Environmental justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.

2. Environmental justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.

3. Environmental justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.

4. Environmental justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.

5. Environmental justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.

6. Environmental justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.

7. Environmental justice demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation.

8. Environmental justice affirms the right of all workers to a safe and healthy work environment, without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.

9. Environmental justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.

10. Environmental justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.

11. Environmental justice must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.

12. Environmental justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and providing fair access for all to the full range of resources.

13. Environmental justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

14. Environmental justice opposes the destructive operations of multi-national corporations.

15. Environmental justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.

16. Environmental justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.

17. Environmental justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to insure the health of the natural world for present and future generations.

Adopted today, October 27, 1991, in Washington, D.C.

Appendix B

Environmental Justice Leadership Forum on Climate Change

Principles of Climate Justice

As communities-of-color, Indigenous Peoples, and low-income communities, the Environmental Justice Leadership Forum on Climate Change calls on federal lawmakers and the new president to enact a suite of policies to address Climate Change as an immediate priority. These policies must be just, fair, sustainable and equitable. It is clear that in Congress a cap and trade mechanism has emerged as the leading approach to addressing the Climate Change Crisis. Our nation must do better than creating a stock market that commodifies pollution and continues to trade our health and environment for profit.

Climate change is the most significant social and political challenge of the 21st Century, and the time to act is now. In our post hurricanes Katrina and Rita era, we continue to bear witness to an increase in the number of severe weather events impacting communities in the United States. Whether it is the mighty Mississippi River rising along the shores of the Midwest, or the melting permafrost creating displacement in the Arctic, out-of-season record-breaking tornadoes in Mississippi and Kentucky, the burning hills in Sacramento and San Diego or the droughts experienced in Georgia, Tennessee and Alabama, all of these events can be linked in some way to climate change.

Vulnerable communities, even in the most prosperous nations, will be the first and worst hit, as has been confirmed by the United Nations' Intergovernmental Panel on Climate Change. In the U.S. context this includes communities-of-color, Indigenous Peoples, and low-income communities that are socio-economically disadvantaged, disproportionately burdened by poor environmental quality and are least able to adapt.

The scientific debate on climate change has shifted from uncertainty about the drivers of this phenomenon to clear confidence that human activity, specifically the fossil-fuel carbon intensive way we power our modern economy, is a central culprit or accelerant in the changes in the climate or what we call global warming. Scientists and policymakers concur that climate change and global warming will result in far-ranging effects on human health, and indeed sociopolitical and economic stability. Evidence of these impacts are documented by the World Health Organization that reports tens of thousands have been displaced in developed countries by the recent severe weather events.

The history of this country is one of struggles to achieve equity, justice and opportunity. Each generation has faced this political challenge. In this moment we are confronted with the real possibility of climate change stealing the American ideal of opportunity from not just the low-income American, not just Indigenous Peoples, not just the person-of-color in America, but all Americans. The Environmental Justice Forum on Climate Change calls on Congress to develop policies to combat climate change that:

Principles of Climate Justice

1. Establish a zero carbon economy and achieve this by limiting and reducing greenhouse gas emissions in accordance with the levels advocated by the scientific community (25% by 2020 and 80% by 2050) through mechanisms that are controlled by the public sector, generate revenue, are transparent, easily understandable by all, can be set-up quickly and have a track record of improving environmental quality;

2. Protect all of America's people - regardless of race, gender, nationality, or socioeconomic status - and their communities equally from the environmental, health and social impacts of climate change. Ensure that any solutions implemented to respond to or mitigate climate change do not violate human or environmental rights;

3. Ensure that carbon reduction strategies do not negatively impact public health and do not further exacerbate existing health disparities among communities. This includes crafting strategies that prevent the creation of pollution hotspots, eliminate existing emissions hotspots in vulnerable communities, and reduce the emissions of greenhouse gas co-pollutants in and near communities-of-color, Indigenous, and low-income communities;

4. Require those most responsible for creating the impacts that arise from climate change to bear the proportionate cost of responding to the resulting economic, social and environmental crisis. In setting the proportionate cost of climate impacting activity, the full environmental, health, social and economic cost of energy use from extraction to disposal must be included to accurately reflect the cost that energy use has on our environment, our health and our communities;

5. Develop a national goal supported by legislatively dedicated resources to transition us from the fossil fuel economy to the green, clean renewable energy economy by 2020;

6. Position the public sector to be a catalyst for change in the transition to the green, clean renewable energy economy by dedicating some of the revenues generated by carbon reduction strategies to support green clean renewable energy initiatives;

7. Create the opportunity for all Americans, especially people-of-color, Indigenous Peoples and low-income Americans, to experience a just transition as well as participate in the creation and operation of a new green economy by creating a workforce development program to grow living-wage, clean, safe, green jobs in the energy sector and beyond;

8. Provide an economic and social safety net for low-income, people-of-color, Indigenous Peoples and those vulnerable in the middle-income from the structural

adjustments in the economy as we transition from the pollution generating fossil fuel economy to the green, clean and renewable economy;

9. Ensure that the green economy has enough jobs for those who need to be retrained and those who historically have been chronically underemployed, unemployed and/or excluded from unions; and

10. Ensure that people-of-color, Indigenous Peoples and low-income communities, who are and continue to be disproportionately impacted by climate change, have the inalienable right to have our voices shape what is the most significant policy debate of the 21st Century.

The Environmental Justice Leadership Forum on Climate Change believes that climate change policies that incorporate these principles are the way forward for the United States of America to restore our credibility nationally and globally on the issue of climate change while preserving the livelihood, health and safety of all Americans.

For more information, contact 212-961-1000, extension 317