SELF-EMPLACEMENT IN THE LIFEWORLD: THE GEOGRAPHIC IMAGINATION OF AMERICAN MIDDLE ADOLESCENTS

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SELF-EMPLACEMENT IN THE LIFEWORLD: THE GEOGRAPHIC IMAGINATION OF AMERICAN MIDDLE ADOLESCENTS

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ABSTRACT

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This dissertation is an investigation of the *geographic imagination* as the mental landscape of the lifeworlds of a group of middle adolescents. The study involved phenomenology and humanistic geography as its guiding epistemological and methodological approaches. With the goal of determining the *geographic imagination* (as part of spatial cognition) of the contemporary individual, constructs investigated were *embodied spatiality, dwelling perspective,* and the "geographies of *spacings and place*" that have led to contemporary *placelessness* of the individual. Key concepts explored were *sense of place, global awareness, cosmopolitanism,* and *cognitive deterritorialization,* particularly in contexts of the space-altering new media of electronic and digital technologies.

The mixed-methods research probed empirical data collected from middleadolescent high school students to elicit their views of spacings and place, in the modes of a 1) Questionnaire Instrument; 2) Writing Protocol; and 3) Interview Schedule. Findings suggested that the participants generally exhibited (but with wide variations) a generalized and diffused spatial orientation, disembedded at all scalar spacings, from local to global, except for the microscale of their own embodiment. Further, it was found that much of the experience of spacings and place were centered on the body as tethered to electronic/digital media technologies. A general conclusion is that much *self-emplacement* is existentially *ageographic*--ontology of "everywhere and nowhere"--in that the personal affectivity of the existential sense of "home" is centered on the body, adolescent bedroom culture, and personal electronic/digital communication and media technologies (all as sites of *spatial connectivity*). These sites of spatial and space-altering connectivity promote abstract, diffuse, disembedded cognition and orientation of spacings and place. The *geographic imagination* substantially develops from these contemporary sites of fundamental and proximate spatial experience.

Two constructs from psychology and geography underlay the study: *Place* as relational experience; and place as cognitive organizational process of the self. Three geographic theorems were derived. The first dealt with the self-knowing individual: To know one's *self-emplacement* in the world is to know the place of the world in oneself. Eight geographic meaning units (themes) were developed from the empirical data gathered from the participants, including these two about *self-emplacement*: No longer are people necessarily more connected to near space than distant space; and the lifeworld is experienced as a relational, hybridized "betweenness" of liminal spacings among electronic/digital places and place-based relational webs.

Additionally, a "Personal Poetics of Place" approach and a "Five Themes of Relational Geography"--as framework for "geography-from-below"--are advanced in the final chapter as remedies for the ontological place (and space) alienation generally found among the participants and as a pedagogical stance to teach effective high-school geography. In several places in the dissertation the revised U. S. National Geography Standards (2011) was examined for its relevance to pedagogy of geography that emphasizes the importance of including the *lived geographies, embodied spatialities*, and the spatial perceptions and experiences of a self-knowing subject.

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CHAPTER I

INTRODUCTION

Human spatial behavior depends on the perception and conception of spaces and places and their geographic relations (Sambrook and Zurick 2010). The imagined distance between people and places, as well as how this is represented in the mind, is of "immense moral and political significance" (Livingstone 2003, 8). For individuals, local places matter vitally, too, not only morally and politically, but also for how they conduct their everyday lives--their *lifeworlds*. Far-distant places as well as near ones are processed together in the *geographic imagination*, from which spatial behavior proceeds. The education establishment is necessarily interested and implicated in these immensely significant perceptions and conceptions of geographic spaces; and in the instance of school-age children, in the all-important outcomes.

The *geographic imagination* is the mental conceptualization an individual has of geographic spaces and places. The *lifeworld* is a person's day-to-day world that is normally unnoticed and taken for granted. An individual's *geographic imagination* represents the conceptions of where he or she is located in geographic space and place; and this *self-emplacement* is part of the taken-for-granted lifeworld. The present research attempted to uncover and make known the taken-for-granted spatial worlds and *self-emplacement* that middle-class, American adolescents enact in their *geographic imaginations*.

1

A note about a specific use of terminology: John Horton (2012, 11 n. 43) advises the use of the term *spacings* as one increasingly used by social scientists in lieu of the usual term "space" (and "spaces") to indicate how spaces are always subject to change. Horton borrows from the propositions concerning space of Doreen Massey: *Space* is

- The product of interrelations, constituted through interactions;
- A multiplicity, predicated on existence of plurality;
- Always under construction, never finished, never closed (Massey 2005, 9).

For these reasons, from this point forward, this dissertation uses the term *spacings*, when it seems pertinent, to foreground its interrelational, multiple, protean, always-under-construction nature. The data collected for the present research seemed to confirm, for its use, the validity of Massey's three propositions.

This introductory chapter is divided into nine sections. In order to relate the dissertation title to the content, this introductory section has briefly defined (above) the *geographic imagination*, the central construct of the research, and the term *lifeworld* as the individual's total life milieu which necessarily includes the "lived geography" (or *spatiality*) in which the person is *emplaced*. The next section provides a statement of the research topic of the lived geographics of adolescents. The third section discusses the research problem of the *self-emplacement* of adolescents in context of the mutating spatialities of contemporary life. The fourth section addresses some of these contemporary, radical changes in spatiality. The research context in section five describes three basic *spatial cognitions*, including innate geographic "locatedness" and the "inner geography" that all humans possess. The discussion states that these innate spatialities conflict with the existential "*placelessness*" of the contemporary era. The research

purpose and goal are stated in section six; they include explicating the *sense of place*, globalized outlook, and *deterritorialized spatialities* of adolescents, with the goal to apply the research findings to the draft copy of the revised (2011) National Geography Standards and to geography pedagogy in general. The research methodology is outlined in section seven; it consists of mixed methods with a Questionnaire Instrument, Writing Protocol, and Interview Schedule (appendices A, B, and C). Section eight offers the significance of the research to the extent that educators and curriculum developers must understand more about the spatial lifeworlds of adolescents, especially the latter's perceptions and conceptions of their own spatialities, their *geographic imaginations*. A chapter summary and outline of the dissertation structure conclude this chapter.

Statement of the Topic

This dissertation addresses some new areas of scholarly discourse dealing with changes in the spatial lifeworld and the *lived geographies* of people using the lens of spatial cognition, environmental perception, and the social sciences and philosophy of embodiment and place. This research design explored how people today experience and *cognize* (perceive, conceive, and imagine) geographic spacings and place. These spatio-cognitive processes are treated with reference to the ways middle adolescents (aged 16-18 years) perceive, conceive, imagine, and conduct their own spatial lifeworlds.

The visual, spatial images of the world--of spacings and place--that young people use inform the crucial matrix of their *geographic imaginations*, their cognitive "maps," which educators must understand and address in teaching geography and social sciences. As education theorist and sociolinguist Basil Bernstein believed, "If the culture of the teacher is to become part of the consciousness of the child, then the culture of the child must first be in the consciousness of the teacher" (1970, 349). Thus, the present research ventured to gain insight and understand the spatial culture of the contemporary adolescent. It sought to answer this overriding question: What manner of spatiality--that is, which specific forms of spacings and place--comprises the culture (the minds) of American youth?

Research Problem

Place is believed to be a constituent and requirement of identity (Buttimer 1976; Casey 1993 and 1998; Dixon and Durrheim 2000; Malpas 1999; Relph 1976; Sack 1997), but the concept of *place* has been undergoing rapid societal change, partly due to personal electronic/digital media and communication technologies, with ensuing, pervasive, and intense pressures on the individual to adapt to these changes. Where place and the individual are concerned, these changes are spatial and geographic. Within the individual subject, they are also psychological.

Thus, as set forth by the research question presented above, the present research tried to reveal and explicate the taken-for-granted, spatial *self-emplacement* of American high-school students within their lifeworlds that are created from and partly determined by their spatial cognition/environmental perceptions.

Rationale: Mutating Spatialities

Processes of spatial interaction are incessantly in flux, whether geomorphological and ecological, or by human action and the myriad spatial facets of their lifeworlds (Golledge and Stimson 1997; Turner et al. 1990). The human lifeworld today, wherever instantiated as it manifests in spacings and place, is undergoing transformations that are demonstrably rapid, deep, far-reaching, and momentous (Norwine and Smith 2000). These social, technological, and environmental transformations engender individual life adjustments and reactions in ways that are spatial, cognitive, and ontological (Scholte 2005). Thus, this dissertation, in part, examined how human beings perceive and conceive of their surroundings in the unfolding, contemporary geohistorical period.

The ways people perceive, conceive of, and experience spacings, place, and environments are constitutive of and result from continuing changes in science, technology, globalized commerce, and other sundry interactions in geographic space (Heise 2008; Ingold 2000). The multidisciplinary literature of *place* is replete with accounts, employing diverse terminology, of the rapidly mutating nature of places, often characterized as filling the world with "placeless places" (Cresswell 2004, 141; also Auge 1995; Harvey 1989; Jameson 1991; Kunstler 1993; Relph 1976; Ritzer 2004; Wood 2009), or the "thinned-out" places defined by Robert Sack (1997). Referring to "nonplace" as inherent to "supermodernity," anthropologist Marc Auge (1995, 77-78) explains, "if a place can be identified as relational, historical and concerned with identity, then a space which cannot be defined as relational, or historical, or concerned with identity will be a non-place." John Brinckerhoff Jackson (1997) labels "auto-vernacular landscapes" as the nearly ahistorical, placeless auto landscapes of suburbia. Benjamin Barber (1995) simply sees them as part of the "nowhere" of "McWorld." In all this, there is the pervasive view that local distinctiveness is eroding from places, as landscapes homogenize into "sprawlscapes" (Kunstler 1993).

The ways individuals and societies adjust to the mutating nature of places/nonplaces are the focus of a large and expanding body of both popular and scholarly work across a wide swath of disciplines, from anthropology to media studies,

from ecocriticism to sociology (e.g., Appadurai 1996; Arendt 1998; Burgin 1996; Evans 2005; Giddens 1990; Gordon and de Souza e Silva 2011; Harvey 1989; Heise 2008; Jameson 1991; Katz and Aakhus 2002; Kern 1983; Kotkin 2000; Lemert and Elliott 2006; Maleuvre 2011; McClay 2011; Morley 2000). Many of these compositions are *jeremiads* in tone; that is, they warn of the nature of contemporary society as leading to further social, experiential, and psychological disruptions between the person and places (e.g., Auge 1995; Berry 1977; Kunstler 1993; Leach 1999; Meyrowitz 1985; Relph 1976). To take one example out of many, Robert Sack evinces that the world is now too complex for *Homo geographicus* (the geographic person) to understand:

A fragmented yet interconnected world, a shift from thick places to thinned-out space, a global interdependence leading to overwhelming difficulties in understand[ing] the consequences of our actions: these are the pressing problems of modernity, and at their foundation is our *behavior as geographical beings*. (Sack 1997, 27; emphasis added)

Nonplace in the United States has a genealogy. After reading histories of colonial America, humanistic geographer Yi-Fu Tuan concluded, "intimately knit communal groups like those of Europe did not exist" during that era, except for a few isolated farming communities and at the frontier (1982, 19). Literary critic Dean Flower lamented more than three decades ago: "Now more than ever we're strangers and travelers in a landscape we indifferently use as if it were not our real home" (1978, 170. Widely influential critical theorist Fredric Jameson, referring to "the great global multinational and decentered communicational networks" operating when he was writing more than two decades ago, believed,

this latest mutation in space--postmodern hyperspace--has finally succeeded in *transcending the capacities of the individual human body to locate itself*, to organize its immediate surroundings perceptually, and cognitively to map its position in a mappable external world. (Jameson 1991, 44; emphasis added)

This existential question comes to the fore: Is it possible (or impossible, as Jameson believes) to--using the language of Van Noy (2003)--"fix the coordinates" of the "interior landscape?" This dissertation research attempted to do just that: to "fix," or discover, the *inner geographies* of a group of middle adolescents.

The present research took up the Jamesonian challenge to investigate the *mental* emplacements that contemporary human subjects employ to cognitively "map" and "locate" themselves in the world (if, in fact, they can), and what that *cognitive* "*mapping*" might mean existentially to the human subject. A significant avenue of scholarship, as signified by the quotes by Flower and Jameson above, questions whether people today are strangers traveling in a landscape where "real home" is never found (e.g., Berger, Berger, and Kellner 1973; Leach 1999; Meyrowitz 1985; Morley and Robins 1993; Schrag 1970). For example, referring to the landscape of the American West when a newcomer showed up there, the acclaimed writer Wallace Stegner voiced this opinion: "perceptions trained in another climate and another landscape have to be modified" (1992, 52). Similarly, more than a decade into the twenty-first century, the challenge now for researchers and educators is to understand the latest mutations in the everyday, lived "landscape" and cognitive "climate" which have been instantiated by the continuing and new, space-altering upheavals in society, especially those relating to globalization and electronic/digital personal-media technologies. These developments have dislocated and *reterritorialized* the sociospatial conditions of even a few years ago. Katherine Harmon comments on new mapping technologies and "personal geographies":

All the technologies that have allowed those new maps have come to fruition in a relatively short time. One is tempted to remark about how rapidly our world has changed, but what has really changed, even more rapidly, are *our ways of seeing this world*....They lend themselves to a form of bushwhacking [orienteering] that is more *interior, philosophical, imaginative*. (Harmon 2004, 17; emphases added)

Geographer Jan Aart Schulte supposes globalization has resulted in some "shifts in mental constructions of elementary realities," with "the key ontological changes at the heart of globalization relat[ing] to understandings of space and time" (2005, 267). Anthropologist Arjun Appadurai, in an influential monograph, believes, "the task of ethnography now becomes the unraveling of a conundrum: what is the nature of locality [sense of the local] as a lived experience in a globalized, deterritorialized world?" (1996, 52).

The geographic world both conditions and constitutes a significant part of the new perspectives, conceptualizations, and ontologies. With the deep, pervasive social changes occurring over the last few decades relating to spacings and place, it seems reasonable to presume that not only has the contemporary human subject enacted new spatial perspectives that reflect mental adjustments to changing conditions, but also that the conceptual architecture of many observers (such as Jameson and others) has shifted into important new areas of thought. These evolving concerns include thinking about current changes in spacings and place, as they relate to the lived geographies of the human subject (discussed in Chapter IV). These current spatial concerns and conundrums that are occurring as "mental emplacements" in a world that is globalized, mediatized, and deterritorialized framed the focus of this present research project.

Research Context

Three general aspects of individual psychology were basic to this research. The

first is that *sense of place* is "an innate faculty, possessed in some degree by everyone, that connects us to the world" (Relph 1997, 208). Second, that "some sense of geographical locatedness in the world may be important to how we see ourselves" (Massey and Jess 2000, 3). The third, provided by environmental philosopher Paul Shepard, asserts that the human relationship with place serves to "both reflect and create an *inner geography* by which we locate the self" (1977, 28; emphasis added).

Thus, these three basic *spatial cognitions* may be summarized:

- Sense of place is seen as innate faculty that connects people to their place-worlds;
- Geographic "locatedness" is important to how people understand themselves;
- Personal relationships with spacings and places create an "inner geography" (i.e., *spatial cognition*).

However, this *locatedness* (or *placedness*) of identity with spacings and place (the *inner geography*, or geographic awareness), and presumed innate sense of place, conflicts with claims made by many observers that, today, people nearly everywhere are living with a diminished sense of place, an *existential placelessness* (Cresswell 2004; Iyer 2000; Leach 1999; Meyrowitz 1985; Morley 2000; Relph 1976; Sack 1997)--or the *rootlessness* of the "human condition" of Hannah Arendt (1998). Pico Iyer admits to living as a "rootless cosmopolitan," a "modern citizen of nowhere," a "global villager" who lives "lost within a labyrinth of impersonal spaces" (2000, 36). Iyer travels the globe among cosmopolitan elite, while most inhabitants of the world never travel far (de Blij 2009). But whether we consider a cosmopolitan frequent-flyer, such as Iyer, or a relatively immobile, stay-(mostly)-at-home modern individual, the cognitive tension due to the contemporary experience of spacings and place--between *placedness* and *placelessness*--

is presumed to manifest within the cognitive make-up of the contemporary individual.

While assessments of this cognitive tension are numerous (between inherent placedness of identity and *existential placelessness*), wide gaps exist in what we know today about how people mentally adjust to the rapid shifts in spatiality that in many ways operate at the forefront of social change. Even less is known about the role of contemporary spacings and place among young people, globally and in the U. S. In terms of their factual geographic knowledge, American youth several times have been surveyed and assessed (National Geographic Education Foundation n.d.), and, in 2010, judged "stagnating or declining" (Hill 2011). Besides these periodic assessments of geographic knowledge, other research on youth has looked at their spatial relations in particular localities, such as rural settings, urban neighborhoods, playgrounds, and how processes of economic globalization affect them. Nonetheless, scant attention has been given to how adolescents perceive their own spatial worlds, including their mediatized spacings (experiences while using electronic and digital media), and how they conceive of themselves functioning in those place-worlds, especially at multiple scales.

Whether in societies with emerging economies (Arnett 2002), or in advanced capitalist societies, young people most likely would be imbued (possibly more than any other age-group) with any new, emerging spatial perspectives, due to their habitually intense adoption and enthusiastic participation with new forms of information and communication technologies (electronic and digital). Young people are customarily riding the crest of these social and technological changes. In the words of James Gleick, referring to electronic and digital media: "It is an industry truism that children most readily learn the necessary new [media] styles and habits" (2002, 298). Film and culture

critic John Davis Ebert cautions, "we are all autonomous cyborgs these days, in need of nobody but ourselves and our video screens" (2011, 173). Even if this sentiment is hyperbolic, how the new media affect human cognition is still in its initial research stages.

Furthermore, few empirical studies have examined the effects of the new spaceand place-modifying mechanisms on adolescent spatial cognition and environmental perception across multiple scales--from personal spacings (the body and its near surroundings) to cognitive spacings (beyond immediate sensory experience), that is, from the microscale to the macroscale of the global. As expressed by a group of geographers: "The geographical imagination is most fully exercised [and for this dissertation: studied] when it wanders across a range of scales, teasing out the connective tissue that binds different levels of the local-to-global continuum together" (Meyer, Gregory, Turner II, and McDowell 1992, 255).

Research Purpose and Goal

The present research endeavored to shed light on the cognized space of middle adolescents, i.e., how they perceived, experienced, and conceived of their own spatial realities, by observing the following traits in the research group that included,

- 1. Sense of place: attachment to and identification with the locale;
- Globalized outlook: demonstration of *globality* (planetary awareness) and *geographic hyperopia* (my term)--the cognitive elevation of global space, as primary, over local place;
- 3. *Deterritorialized spatiality*: a decontextualized, disembedded spatial lifeworld.

As introduced earlier, and reiterated here, this research examined the participants' subjective partitionings of space, that is, how they positioned themselves in the spacings of the world. Further, this research strove to understand the architecture of young people's mental geographies: their sense of home, locality, and global space to learn about their spatial cognition of their own lifeworlds--their geographic imaginations. By understanding more of the spatial interactions, perspectives, and attachments (or detachments, as the case may be) of middle adolescents, curriculum development and subsequent education practices might be improved and made more effective, based on these understandings. This dissertation offers an empirically informed advance in theory about the *geographic imaginations* of young people that should be useful, not only for curriculum improvements, but, also, for the construction of a more deeply informed pedagogy. This is underscored by Freeman (2008), who found that the "geographical world" constructed and represented in school-geography instruction is produced by "education power-elites" (textbook developers and corporations, curriculum planners, and teachers) who tend toward a degree of "disconnection" with "youth worlds," and with the very youth who are considered only as end-users of an end-product. If informed geography education is the goal, then educators must understand where young people self-position themselves as they look out at and intimately interact with their placeworlds. Only then, with this understanding, can programs of socialization and education be formulated that not only would help young people make sound judgments for themselves and society, but also would inform educators in their construction of curricula in such a way that could help ensure the larger goals of societal survival.

For these reasons, this research ventured to close the gap among, and disentangle,

these salient, binary research themes vis-à-vis young people: their

placedness/placelessness, sense of place/no-sense-of-place, and locality/globality. Thus, this research, unlike others, addresses the spatial cognitions, environmental perceptions, and current experiential *self-emplacements* of adolescents.

Methodology

Research problems in environmental psychology (cognate to the psychology of spatial cognition) have three components according to Tommy Garling (2001): the person or group, the environment, and the activity in which the person or group is engaged. This present research followed this framework. The subjects were middle adolescents (16-18 years old); their general activities were their spatial relations, including their embodied, cognized relations in spacings and place; and the environment was the spatial milieu of the subjects. This included their activity spacings and places, both online and off-line, i.e., their lifeworlds. Specifically, the research looked at adolescents' spatial interpretations of their own lifeworlds--their *geographic imaginations-*-by highlighting their *lived spatialities* at a continuum of scales: from embodied emplacement, to *sense of* (local) *place*, and sense of global space.

A mixed-methods research design (Chapter VI) was employed, consisting of a Questionnaire Instrument, Writing Protocol, and Interview Schedule, conducted in several phases. Descriptive statistical analyses--reporting distributions, central tendencies, and frequencies--were performed on the data gathered from the questionnaire items. Non-parametric, inferential statistics identified the significance of associations among questionnaire responses. The semi-structured, in-depth interviews were audiorecorded and transcribed. From the research group, the transcribed texts from the Interview Schedule and the texts from the Writing Protocol (Chapter VII)--focusing on spatialities, spatial cognitions, and environmental (place) perceptions--were analyzed (Chapter VIII) in order to compare and contrast, in a hermeneutical fashion (i.e., collected data placed in context of social-science literature), with models and theories about these general areas taken from a broad range of the humanities and social sciences (detailed in chapters III, IV, and V).

The three research modes were sequenced chronologically in three phases, beginning with the Questionnaire Instrument, followed by the Writing Protocol and Interview Schedule. Each data-collection method fed information and insight into the subsequent research phase, culminating in the specific questions asked in the interviews. The data collected from the three research modes were synthesized to reach overall conclusions and form recommendations of pedagogy. The results were referred back, hermeneutically and iteratively, to existing models about the current state of awareness of the place-world and sense of global space and compared to the status quo in the literature in order to inform and advance theoretical development.

As John K. Wright would counsel, we must cultivate "an imagination particularly responsive" to unexplored territories. He laid out a research path:

the imagination not only projects itself into terrae incognitae and suggests routes for us to follow, but also plays upon those things that we discover and out of them makes imaginative conceptions which we seek to share with others. (Wright 1947, 4)

Significance of the Research

The results of this empirical and theoretical study of high-school students' subjective views of their placedness (in physical space), and their mental *self-emplacement* (their spatial sense of their "whereness" in both physical and abstract space)

will be of value in the general formulation of education curricula, and of particular improvements in the delivery of geographic education to adolescents. Educators and curriculum developers need to know about, not only the factual geographic knowledge students have of the world in general, but, also, more specifically and crucially, what it is that students perceive and conceptualize about their own spatial lifeworlds.

The research provides baseline, empirical data (as called for by Downs [1994]) in the vital area of the subjective geographies of adolescents--their *geographic imaginations*. In light of economic globalization, the American education establishment, along with political and business leaders, has voiced strongly the perceived need for American youth to be ready and able to compete on the global economic stage. Thus, educators, curriculum developers, and textbook writers need to understand the levels of knowledge that students have about the world, not only geographic facts (such as the ones measured by the Roper/National Geographic polls), but also how young people spatially conceive of the world in which they live. This knowledge will serve as basis for further programmatic action to determine how young people find and "map" their physical, cognitive, and ontological places in the world and where in the spatial scheme, both physical and abstract, these place-worlds exist. This research helps to accomplish these ends.

Summary

This chapter began the process of constructing an underlying thesis for this research based on existing literature which, first, demarcates three basic spatial cognitions (or premises) that provided a conceptual basis for further conceptual scaffolding: 1) People are connected to their place-worlds by an innate faculty; 2) the way people understand themselves (as part of their identity) depends in part on their geographic locatedness; and, 3) an *inner geography* is created by people's relationships to spacings and places. However, as indicated in literature concerning place and placelessness, there are tensions in American society (and probably in all western societies, and most likely even in all societies as they modernize)--and presumably within individuals--between the hypothesized, innate need for *place attachment* (rootedness) and a growing *existential placelessness*, as exemplified by Hannah Arendt's (1998) depiction of the rootlessness of the modern human condition. Thus, the underlying current in this research was that young people are more likely to have adopted any new spatiality engendered by modern society, and, as a result there is impact on how young people partition their spacings--and how they structure their "interior landscapes." A mixed-methods procedure was briefly described and set up in order to study the lived experience of the research participants. Investigated were the factors that relate to *sense of place*, globalized outlook (or *globality*), and a dislocated (*deterritorialized*) spatiality.

Dissertation Structure

The dissertation is divided into eight chapters. The first chapter has introduced the general research topic and issues under investigation. It prepared a conceptual basis and thesis from the literature that underlie the research problem. Three research purposes for study were specified: 1) *sense of place*; 2) globalized outlook (or *globality*); and, 3) *deterritorialized* (or decontextualized) *spatiality*. These were selected to provide a platform for examining the spatialities and *geographic imaginations* of the research participants. The chapter also has summarized the research methodology, defined the primary research question, and provided a rationale for the significance of the research.

Chapter II presents the research questions and propositions. Chapter III furnishes the research conceptual context, its nature, and delimitations of the research. It defines several basic terms, and prepares the ground for the remainder of the research by presenting the conceptual basis for an *embodied spatiality*.

Chapter IV--the main review of the literature--defines and discusses key terms pertaining to the dissertation, reviews the literature that lays the empirical and theoretical foundations of the research, and points the theoretical background towards further development of existing theory of the spatiality of the contemporary individual. In several cases, key terms function as pivotal subjects of the dissertation itself and thus receive substantial explanation and discussion. The key constructs include *lifeworld*, *place-world*, *dwelling*, and *geographic imagination*.

Chapter V provides four models of conceptualized spacings-and-place experience. The first three are drawn directly from sources that treat place experience. The fourth model was developed by the present researcher. Chapter VI provides, in greater detail, the methodology for the research, including research design, sample selection, data collection tasks, and procedures for data analysis. Analysis and results obtained from the data collection are presented in Chapter VII.

The final chapter, Chapter VIII, explains the research findings, suggests refinements to existing models of the *geographic imagination*, discusses implications of the research, presents eight geographic themes that were derived from the empirical data, and suggests further research possibilities. The chapter also returns to the revised National Geography Standards and offers a radical departure in terms of recommendations for geography pedagogy--a "Personal Poetics of Place" and a "Five Themes of Relational Geography" in light of the framework laid out in previous chapters, especially the conceptual framework in Chapter III, the literature review in IV, the models in V, and the findings delineated in VII.

CHAPTER II

RESEARCH QUESTIONS AND PROPOSITIONS

This chapter elaborates on the research questions and propositions of the dissertation introduced in Chapter I. The research was designed to investigate a particular aspect of geographic reality: **How do middle adolescents experience and conceive of spacings and place (their** *geographic imaginations*) inclusive of all spatial scales from the local to the global. The research questions and propositions emerged from theory (chapters III and IV) and the models (Chapter V), and they provided the structure for the research design (Chapter VI). The results of the empirical research (Chapter VII) into the perspectives of spacings and place may contribute to addressing the issue verbalized by cultural geographer Denis Cosgrove: "Who are we in relation to the world?" (della Dora 2008, 385), although a just-as-valid question would seem to be, What is the world in relation to us?

Research Questions

The following are the research questions that were developed to guide this research.

Research Question 1--Sense of Place

To what extent do middle adolescents exhibit sense of place (place attachment and place identity)?

Sub-question A: How does length of residence and familial mobility, as temporal

dimensions of locality, influence *sense of place*, such that the longer the participant has lived in one location, the greater *place attachment* and/or *place identity* the participant exhibits?

Sub-question B: How does the length of residence, as the temporal dimension of parents' residential placement, affect participants' attachment to and identification with place?

Research Question 2--Globality

Are middle adolescents more cognizant of global space than of their own locale; that is, do they have greater global awareness (*globality*) than awareness of their locality (sense of the local)?

Sub-question C: Is there an inverse relationship, as the literature suggests, between *place attachment* and *globality*, such that participants who are more aware of global space exhibit a diminished *sense of place* of their locale? Sub-question D: How does time spent in a single location (the temporal dimension) influence *globality*, such that participants who spend less time living in a single location exhibit greater *globality*?

Research Question 3--Gender and Sense of Spacings and Place

What is the relationship between gender, on the one hand, and awareness of global space and sense of local place, on the other?

Research Question 4--Media and Individual Spatiality

What are the personal spatialities that result from using electronic and digital media?

Sub-question E: What is the relationship between amount of time using electronic

and digital media technology, on the one hand, and *sense of spacings and place*, on the other?

Overall, the research investigated the relative extent to which middle adolescents incorporated the following multi-scalar spatial perspectives:

- Sense of home;
- Sense of place: place attachment and place identity;
- Cognitive deterritorialization;
- Global and local awareness;
- Lived geographies, negotiate among home, place, and the global;
- Spatial cognitions of *deterritorialization* and global/local awareness.

Research Propositions

Maxwell (1996) justifies the inclusion of research propositions (or hypotheses) in a qualitative study, as "tentative answers" to the research questions. The three propositions presented below are grounded in preliminary findings proceeding from discussions with students and encounters with literatures of geography, social sciences, humanities, communication studies, discourses of globalization, and others (Chapter IV). The three propositions were not intended to comprehensively cover all possible spatial experience and *spatialities*. In the attempt to discover the lived geographic experience of the *subjective partitionings* of space of young people (their *cognitive spatialities*), the present research left open the possibility that any themes emerging from the research could turn out to be some amalgam of all these propositions--or none, with the emergence of entirely novel spatialities initially unforeseen. This, the present research engaged to uncover and explain.

Proposition 1--Geographic Hyperopia

Middle adolescents exhibit more globality (global awareness) and cosmopolitan orientations (world citizenship) than sense of place (place attachment and place identity) and locality (sense of the local). The present researcher labels this hypothesized mental construct *geographic hyperopia*--the cognitive elevation of global space, as primary, over local place. Frank White describes it as the *overview effect*, in which the "spaceflight experience" of astronauts--when "your identity is with the whole thing" (i.e., identification with Planet Earth)--diffuses to all humanity (1987, 12). Cultural geographer Denis Cosgrove terms it the *Apollonian perspective* (1994), in which "to grasp the spherical form of the earth requires an act of imagination" (2005, 3) to visualize the entire globe as if from above. Cognitive anthropologist Tim Ingold conceptualizes it as the "geological image of the world as a globe" (2000, 217). (The notions of *globality*, global spatial experience, and global identity are discussed further in Chapter IV literature review.)

Proposition 1 also emerged from environmental psychology where the notion of *environmental hyperopia* recognizes that many people are generally more aware of global environmental problems than local ones (Uzzell 2000) (possibly due to media coverage and school instruction of such phenomena as international events and global climate change). For example, Uzzell (2000) suggests that people believe (somewhat illogically) that the global environment is in worse shape than their local environment. Second, people are usually more aware of global environmental problems, such as global climate change, than local ones. Extending this conjecturally, there is a tendency, due to intense *mediatization*, (i.e., media saturation of people's lives) for people to visualize global

events and processes more readily than ones at the local level. The present research explored whether participants were more aware of global space as compared to local place.

Proposition 2: Cognitive Deterritorialization

In the contemporary era of hypermodernity, electronic and digital media and sedentary, indoor lifestyles have impacted lived geographies, so that middle adolescents are experiencing an attenuated, rather abstract sense of place (place attachment and *identity*). The lifeworlds of many people today exhibit both the material and cognitive conditions in which they seem to not live fully in any place, in lifeworlds decontextualized and disembedded at all scales, in effect, a *deterritorialization* of the individual (Chapter IV), a kind of psychological *topaphasia*, or sense of space-distortion. As Anthony Giddens asserts, a key "discontinuity" of modernity is "the 'lifting out' of social relations from local contexts of interaction and their restructuring across indefinite spans of time-space" (1990, 21)--his time-space distanciation. The advertising slogan mentioned in Chapter IV captures this diffused, *deterritorialized* spatial-cognitive condition: "There's no place better than everywhere." Placeless (culturally and spatially impoverished) places become *reterritorialized* into uniform "everywheres." Consequently, the impoverishment of physical places, by extension, is experienced by individuals as their being experientially and cognitively lifted out of local contexts and cognitively "re-emplaced" (or reterritorialized and perhaps impoverished) in lifeworlds that are socially, experientially, and cognitively unanchored to traditional places.

Proposition 3: Return to Locality

In contradistinction to Proposition 1, and possibly as reaction to Proposition 2,

middle adolescents desire a return to, and exhibit renewed interest in, and appreciation of, their locale, i.e., as a heightened sense of place and an intensification of place identity.

Concluding Comments

The Research Questions were supported by the geographic, social-science, and human-science literatures reviewed in chapters III and IV. The Research Propositions represent hypothetical positions that helped guide the research. They were used as constructs to be denied or affirmed and/or as platforms from which to compare and contrast the research data presented and analyzed in Chapter VII, and discussed in the concluding Chapter VIII.

CHAPTER III

RESEARCH CONTEXT WITHIN PHILOSOPHY AND SOCIAL SCIENCES

This chapter places the research within several paradigms that include humanistic geography, and philosophical traditions within social-science research, the latter including phenomenology and an interpretivist/constructivist approach. Provided are expanded definitional explanations of four terms foundational to the research: *cognition*, *spatial cognition*, *imagination*, and *lifeworld*. Furnished, also, is a description of research knowledge claims, general statements about methodology (detailed in Chapter VI), and the manner in which the research progressed as a general "spiraling-forward" technique. Important to this dissertation, an *embodied spatiality* is sketched out (Chapter IV). This chapter also discusses geography education, presents literature on the geography of childhood, describes the research participants, and explains the delimitations. A summary and concluding comments end the chapter.

First Terms

This section provides a lexicon of terms pertinent to this research. Concepts range from *cognition, spatial cognition*, and *imagination*, to *lifeworld*, and *embodiment* (*emplaced body*, and *embodied experience*, *mind*, or *consciousness*). These notions are all relevant to the umbrella term as used here--the *geographic imagination* (developed further in Chapter IV).

The chain of terms for this dissertation begins with *cognition* as the most basic

construct. *Cognition* may be conceptualized as "the physical and mental means by which we perceive, process, and imaginatively manipulate the world, a process that is conducted through all the senses and throughout the body" (Fox 2007, 10). This definition removes the mind from being situated solely in the brain and disperses it throughout the body.

However, a conceptualization more in tune with the "embodied experiential schema" developed in this research (and possibly an "embodied geography" as disciplinary cognate of "embodied sociology" [Williams and Bendelow 1998]) views cognition as "embodied action" (Varela, Thompson, and Rosch 1991). The field of "embodied perception" owes a great deal to French philosopher Maurice Merleau-Ponty, especially to his two highly influential books, *Phenomenology of perception* (2002; first published 1945) and The visible and invisible (1968; first published 1964). A useful statement is that of Maturana and Varela (1987, 29-30): Cognition is an "effective action" that "enables a living being to continue its existence in a definite environment as it *brings* forth its world" (emphasis added). They infer these several postulates: "this bringing forth a world manifests itself in all our actions and *all* our being" (ibid., 27; emphasis in original); "every act of knowing brings forth a world" (ibid., 26); "all doing is knowing, and all knowing is doing" (ibid.); and there is an "unbroken coincidence of our being, our doing, and our knowing" (ibid., 25). Thus the individual's lifeworld coevolves with coincidental (and "co-spatial") knowing, doing, and the environment itself. The geographic imagination as constituent of cognition (and thus of knowing) must be viewed in the same manner: Humans know and experience the spatial, geographic world as interconnected and interwoven with the homologous triad of knowing, doing, and the world itself, and that knowing and experiencing cannot be separated into discrete threads.

Spatial cognition has long been an area of interest of cognitive psychologists to identify fundamental processes of thought; developmental psychologists to investigate the evolution of spatial knowledge in the individual; and philosophers as a source for hypotheses about the nature of knowledge (Rosser 1994). This paralleled the development of behavioral geography (within human geography) in efforts to explain how spatial behavior relates to cognitive representations of space (Denis and Loomis 2007; Downs and Stea 2005). An "internalist" conception of *spatial cognition* views it as, "knowledge and internal or cognitive representation of the structure, entities, and relations of space; i.e., the internalized reflection and reconstruction of space in thought" (Hart and Moore 2005, 248). A more action-oriented view is that spatial cognition "entails the ability to mentally represent spatial relations and to anticipate the course and outcome of transformations applied to those relations" (Rosser 1994, 255). More simply, it is defined as "the human understanding and perception of geographic space" (Jiang 1998, 48).

However, the field of spatial cognition as it developed out of behavioral geography (with its behaviorist antecedents) has been subjected to extensive criticism. Geographer Denis Wood (2004) criticizes the psychologism of spatial cognition, with its predominant concern with operational definitions, measurement, and methodologies. The field of spatial cognition is also criticized for its use of experimental subjects who "never live anywhere in particular," with no social class, no social histories, and not even personal histories, such that, "they might as well be rats" (ibid., 122). The criticism is not only that the subjects are studied in inert "laboratory space," but that space itself is Cartesian background container-space allowing no human input, no human production--it

is only cognized as pure, unhumanized space. In Wood's review of Kitchin and Blades' (2002) *The cognition of geographic space*, he asserts, "if we want to understand anything about the cognition of geographical space, we must move out of the laboratory and into the geographical space in which the cognition occurs" (Wood 2004, 124).

The *imagination* comprises a "basic synthesizing activity for ordering our mental representations" (Johnson 1987, 152). It is, according to humanist geographer Denis Cosgrove, "the human capacity to form mental images, especially of things not directly witnessed or experienced" (2008, 8). Not only as part of the professional geographer's tool kit, but also for the individual, "Imagination is surely as much part of a geographical tool kit as any map or social theory" (Price 1996, 354). The *geographic imagination* incorporates these notions of imagination and corresponds to the mental representations an individual has of the geographic world (Cloke, Crang, and Goodwin 1999; Massey 1995). It "enables the individual to recognize [and imagine] the role of space and place in his own biography" (Harvey 1973, 24)--in one's own *lifeworld* (explained below). Human imagination, though, is not floating freely in a "(non)space." As spatial-cognitive psychologist Barbara Tversky reminds us, "We cannot get out of our bodies and we cannot get out of the world. We can do so only in our imaginations, but...the imagination is constrained by our bodies and the world" (2009, 213). Thus, **imagination is**

embodied, embedded (in particular socio-historical formations), and emplaced.

The *lifeworld* consists of a person's normally unnoticed, taken for granted day-today world (Buttimer 1976; Ley 2009)--the "world of the natural attitude of everyday life" (van Manen 1990, 7). Both imagination and lifeworld occur--literally "take place"--in the body which necessarily is always in a material space. Such *embodiment* is intrinsically and inextricably part of "being-in-the-world" (Csordas 1994; Heidegger 1962).

These beliefs about *cognition*, *spatial cognition*, *imagination*, *lifeworld*, and *embodiment* (*emplaced body*, *embodied experience*) outlined above, guided the present research in developing a framework for understanding and studying the *lived geographies* of high-school students. It queried its selected research participants about their "internalized reflection and reconstruction of space in thought" (Hart and Moore 2005, 248) concerning the spatiality of their lifeworlds--i.e., their *geographic imaginations*.

First Meanings: Embodied Spatiality

This section takes the philosophical position, introduced by Martin Heidegger (1962), of the human subject as grounded in and inextricably entangled with place, that is, Heidegger's *Being-in-the-World*. The place-experience of the individual--as existential "situatedness" inextricably bound to place--is co-constitutive with places that are themselves interactively, intersubjectively "placing" (the concrete "taking place" of place) in their socio-physical exigencies, while the world itself is interactively, intersubjectively "worlding" (the happening of place, the "placing" of meaning, and the "environing" of the environment) (Malpas 2006, 54). Subjectivity, place, and the world are all in tripartite, mutual co-formation. In this view, individuals cannot be expunded entirely from the reality of place, even if people tend to lose their sense of place (Meyrowitz 1985). The loss of a sense of place occurs as places themselves are "thinning out" (not as a lessening of spatial density, but as the thinning out of the underlying geographical forms of place-activity specialization, segregation, and isolation; e.g., waterfronts cleared for warehouses) (Sack 1986). This occurs while experience of spacings and place increasingly is mediated digitally and electronically. Places and their

human meanings might change, and places might lose some capacity to ground individual identity, but people still must live in some kind of place, with some kind of human meaning attributed to it. Even if the mutual co-formation of the tripartite elements--place, subjectivity, and world--continually rebalances, creating ever-new mixtures, they always constitute the ingredients of *lived geography*.

The purpose of this discussion is to argue against the ontologically dualistic (Cartesian) model of self-**and**-world, and to demonstrate the co-constitutive nature of mind-body-place, not only as interactive, but as primal *being-in-the-world* (and, we might say, the *worlding*-of-being). Only then, as is suggested in this dissertation, can the *geographic imagination* be properly examined. As ethnographer Keith Basso (1996a, 7) puts it: "We *are*, in a sense, the place-worlds we imagine" (emphasis in original). But additionally, humans, to a greater or lesser extent, are their place-worlds as *lived*. These are their *lived geographies*.

The preceding argument leads to further elaboration as developed in the present research. In this view, the human subject entwines bodily and cognitively with the geographic world--wound and twisted together in a single spatial fabric (whether or not the individual is consciously aware of this). The human subject, therefore, is emplaced within time-space; the individual is intimately situated "in its place." It seems necessary, then, to affirm an *emplaced body*, as does philosopher of place, Edward Casey (2001). To combine these strands, we can speak of an

- *embodied experience* (Johnson 1987) **of the geographical lifeworld** (Buttimer 1976), by an
- embodied mind (Varela, Thompson, and Rosch 1993) and, an

• *emplaced body* (Casey 2001).

To further the perspective advanced here, psychologist Frederic Peters postulates that consciousness itself is a subjectivity of "recursive, spatiotemporal self-location" (2010, 411). Its "self-locational schema" is structured by a tripartite reference frame of "*this* [the I-subject]-*here-now*"--a "relational process between agent and environment" (ibid.). Peters stresses that his construction of consciousness "cannot properly be considered [as has been proposed by others] as a model of the self *and* the environment...or a representation of the self model *nested in* a map of the environment" (ibid.; emphases in original). Instead, for purposes of the present research, the Peters model of the recursive, self-locational, *this-here-now* schema emplaces the human subject in integral *relationship with* its environment--an "agent [or self]-to-environment interaction"--which, perforce, includes the geographic world.

The spatial logics of each of these terms--*imagination* (as necessarily embodied), *lifeworld* (as spatially occurring), and *embodied experience*, *mind*, or *consciousness* (which must "take place")--overlaps with the anthropological notion of *place-world* (Basso 1996a; 1996b; Casey 1993, 1996, 2001; further examined in Chapter IV). To again encapsulate: We can speak of an embodied mind as co-extensive with an emplaced body, and co-extensive in relation with place. Mind/experience/body/place enacts as a cognitive-experiential-bodily-spatial entity that, to use Heidegger's term, is *worlding*.

Thus, an individual's *geographic imagination*, as a cognitive-embodied configuration, represents the perceptions, experiences, and conceptions of where he or she is located in (or with) geographic space, and this *self-emplacement* is part of the

taken-for-granted lifeworld. This research endeavored to uncover and make known the taken-for-granted *self-emplacement* that middle adolescents enact in their *geographic imaginations*.

Humanistic Geography

Within the larger academic discipline of geography the subfield of human geography "deals with mankind in his total geographical milieu" (Buttimer 1968, 135). Humanistic geography (subsumed under human geography) is part of an "alternative geographical tradition" in geography, according to Denis Cosgrove (2003, 867), and comes closest to the matters this dissertation has pursued.

The humanistic turn in human geography arose from the 1970s onwards and developed as reaction to positivism, spatial science, the mechanistic approaches of the "quantitative revolution" in geography in the 1960s, and its "reduction of geography to geometry" (Cloke, Philo, and Sadler 1991, 79). Geographer Tim Cresswell observes that spatial science required the removal of people from the scene; and that its space of study "was not embodied but empty" (2004, 19). A geographer in the 1980s recognized that the earlier spatial-science geography was "moving to the objective, impersonal, and normative" and "away from the subjective, the emotive and the singular" (Watson 1983, 386).

Humanistic geography, in contradistinction to the latter impersonal-objective stance, developed out of geography's adoption of social theory and renewed interest in humanism in the twentieth century that "put people in the center" of attention (Warf 2006, 232), and "sought to develop understandings of social life embedded in subjectivity, space, place, and everyday life" (Jones 2009, 270). The research interests common to humanistic geography lean toward "concern with understanding the humanly authored world" (Entrikin and Tepple 2006, 30)--"experiences, places, and lifeworlds" (Rodaway 2006, 264)--and is "the geographic perspective closest to experience" (Sack 1997, 297 n. 33). Its program has been to "give center stage to human awareness, human inventiveness, and individual perception of place" (Pitzel 2004, 106). One of these interests has been the study of landscape in terms of individual subjectivity, i.e., the study of environmental perception (Knox and Marston 1998).

Other humanistic interests in geography turned toward phenomenology (e.g., Buttimer 1976; Ley 1977; Pickles 1985; Relph 1970; Seamon 2007 and 2008; Seamon and Mugerauer 1989; Tuan 1971). In the words of David Ley: "Phenomenology is a philosophy which takes the everyday world with its inevitable mesh of fact and value as its centre of concern" (1977, 498). Creswell describes it as "an interpretive process in which the researcher makes an interpretation...of the meaning of the lived experience" (2007, 59). David Seamon broadens the term "phenomenological" to mean,

the excavation of human experience, first, in terms of particular persons and groups in particular places, situations, and historical moments; and, second, as this excavation engenders a *self-conscious effort* to make intellectual and emotional sense of what that experience reveals in terms of broader lived structures and more ethical ways of being, willing, and acting. (Seamon 2008, 15; emphasis added)

More than three decades ago Neil McEwen (1980) recommended a phenomenologically based school geography that emphasized the lived, subjective geographic experience of students. More recently a "geo-phenomenological" analytic methodology has been advocated for geography education (Hung 2010; Hung and Stables 2011), where *geo-phenomenology* would be the study of the human meaning of geographic experience (Hung 2010, 235). Geo-phenomenology emphasizes the human subject as emplaced in the environment where his/her consciousness interrelates with the environment (Hung and Stables 2011). The *geographic imagination* as developed in the present research proceeds out of these humanistic and phenomenological paradigms.

Research Approaches

Spacings and place are fundamental components of the deep structure of culture; they are ubiquitous, existentially immediate, and, hence, usually not part of conscious awareness. That spacings and place are embedded in the generally unreflected-upon deep structure of culture (and the mental makeup of the individual) is analogous to the general lack of awareness of the workings of the geoeconomy, about which, "the world-as-market for us is as water for fish; we do not notice what is the general and universal background to all of our interactions" (Campbell 2009, par. 13). Similarly, spacings and place also entail a pervasive matrix in which humans are enmeshed and normally not subject to conscious thought. This psychological condition is analogous to the *environmental* unconscious posited by ecocritic-theorist Lawrence Buell (2001). Buell writes that the environmental unconscious (in its negative aspect) refers to the habitual mental "foreshortening," or the "inertial" aspect, of the "apprehension of [the] physical environment and one's interdependence with it" (ibid., 22). Buell, who cites social theorist Pierre Bourdieu (Bourdieu and Wacquant 1992, 127), reasons that, in this normal state of mind, "when habitus encounters a social world of which it is the product, it is like a 'fish in water': it does not feel the weight of the water, and *it takes the world about* itself for granted" (Buell 2001, 19; emphasis added). Buell also posits a positive aspect of the *environmental unconscious* that potentially can be awakened to self-consciousness.

His thoughts about the mental capacity for conscious environmental awareness could be applied also to developing the *geographic imagination* (Chapter VIII).

What this research strove to reveal and interpret were the human meanings of spacings and place as currently experienced. Importantly, the strength of a mixed methods approach is that it is more open to interpretation and designed to reveal meaning. This approach places "the observer in the world," in order to "make the world visible" (Denzin and Lincoln 2000, 4). Cresswell (2004) asserts that qualitative studies are the primary useful methodologies for studying place. Hence, qualitative methods (combined with collection of quantitative data) are employed in the present research because they are particularly appropriate for the task of understanding the nature of place as a site of human meaning which calls for the centrality of subjectivity and experience.

An interpretivist/constructivist methodology--emphasizing the social construction of reality--underlies the orientation of this research. Constructivism holds that "both individuals and groups of individuals construct ideas about how the world works"; and recognizes that "individuals vary widely in how they make sense of the world and that both individual and collective views about the world undergo change over time" (Novak, 1987, 349). With its roots in philosophy and psychology, Matthews (2000) labels constructivism as "education's version of a 'grand unified theory." Merrill provides these assumptions of constructivism:

- Knowledge is constructed from experience;
- Learning is a personal interpretation of the world;
- Learning is an active process in which meaning is developed on the basis of experience;

• Conceptual growth comes from the social negotiation of meaning, the change of mental representations through collaborative learning (Merrill 1991, 48).

From this philosophy of learning, it was useful for this research to recognize the constructivist call for educators to understand the models--the mental structures--that young people use to perceive and conceive the world, including models of physical, social, and cognitive spacings. As eighteenth-century English novelist and dramatist Henry Fielding has a character proclaim, "Make me no maps, sir, my head is a map, a map of the whole world" (*Rape upon Rape* [1730], act 2, sc 5; cited in Montello 2002, 283). Further, this Fielding quote illustrates that people embody *cognitive maps* of spacings and places (although "map," here, is metaphorical), defined as "a person's organized representation of some part of the spatial environment" (Downs and Stea 1977, 6).

However, cognitive maps are not static mental constructs--they are flexible (ibid.). And, as Thomas Saarinen observes, "We didn't get our image of the world from running around and looking at the world" (1987, n.p.). Thus, the process of developing cognitive "maps" may be understood as "the mental process through which people come to grips with and comprehend the world around them" (Downs and Stea 1977, 61), whether from first-hand experience--"running around and looking"--or from exposure to electronic/digital media and print cartographic representations. It is the process of cognitive mapping, no matter its provenance, exhibited by young people which this research ventured to discover.

Interpretivism/constructivism is also an epistemology. Gale and Golledge (1982, 64) point out that geographic researchers often confuse the epistemologies required to address scalar differences when "transition[ing] from personal to cognitive space"--from the microscale of individual perceptions to the macroscale of (individual) cognition. Thus, they claim that empiricism is required to study *immediate sensory experiences*--the perceptual levels of body zone, portable personal space, social space, public space--by using, for example, empirical data to determine how the use of information and communication technologies (ICT) alter sociospatial relations. At larger scales, and in the long run, they recommend that constructivism be used to study the vaster cognitive spacings that lead outward to global awareness.

Research Techniques and Knowledge Claims

In this chapter about the nature and context of this research, the present researcher offers the following thoughts about the evolutionary and iterative manner in which this dissertation progressed. These comments also provide a glimpse into the research methodology, its technique, and knowledge claims.

Quantum physicist Richard Feynman, in the opening lines of his Nobel Lecture of 1965, spoke of the research process:

We have a habit in writing articles published in scientific journals to make the work as finished as possible, to cover up all the tracks, to not worry about the blind alleys or describe how you had the wrong idea first, and so on. So there isn't any place to publish, in a dignified manner, what you actually did in order to do the work. (Feynman 2000, 9)

Feynman goes on to delineate the sequence of ideas on which he worked that led to the "final" product for which he won the Nobel Prize. His long-term work developing his ideas, many which were incorrect, was clearly an iterative process of first entertaining and later casting aside various ideas and lines of inquiry. Part of his "work" included the imagining, examining, and dismissing of wrong" ideas--the "blind alleys." Of course, wrong ideas can perform most helpfully, in that they often might lead in other, even opposite directions. The present dissertation proceeded along similar iterative research lines: Many ideas were entertained, many cast aside.

In the matter of the processual sequence of developing ontological explanations about reality (i.e., theorizing), Bruce Berg (1995, 15, citing Nachmias and Nachmias 1992, 46) writes about qualitative research methods and touches on the question of which comes first: ideas or research? He reports that some researchers (Berg deals with social scientists) argue that ideas (and theory) must come before empirical research, the "theory-before-research" model that calls for deductive approaches to research. Others argue the opposite: the "research-before-theory" model that employs inductive methodologies. Berg (ibid., 16) conjoins the two models and advocates a more active role in the research process in which a "spiraling" progression transpires, as opposed to a linear process (exhibited by both the theory-before-research and research-before-theory models). In his reforged, "spiraling forward" model, no stage of the research is completely vacated.

The spiraling-forward model offered by Berg is quite similar to the progression of the enterprise of the present research. Due to the broad, multidisciplinary nature of the subject matter (experience of the place-world), the present research has journeyed, as Berg (ibid., 16) pronounces, in this peripatetic manner: "with every two steps forward, you take a step or two backward before proceeding any further." The present research, with multiple steps forward and back (and many sideward), often appeared as chaotic movements; at times, though, a coordinated choreography appeared through the glare of the stage lights. A final note about the overall research technique employed in the present research: Neil Postman, in contrasting the methods of the writer of fiction versus the social-science researcher, states that the methods of the latter tend toward the reverse of the fictionist. He proffers that the focus of the researcher, "is on a wider field, and the individual life is seen in silhouette, by inference and suggestion" (1992, 156-157). This informed the technique used in the present research, in that the spatial lifeworlds of the research participants were silhouetted against the background of current American societal spatiality as reflected in a wide spectrum of literature. In addition, as Postman explains about the method of the researcher: "using abstract social facts, [the researcher] proceeds by reason, by logic, by argument" (ibid.). In this way, the present research, employing data elicited from the research participants, but also the "social facts" gleaned from social science and other literatures, ventured to arrive at a truthful semblance of the sociospatial situation of its subjects and their *geographic imaginations*. (More detail about analytic methodologies in Chapter VI.)

Geographies of Childhood

As processes of globalization and modernization have forced rapid changes in the world over recent decades, research on its impact on children and youth has burgeoned. Changes have come also in the way children and youth are conceptualized and studied; they are viewed now as social actors who are to be consulted about their lives (Matthews and Tucker 2000). Today, children and youth are regarded as participatory subjects of research, rather than simply treated as passive objects of research (Barker and Weller 2003).

Included in the extensive research about children and youth many researchers are

addressing global education (e.g., Anderson, C. 2001; Anderson, L. 2001; Diaz, Massialas, and Xanthopoulos 1999; Gibson, Rimmington, and Landwehr-Brown 2008; Golmohamad 2009; Kirkwood 2001; Nussbaum 2002; Papastephanou 2005). Also studied is the impact of globalization on children (e.g., Aitken 2001; Katz 1998, 2004a, 2004b; Kjeldgaard and Askegaard 2006). Examples of other works include an edited volume on methods of researching the experiences of children (Greene and Hogan 2005), and a monograph on methods of researching the lives of young people (Heath, Brooks, Cleaver, and Ireland 2009).

A rapidly growing accumulation of studies--sometimes called the "new social studies of childhood"--addresses wide swaths of childhood and children's lives (Barker and Weller 2003); for example, Livingston (2009) provides a book on children and the Internet. These studies have "adopted the premise that children, as social actors, are competent witnesses to speak for themselves about their experiences of, and perspectives on, the social worlds in which they live" (Barker and Weller 2003, 208). Similarly, the present research enlisted the voices of adolescents as sources--as subjects rather than objects--for the investigation of their spatialities.

In the 1970s and 1980s, research efforts united cognitive psychology with geography (e.g., Blaut and Stea 1971 and 1974; Downs 1985; Mathews 1984), which "demonstrate[d] that space and place are fundamental aspects of children's knowledge acquisition" (Gagen and Linehan 2006, 792-793). More recently, there has been growing interest in "children's places and spaces in the world" (Frones et al. 2000, 5), or, as it has been termed, "geographies of childhood" and "children's geographies" (Phillips 2001), or even "youthscapes" (Maira and Soep 2004). A critical mass of interest in the issues

surrounding the geographic worlds of children culminated in the launch of a journal devoted to spatialities of children and young people--*Children's Geographies* (first issue: 2003). Geographic attention to children includes papers by Holloway and Valentine (2000), Katz (2009), and an edited volume by Skelton and Valentine (1998). These studies have demonstrated how children and youth are intimately involved in "shaping spaces for their own agencies and sociabilities" (Kullman 2010, 832).

An area that has not received much attention is how children perceive their spatial worlds. Nevertheless, Arnett relates that, since at least the early 1990s, social scientists have observed that "many children and adolescents now grow up with a global consciousness" (2002, 777). He quotes sociologist Roland Robertson who observes that children today develop a conscious "intensification of the world as a whole" (Robertson 1992, 8). Yet, many spatial themes of the mental lives of young people remain under-investigated and unclear, such as themes dealing with relationships to globalization, cosmopolitanism, and local places.

Researching Adolescent Spatiality

The present research targeted middle adolescents. *Middle adolescence* refers to the age-span of 15 to 17 years in age (Centers for Disease Control and Prevention 2009), the closest designation to the age of the participants of this research, who were all between 15 to 18 years old. However, the designation of terms for the period preceding adulthood is a contested arena (Aitken 2001). The historical transformation of childhood as part of Western industrialization, and more recently the "disillusion of the public and the private," has created the "global child' as a hollow category of globalization" (ibid., 120, 122). This signals a large degree of developmental indeterminacy at the boundaries

of childhood and adulthood, and of the identity of children as economic consumers (ibid., 122, 123). Aitken relates that the "plasticity" and "fluidity" of terms such as "child," "adolescent," "teen," and "youth" "seems appropriate to their shifting identities (ibid., 126, n. 2), thus he allows some "slippage" among their use. Accordingly, this research will do the same.

Unlike endeavors that have surveyed and assessed American youth for their factual geographic knowledge, few studies have looked at how children and adolescents perceive their world spatially at scales, from their home to the global arena. Instead, most studies of children's geographies have looked solely at their microspaces--home, school, playgrounds, and life at street-level--their relations in local spacings and place--and at processes of economic globalization. Little is known of the spatial perspectives of how young people perceive their own spatialities and *emplace themselves* in their own localities (including home), that is, their senses of place, nor how they conceptualize global space (as part of the *geographic imagination*). Cognitive geographer David Stea recognizes that a prominent, "remaining issue awaiting further study" concerning spatial cognition is, "What is the relation between microscale (proximal) spatial cognition and macroscale/geographic scale (distal) spatial cognition?" (2005, 998). For these reasons, the present research sought to investigate further this question by Stea, and fill the research-knowledge lacunae in three salient pre-research themes in relation to middle adolescents: sense of place, existential placelessness, and globality (consciousness of the world as a "single place" [Keane 1998]).

The visual, spatial images of the world--of spacings and place--that adolescents cognize and embody are the crucial matrix of their *geographic imaginations*, their

cognitive "mappings," that educators must understand and address in teaching geography and other social sciences. Education theorist and sociolinguist Basil Bernstein (1970, 349) believed, "If the culture of the teacher is to become part of the consciousness of the child, then the culture of the child must first be in the consciousness of the teacher." Thus, educators must necessarily understand the "spatial culture" of their students in order to effectively teach. The present research attempts to do just that: to gain an understanding of the spatial culture of the middle-adolescents in terms of their own understandings. It endeavored to answer this question: What constitutes the nature of the spatiality--the specific frames of spacings and place--in the culture (consciousness and spatial actions) of American youth? As MIT intellectual historian Pauline Maier sees it: "How can you understand what people do if you don't try to understand what they think?" (cited in Schuesser 2011, n.p.). However, for the present research, with its stance on "embodied active cognition" (Clark 1997), it is just as valid to study what people *do*, in order to infer and understand what they think.

That young people commonly ride the crest of new space-altering technological innovations (Gleick 2002) was mentioned in Chapter I. The Kaiser Family Foundation reported that electronic and digital media use among 8- to 18-year-olds had increased 2.25 hours between 2005 and 2010, totaling 7.38 hours per day (cited in Morimoto and Friedland 2011, 551). However, this is not the whole picture: Twenty-nine percent of media use-time by young people was spent in multimedia activities, i.e., involvement with more than one medium at a time. When including media multitasking (summing together all media use), the time spent rises to 10.75 hours per day (every day of the week) (ibid.).

Morimoto and Friedland indicate that it is not news that young people are immersed in a media-saturated environment, but that how this affects the lifeworlds of young people has remained understudied. They argue that "the sheer depth of media saturation has moved from a 'variable' or medium of communication to a *form of life itself*" (ibid., 550; emphasis added). They also contend that everyday life is so thoroughly intertwined with media use that no neat separation can be ascertained; and that "we can no longer understand the lifeworld of young people as *separate* from media" (ibid., 551-552; emphasis in original). If true, and as the lifeworld is partially constituted by spatial forms (the place-world), then a logical conclusion (important for this research) is that media inform a, perhaps, significant influence on the *geographic imagination*. That is, how people today (especially young people) experience and "see" the world is focused through their own lenses of electronic and digital media. In short, **spatiality is now largely mediated**. (Results of the data presented in Chapter VII address this issue.)

Geography Education

Geography as a field of study (or at least Geography Education as a major concern of the larger discipline) has not ignored the nature of the learner. With the rise of modern disciplinary Geography beginning around 1800, coming in "the wake of [Jean-Jacques] Rousseau's pedagogical revolution," according to Chenxi Tang, "topical classification and memorization of factual knowledge about the earth and its inhabitants were abandoned in favor of the methodological construction of geographic knowledge on the basis of the **knowing subject's own spatial experience**" (2008, 8; emphasis added). It should be self-evident that Tang sidestepped the actual decades-long conduct of both pedagogical and academic geography in its factual "capes and bays" pedagogical approach. However, as related by Neil Postman, the progression of Western civilization since the eighteenth century toward individualism, and propelled by Rousseau's enormously influential *Emile* (published 1762), has carried schooling along a gradual, punctuated path toward "child-centered" education, such that now, "no modern educator ignores the nature of the learner (Postman 1999, 157). The present research places the spatial lifeworld and the *geographic imagination*--the knowing subject's own spatial experience--at the center of a child-centered analysis.

One educator believes that "place" as concept, and its role in peoples' lives and identities, is an appropriate "geographical question" for inclusion in school geography (Maude 2009). This recommendation brings to the forefront the interactions of people and place. Along this pedagogical line, the revised second edition (2011) of the U.S. National Geography Standards (the *Geography for life*) contains prefatory language that indicates the appropriateness of some focus on the individual as it promotes the "geographically informed person." It presents this person-centered rationale: "[b]y understanding our place in the world... geography lets us put ourselves, and our world, into context"; and, "[g]eography enables us to understand where we are, literally and figuratively" (Geography for Life: National Geography Standards Content Committee 2011, 2-3).

Under the section titled "The Spatial Perspective," the revised *Geography for life* states, "...geography is concerned with the spatial dimension of human existence (space and place)"; it affirms "[t]he fundamental issue of 'whereness'... [which] helps humans contemplate the context of spatial relationships in which the human story is played out" (ibid., 11). Geography Standard 2 concludes with a statement promoting spatial

experience of a self-knowing subject: "Students must understand the role that perception plays in the creation and development of their understandings of the world" (ibid., 36).

Geography Standard 6, in the same document, titled "How Culture and Experience Influence People's Perceptions of Places and Regions," further advances the importance of spatial awareness:

The geographically informed person must understand that our own culture and life experiences shape the way we perceive places and regions. Perceptions are the basis for understanding a place's location, extent, characteristics, and significance. Culture and experience shape our worldview, which in turn influence our perceptions of place and regions throughout our lives. Students must understand the factors that influence their own perceptions of places and regions.... [which] enables [them]...to *reflect on their own perceptions* of places and regions. (Geography for Life: National Geography Standards Content Committee 2011, 54; emphasis added)

As Doreen Massey remarks, in referring to students' mental images of the world: "digging these things up and talking about them is a good way in the beginning to examine what it means to think geographically" (2006, 48).

Among other tasks, the revised *Geography for Life* emphasizes individual perceptions, life experiences, and worldview, as indicated above. It is reminiscent of the perspective of geographer David Harvey on the *geographic imagination*, as that which "enables the individual to recognize the role of space and place in his own biography" (1973, 24). The revised National Geography Standards clearly call for teachers to encourage some degree of self-reflexive thinking on the part of students, in terms of their own cognitive, perceptual, and *embodied emplacement* in their own place-worlds (taken up again in the final chapter).

Nature of Qualitative and Mixed Methods for This Research

The research sample was drawn from a large high school situated in a small city

(around 20,000 people), considered to be suburban. The students selected for study constituted a purposive sample comprised of 25 students, 15 to 18 years old, who were enrolled in a course of Advanced Placement (A. P.) Human Geography. Any advanced class is already a self-selected group who wants the challenges of a higher-level highschool class. Furthermore, due to the subject matter of the research, the eight students chosen (out of the 25) as interview participants were selected for their perceived articulateness and ability to provide insightful information (as recommended by numerous qualitative researchers, e.g., Polkinghorne 1989; Strife 2012). This purposeful sample limits generalizations of the findings beyond this type of school and these types of student (further description in Chapter VI); however, it was the purpose of this research to delve deeply into the subject matter inductively. The benefit of the qualitative, mixedmethods approach is a deeper understanding, as well as the development of theory that can be tested later using quantitative methods of inquiry. The research participants should have exhibited at least some of the range of spatial cognition and *lived geographies* that exist in the general population of American young people of the same age and thus produced a deeper understanding of this constellation of behaviors.

A further comment about the interviews: They were conducted in the most readily accessible "natural-life situation" (an Internet café), convenient and familiar to the researcher and all the research participants. Ideally, it would have been advantageous for purposes of phenomenological research into the cognition of the place-world at all scales to also have interviewed the research participants in their homes--the most "local" of places closer to "natural life." However, for reasons of propriety of entering students' homes, the present researcher decided not to pursue the use of this research venue. Because the research participants' homes were not used (although the topic was covered in discussion), there might be some undervaluation of home as "place."

The research sought to understand some of the human cognitive adaptations to the spatialities of the world as they present themselves today to the adolescent subject. The middle-adolescent participants in the investigation may be viewed as broadly typical of those millions who have been labeled (and sometimes vilified) as "screenagers"--those who have "grown up digital" (Tapscott 1997 and 2009).

Rationale towards Non-Generalization

Humanism (and thus humanistic geography) is a philosophy of idealism, a classification of philosophy which holds that the "knower imposes order on the world, one fundamental dimension of this order being space" (Peet 1998, 299). Thus, humanism/humanistic geography favors subjective embodied experience, such as the study of place-meaning experienced at the level of the individual. This stance, therefore, carries with it an epistemology which does not favor "external" generalizability, in which it is representative of a larger population. Indeed, scholar of research methods Joseph Maxwell believes, "the value of a qualitative study may depend on its *lack* of external generalizability" (1996, 97).

The specific research findings of the present research, then, pertain in their specificities to only these research participants and their particular locational, social, and cognitive *lived geographies*. Nevertheless, the findings may be reflective of the many thousands of other young people across the U. S. of similar age, intellectual abilities, and socioeconomic backgrounds, especially as influenced by the nearly ubiquitous adoption of the new, personal-media technologies. Yet, the value of the present research--and its

potential generalizability--may be this, as stated by Maxwell: "the generalizability of qualitative studies usually is based, not on explicit sampling of some defined population to which the results can be extended, but on the development of a theory that can be extended to other cases" (ibid.). The present research did just this: It aspired to develop workable models of spatial cognition and an empirically informed advance in theory about the *inner geographies* and *geographic imaginations* of young people. These theoretical formulations, presented in chapters VI, VII, VII, may prove to be extendable to other populations, especially as new spatialities continue to diffuse through larger populations.

Summary and Concluding Comments

This chapter has dealt with the overall intellectual context of this dissertation by engaging various fundamental topics and perspectives found in postmodern thought relating to *embodied cognition*, or theories relating to the *embodied mind*. It set the philosophical stage for the concept of *embodied spatiality*, in which an emplaced mind and body are configured. As the frame for the present research, this refers to the "*self-emplacement*" of adolescents as reflected in their *geographic imaginations*.

This chapter further prepared the ground for review of the literature (Chapter IV) by defining cognition, spatial cognition, imagination, lifeworld, and embodiment. It specified the field of humanistic geography--a people-centered approach--as rationale and context for the research. A qualitative methodological approach--designed to uncover meanings--was proposed as proper methodology for an endeavor to study spatial experience. Interpretivism/constructivism as the epistemology and theory of learning-- experiential knowledge construction--was explained as undergirding the orientation of

the research. And, a "spiraling-forward" progression of research was described as how the present research actually proceeded.

Other topics addressed in this chapter were the research of adolescent spatiality; and the "new social studies of childhood," which views children and adolescents as competent actors who can serve as legitimate sources of data about their own worlds. Geography education was addressed with the revised National Geography Standards (2011) in terms of how they deal with matters of spatial perception and self-reflexivity.

The next chapter (Chapter IV) surveys the multidisciplinary literature concerning spatial experience, beginning with the big picture of planetary spatiality, and funnels toward the particular topic of this dissertation: the *geographic imagination*.

CHAPTER IV

LITERATURE REVIEW AND THEORETICAL UNDERPINNINGS

English philosopher John Locke observed in the seventeenth century that discovery of the New World "enlarged the sphere of contemplation" (Marshall and Williams 1982, 258). Several centuries later, with the advent of instantaneous communication, ubiquitous media, and globalized economic and cultural interactions, a salient, even critical, concern of our time is the question of the constitution of the "sphere" of our spatial contemplation and *geographic imagination*: How do people today experience the spacings of the world? According to Derek Gregory, "spatialization refers to those ways in which social life literally 'takes place," in which space is given a "double valency," in that it is "coded in both physical and social terms" (1994, 104). Such experience of the spacings of the world is a person's *spatiality* or *lived space*, the space of the "lived world as experienced in everyday situations and relations" (van Manen 1990, 101). Thus, spatiality, perforce, has cognitive dimensions. As Doreen Massey pronounces about the "geographical mind": "It is probably now well accepted, though it is still important to argue, that a lot of our 'geography' is in the mind" (2006, 48).

This chapter lays out ways in which people today articulate their spatial worlds-the geography in their minds. Its purpose is to amplify the present researcher's conceptualization of the *geographic imagination*--the central construct of this research.

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The chapter commences discussion with the idea of the "Global Age," the contemporary historical period, followed by sections about global awareness and cosmopolitan citizenship, and, subsequently, funnels toward ever smaller-scale or more specific topics: from the globe to the body. After global issues, the discussion continues with description of the polarities of the continuum of historical spatialities in the American lifeworld-rootlessness and place-attachment. Discussion of further contemporary ideas of spatiality follows, with a look at the spatial effects of electronic and digital media. Next, cognitive deterritorialization and placelessness are discussed as common responses to the social forms of the new socially disembedded spatialities. This is followed by elaboration of the pivotal notion of *place-as-embodied-meaning*. Then comes an explanation of *place* attachment and sense of place, and "geographic identity." After defining place, a fundamental geographic construct, the discussion (in the section titled "Living in the World") further develops the "embodied meaning of place" by examining the key concepts of *lifeworld*, *place-world*, and *person-as-place*. The notion of "dwelling perspective," which gives further (literal) "body" to the account, is explored. Finally, all the foregoing leads to the central construct-*spatiality of the geographic imagination*-before a brief discussion, summary and concluding comments.

Global Age

Some historians distinguish between the long-established, internationalized world history and a new *global history* (Albrow 1997, 2007; Geyer and Bright 1995; Mazlish 1998; Mazlish and Buultjens 1993; O'Brien 2006; Robertson 1992, 1998; Schafer 2001, 2003). Schafer (2003) characterizes the difference as a radical shift in focus, where world historians have been interested in individual, rather isolated, civilizations and their epic struggles, while global historians are chiefly interested in past and present globalizations and their contemporary outcomes. Schafer periodizes world history in the current epoch as the *Global Age*. He explains that in the last quarter of the twentieth century, "The mycelium of a global civilization" spread around the globe and a "technoscientific civilization has begun to cover the globe. We are moving toward a global civilization with many local cultures. The local cultures are the flesh and blood of this world and the emerging technoscientific civilization is its nervous system" (Schafer 2004, 72). A group of geologists and earth scientists has concluded that there is sufficient evidence for international formalization of the designation of an *Anthropocene* geologic epoch (commencing ca. A.D. 1800) to reflect the salience of the current period of anthropogenic global environmental change (Zalasiewicz et al. 2008). These two developments point to both current human history as global and the globe itself as "humanized," for better or worse.

The seemingly all-pervasive engine by which many facets of life are becoming worldwide in scope is *globalization*, collecting in one concept all those integrative forces that are working to make the world of human actions function as a single "place" (Keane 1998; Robertson 1992). Cosgrove states that "globalization is a driving idea of our times" (2001, ix). Author Thomas Friedman claims that globalization is "the defining international system" of the post-cold war world, "a system increasingly built around integration and webs;" thus, the world is "an increasingly interwoven place" (1999, 7, 8). Globalizing social processes, although commencing centuries earlier, continue to profoundly affect many areas of social life. Economic geographer Peter Dicken, among others, points to the "fundamental redrawing of the global economic map"--a "global

shift"--that has transformed the world economy into a "geoeconomy" (2003, 1). The sociospatial forces associated with globalization are such, that, "human lives are increasingly played out in the world as a single place" (Scholte 1997, 14). Further, globalization not only affects corporations and nation-states, it is a system "enabling *the world to reach into individuals*...faster, deeper, cheaper than before (Friedman 1999, 9; emphasis added).

Scholte finds in the multidisciplinary literature five broad characteristics assigned to globalization: 1) internationalization; 2) liberalization; 3) universalization; 4) westernization or modernization; and, 5) *deterritorialization* (2000, 15-17). While many social scientists perceive deterritorialization as a secular process that is adequately explained by the other four pre-existing concepts (Smith 2002), Scholte argues that it is only deterritorialization that offers any new insight into globalization. Commenting on *deterritorialization*, he asserts,

The proliferation and spread of supraterritorial...connections brings an end to what could be called "territorialism," that is a situation where social geography is entirely territorial. Although...territory still matters very much in our globalizing world, it no longer constitutes the whole of our geography. (Scholte 2000, 46; cited in Smith 2002)

In general terms, this research explored whether these kinds of space-bending, sociospatial effects of globalization are reflected in the lifeworlds of middle adolescents.

Global Awareness

Instead of cultural beliefs, social science frequently speaks of "imaginaries." For some theorists, the imaginary is a "shared cognitive schema" generally extant in society. This is a line of theorizing in terms of abstractions and assumes all individuals share the imaginary (Strauss 2006). A widely acknowledged social and individual construct is that people in postmodernity "share" or are individually imbued with a *global imaginary* or planetary or global awareness or consciousness (Albrow 1997; Cosgrove 2001; Heise 2008; Ingold 2000; Keane 1998; Robertson 1992; Thomashow 2002; Turnbull 2006; Uzzell 2000; Waugh 2005), in which case the individual--a "geohuman"--exhibits the psychological construct of *globality* (Robertson 1992). In terms of person-centered analysis, and as justification for the present research, this area is under-theorized (and over-generalized), in that "shared cognitive schemas" are theorized only at the level of society without benefit of data collection at the level of the individual.

The integrating forces of globalization are more than economic and supraterritorial; importantly, they are also cultural, social, and even psychological. They are not only effecting fundamental changes in nearly every place on Earth, but they seem to be quickly reforming the sociospatial worldviews of large masses of individuals. In addition to the totalizing impacts of globalization, other driving forces associated with it-rapid increases in global travel, global product branding and advertising, and 24/7 news production--have led people worldwide to view the world as a unitary (but not unified), interconnected globe. Dirlik sees globalization as not only a historical process, but also a discourse of a "self-consciously new way of viewing the world" (2000, n.1). In view of these processes of modernity and globalization which are engendering awareness of a global system of physical and social interactions across space and time, Roland Robertson (1992) uses the term *globality* to refer to "global consciousness"--"an intense awareness of the world as a whole." Gibson-Graham assert that the world economic system engenders a "global imaginary" with implications for how individuals "feel, act, and identify" (2003, 49). They contend that those forces consolidate not only through

institutions, but also "through subjects who experience themselves as increasingly subsumed to a global order," while "our familiar social container erodes." As geographer Alastair Bonnett remarks.

Stories of journeys to far-flung destinations are told everywhere and by anyone. We are all, more or less, *plugged into our planet*. Its availability and accessibility have created a mass cosmopolitanism. Our wired up, footloose, travel-bugged world is stage to expanding and mutating forms of global geographical awareness. (Bonnett 2008, 5; emphasis added)

This personal, cognitive aspect has been popularized since at least the Second World War, when that global conflict instigated a "geographical reorientation [that] demanded a fresh recognition of the earth's spherical shape" (Schulten 2001, 205); and news cartographer Richard Edes Harrison created widely distributed maps (e.g., Harrison 1944) in which the public could see Earth's sphericity and global relationships (Schulten 2001, 214 ff.). Geography textbooks, such as *Our air-age world: A textbook of global geography*, took this "new point of view" to school-age children in its pages and instructed that, "It took a global war to focus our attention upon the necessity for global geography" (Packard, Overton, and Wood 1945, 2). The textbook explains, "The results of the conquest of the air are so manifold that one can scarcely compute their far-reaching effects. One of the most startling changes to come in our day is the change in our viewpoint concerning the earth on which we live" (ibid.). Americans were commencing a *pedagogy of the global*.

Denis Cosgrove excavates the long genealogy of Western imaginings and representations of the whole Earth, even though it was not physically possible to view the Earth as a whole until the late 1960s through the agency of the American space program. The NASA photographs of the whole world--given partial credit for the first Earth Day celebration, in 1970--"echoes through the language and imagery of globalization" (2001, ix).

Two NASA space photos have been especially influential in humanity's view of the Earth: *Earthrise* (NASA AS8-14-2383), photographed by Apollo 8, in December 1968; and the numeronymous 22727 (NASA AS17-148-22727), photographed by Apollo 17, in late December 1972. *Earthrise* (Figure 1) was taken from lunar orbit and shows a half-Earth, with the lunarscape in the foreground. The 22727 shows one side of the planet, with swirling clouds, expanses of ocean, and the continent of Africa. These two Earth photos have been reproduced endlessly and have become enormously important (Cosgrove 1994). Cosgrove quotes from American poet Archibald MacLeish's essay published in the *New York Times*, on 25 December 1968; quoted again in *National Geographic*, May 1968, accompanied by color centerfold reproduction of *Earthrise*:

For the first time in all time men have seen the earth: seen it not as continents or oceans from the little distance of a hundred miles or two or three, but seen it from the depths of space; seen it whole and round and beautiful and small. (MacLeish 1968; cited in Cosgrove 1994, 283)



FIGURE 4.1. Earthrise (NASA AS8-14-2383) (1968)

Although the image of Earth floating in space was prefigured in human conceptualization long before the actuality of the first humans to see the planet from space and to capture photographic images of the planet, the NASA photos of Earth helped to remake the image that humankind had of itself and Earth. People for the first time saw actual photos of Earth hanging in space and perceived the planet as a single entity and themselves as inhabitants "englobed" in the single, contiguous space of the planet. This above-Earth perspective is now ubiquitous. Cosgrove speaks of the twentieth-century's bird's-eye view of the Earth (Cosgrove calls it the *Apollonian perspective* or *gaze*), "in terms of an altered spatiality of globalization, as connection and communication, networks of individual points linked across invisible channels over a frictionless surface, generating and transforming a virtual globe" (2001, 236).

Cosgrove maintains that the "...Western cosmopolitan tradition has been closely connected to the idea and image of the globe, and thus to such forms of geographical representations as the world map and the atlas" (2003, 853). These events--voyages of discovery, and publication of cartographic works (maps, atlases, globes) and "geographies"--occurred at the beginnings of the modern era and contributed to the evolution of a global awareness.

Reaching further back in history, Roland Robertson and David Inglis (2004) impute *presentism* to many contemporary accounts of globality. Their analysis of classical Mediterranean civilization is intended to dispel the notion that forms of consciousness of global society or global culture are present only recently for the first time in human thinking. In the modern spatial imaginary, "all the planet's geographical areas are seen to be intimately interconnected with each other;" and, the Earth is regarded as "one place" (ibid., 38). They relate that it would be plausible to contend that beginning with European explorations toward the end of the fifteenth century and the concomitant innovations in global cartography, ideas of globality were initially and solely the cultural expressions of Western modernity. By recounting what they call the "global animus" (global "spirit") of much thinking in ancient Greece and Rome (ibid., 39), Robertson and Inglis' paper disputes that global sensibilities first occurred in the modern world (ibid.).

As a result of their analysis, Robertson and Inglis maintain that far from occurring sporadically or tangentially in extant literature of the Greco-Roman civilization, ideas of globality appear as a "central preoccupation" and were a "reflexive self-interrogation" of its globalizing tendencies (ibid.). They relate that beginning in the fourth century BCE some Greek thinkers began to think of the "world as a whole," ideas that were later taken up by Roman writers. The latter understood that the Roman Empire extended "worldwide" in scope; that Roman imperialism created conditions for "worldwide" travel, commerce and the movement of ideas; and that Rome, itself, was a "world city" (ibid.). Robertson and Inglis, then, claim that ideas of *globality* are not new, and extend as far back as the Greco-Roman "global animus"--the perceptions of the Roman Empire by contemporary Roman intellectuals (ibid.).

Cosmopolitan Citizenship

As part of the ideological shift that has accompanied globalization, academic interest in *cosmopolitanism* continues to grow, evidenced by the announcement by David Harvey (2000, 559) more than a decade ago: "cosmopolitanism is back." Academic geography's contributions to cosmopolitanism are deep and complex, according to Denis Cosgrove (2003), although Schueth and O'Loughlin (2008) claim that geographers have made few contributions. In any case, "some form of geographical knowledge," according to Harvey, "is presumed in every form of cosmopolitanism" (2000, 557). The present research posits that cosmopolitanism as a personal precept (including belief in world citizenship) must necessarily inform a *geographic imagination* that reflects some degree of globality. (There are questions in both the Questionnaire Instrument and Interview Schedule querying global citizenship.)

Cosmopolitanism is a politico-philosophical worldview that in its most generalized form refers to an intellectual and esthetic sense of tolerance toward other peoples, places, and experiences (Matthews and Sindhu 2005). In common usage, *cosmopolitan* refers to an entity, perhaps a city, composed of elements from all or parts of the world; and, towards a person, it refers to one who is free from local and national prejudice (Small and Witherick 1995). In recent usage, it frequently is associated with some form of world citizenship (also designated as global or cosmopolitan citizenship).

Cosmopolitanism is not new. For nearly two and a half millennia people have proclaimed allegiance to the ideal of global citizenship (Bowden 2003). Ancient Roman thinking about globalism had its antecedents in Greek thought. The latter conceptualized a person's socio-political affiliations as two possible opposing "citizenships." One was loyalty to one's *polis* (or city-state) of birth, such as Athens or Sparta; the other expanded a person's horizons beyond "parochial limitations" to include the whole world (*oikoumene*), as citizen of the world, a *cosmopolite* (Robertson and Inglis 1994, 40). Many Stoics of the Greco-Roman world affirmed themselves as *cosmopolites*, as opposed to citizenship in merely a *polis* (Dower 2000). Socrates was perhaps the first to identify himself a world citizen, declaring, "I am not an Athenian or a Greek, but a citizen of the world." A century later, Diogenes the Cynic declared his world citizenship. In AD second century, Marcus Aurelius issued his well-known declaration: "My city and country so far as I am Antonius is Rome; but so far as I am a man, it is the world" (cited in Bowden 2003). Aurelius was indicating that his home city, the place where he had political rights, was Rome, but as a human, his "home" was the wider world of all humanity. Thus, Aurelius, Socrates, and the Stoics situated themselves, simultaneously, both locally and globally.

Cosmopolitan thinking declined after the ancient Stoics, but a renewal dawned in sixteenth-century Europe. Early modern geographers valued seeing the world as a whole. Sebastian Munster, the German humanist who, in 1592, authored *Cosmographie*, the best-selling work of all sixteenth-century geographies, declared, "To learn something fruitful about the provinces of Europe, Africa and Asia, it is in the first place necessary to visualize the world as a whole..." (translated in Kish 1978).

Global awareness was on the increase more than a century and a half previous to Munster. Developments contributing to greater global awareness included, 1) the translation and publication, in 1410, of Ptolemy's *Geography*; 2) Prince Henry's 1418 establishment of the Sagres, Portugal, research and development institute; 3) invention of the printing press by Gutenberg, in 1455; 4) circumnavigation of the globe, in 1519-1520, by Magellan's crew; and, 5) Mercator's maps and atlas, created around 1569 (these facts from Rosenberg n.d.).

Modern philosophical cosmopolitanism commenced as a movement among eighteenth-century Enlightenment intellectuals, such as Thomas Paine and, particularly, Immanuel Kant, who believed that universal principles of humanistic solidarity exist and that they, perforce, transcend state borders. States were held to be responsible for violence and war (Opello and Rosow 1999). The eighteenth-century Enlightenment view accepted that it did not matter whether an individual was English or French, but that the individual, in rational thought, united with wider humanity. The Enlightenmentcosmopolitan view was a normative project that valorized universal humanity and left out of the equation any salutary ties to the nation or locale.

More recent views of cosmopolitanism attempt to move beyond the dialectics of local/global and particular/universal discourse. As seen above, the abstract-idealist position has viewed the individual as spatially indeterminate, not bound to any real place, but, instead, with normative allegiance to a diffuse "humanity." In attempting to study "geography of cosmopolitanism," Schueth and O'Loughlin (2008) look to the oft-cited essay by Doreen Massey (1993), who inflected the discourse toward a positive, outward-looking, "global sense of place." The spatiality of a global sense of place entails a "global sense of the local," according to Massey, in which a "progressive" view of places "includes a consciousness of its links with the wider world, which integrates in a positive way the global and the local" (ibid., 239).

In order to move beyond a purely theoretical treatment and to develop a platform for their empirical study, Schueth and O'Loughlin (2008) inject into cosmopolitanism the notion that global consciousness and the attitude of "belonging to the world" as a whole should not exclude local attachments--a kind of "rooted cosmopolitanism." They present the view that cosmopolitanism--the belonging to the whole world as a "globalization from within"--nests within it a geographic sense of place, a "sense of world-place" (citing Beck 2002). Local place (whatever its boundaries), in this view, still matters.

Traditional American Spatialities

Historically there have been two dominant practices in America of how to relate to *lived space*, how to live in the locality--two opposing habits of settlement and presence on the landscape. Partly the questions fall under the old rubrics, long extant in academic geography, of the two binary oppositions of local/global and place/space. Individual adjustments to globalizing forces manifest as wide differences in people's spatial lifeworlds. Although there are as many ways to relate to place as there are individuals, the two dominant, traditional, opposing tendencies in American society are *voluntary rootlessness* and a *committed attachment to place* (Leach 1999). These two opposing lived geographies of the American experience on the landscape provide some historical basis from which to assess any hypothetical contemporary existential *deterritorialization* and placelessness.

Historian Page Smith (1976), in his review of the post-Second World War book by British artist and writer Wyndham Lewis, *America and Cosmic Man* (1948), said that Lewis promoted the notion that "a new human type has developed in America." That new type was one of "rootlessness," one in which Lewis, when he visited America, paradoxically felt "at-home,"

not because it [the U. S.] is intrinsically a more interesting country, but because no one really belongs there any more than I do. We are all there together in its wholly excellent vacuum... I know in that country that everyone has left his roots over in Poland or Ireland, in Italy, or in Russia, so we are all *floating around in a rootless* Elysium... [I]t feels just grand to be drifting around in a sea of Poles, Lithuanians, Irish, Italians, Negroes, Portuguese, French, and Indians. It is the kind of disembodied feeling I like. (Lewis 1948, 165; emphasis added)

More than a century earlier Alexis de Tocqueville recorded similar American habits

when he observed they were a restless people: "Millions of men are all marching together toward the same point on the horizon; their languages, religions, and mores are different, but they have one common aim. They have been told that fortune is to be found somewhere to the west, and they hasten to seek it" (Tocqueville 1988, 281).

American poet, essayist, and agrarian Wendell Berry relates that the dominant tendency has been that, "as a people, wherever we have been, we have never really intended to be" (1977, 3-4). Mark Twain's Huck Finn had his personal (and fictional) push/pull factors to contend with (civilization did not agree with him) when he felt compelled to "light out for the territory ahead." But millions of other nonfictional Americans took part in the protracted migration across the continent, as Tocqueville had observed. This continues into contemporary times. With local mobility counted in the tabulations, the 1990 census recorded that Americans had moved on average once every four years (Hardwick and Holtgrieve 1996, 275). This personal fulfilling of "manifest destiny" to occupy the continent proceeded from the early European dwellers on the land, a people who were "addicted with the expansionist view" (Lemon 1990, 144).

The significance for today of the "westward movement" across the continent and the particular way the land was settled can be illustrated by considering the tenet in historical geography known as the "Doctrine of First Effective Colonization." It holds that "the first group to colonize an area effectively will be of singular importance in shaping the cultural landscape of that area" (Nostrand 1990, 62). The cultural landscape "involve[s] not only the content in the landscape but also the *perception* of that content" (Mitchell 1990, 5; emphasis added). Thus, the "landscape impress of the forebears," valorization (Nostrand 1990, 62). An important strand of that impress and perception created the previously noted "disembodied feeling" of the "new type of human in America" (Lewis, 1948) who has practiced voluntary rootlessness with concomitant tenuousness to actual places. As Tuan claims as a general statement (one that is important to the present research): "Americans have a sense of space rather than a sense of place" (1974, 8).

Yet, place is persistent in American society. This informs the second tendency: the committed attachment to places. (Explored below in the Place Attachment/Sense of Place section.)

These, then, have been the two dominant tendencies of human presence on the continental landscape since the beginning of settlement after 1492: a transient rootlessness, in contrast to an enduring, settled dwelling on the land (or in the city). There were people who stayed wherever they settled, and there were people who pushed on toward the horizon.

The purpose of this brief sketch of the history of spatiality in America was to delineate the oppositional lifeworlds of placelessness and rootedness. It was not meant to set up a false dichotomy (or "false alternatives"), i.e., a distinction between the two either/or options of a wandering American rootlessness, and a committed-to-place emotional attachment. A false dichotomy does not accurately present the range of available possibilities (Baggini and Fosl 2010). And, we would expect the human experience of spacings and place to be as wide ranging as there are differences in the situatedness of people's lifeworlds. However, these dichotomous experiences of place (rooted and placeless)--at opposite ends of the continuum of lived geographies of American life--are the focus of much unsettled, multidisciplinary attention. Along with sense of place, they are also the lens through which the present research examined the *geographic imaginations* of young people.

Contemporary Spatiality

One of the great themes of modern Western intellectual history is the impact on the Western mind of the coming in contact with new places, peoples, and cultures, in the sixteenth to nineteenth centuries, which resulted from European discoveries of new worlds and settlement of new lands (Marshall and Williams 1982). More recently, since at least the twentieth-century observations of media theorist Marshall McLuhan (1962; 1964), and media and culture critic-educationist Neil Postman (1985; 1992), intellectual ferment has brewed around the questions regarding the social and cognitive impacts of new developments in electronic and digital media and communication. Like the cultural contact and settlement during the Age of Discovery and colonization, the societal "contact" with new technologies of information, media, and communication is widely believed to elicit intensive and extensive social changes, as reflected in how individuals perceive, conceive, and experience their worlds (Appadurai 1996; Carr 2010; Friedman 1999; Hillis 1999; Kneale 1999; Kotkin 2000; Meyrowitz 1985; Morley 2000; Opie 2008; Ritzer 2004; Wood 2009). As Michael Peters points out, it is "increasingly in terms of computer [electronically/digitally] communicated networks that we act and define ourselves as subjects" (1996, 100).

Geographers and others frequently have recounted changes in physical places in the current era of capitalist modernization and globalization--from homes to schools, from cities to countries. But it is not only places that have undergone transformation; the individual as agent also has responded in life-changing ways to forces of modernization, globalization, and developments in space-altering "technologies of speed, distance, and information" (Thomashow 2002). These volatile processes of modernization have resulted in experiential *time-space compression*, and have forced alterations in "how we represent the world to ourselves" (Harvey 1989, 240). A key transformation in the Computer Age (but one with long, historical continuity) is the manner in which humans today experience the rapid time-space compression and other radical transformations of the place-world. Novelist Richard Powers puts it this way: "Other inventions [he mentions printing press, car, and airplane] alter the conditions of human existence. The computer alters the human" (2000, 159). A crucial question, therefore, reverses the perspective by gazing outward through the digital screen (and other electronic devices) to the viewer/user, and asks--"How has the contemporary place-world transformed the human subject?"

To illustrate some of the mutating spatialities of the twenty-first-century lifeworld, the example of an African chieftain living today in suburban Maryland is informative (Phillips 2006). The chief is the hereditary ruler of a village in Cameroon, in a kingdom in existence since the fourteenth century. To maintain close ties to their ancestral village, nearly 6,000 miles and a continent away, indeed to rule over his subjects, the chief and his wife commute to their African home two or three times each year. But, on a daily basis the chief stays in close contact by cell phone and laptop computer, on which his court docket is kept current. The author writes of the chief, who "juggle[s] ancient and modern ways":

Like the best and brightest from other corners of the developing world, Africans who prosper in the global economy often leave home to do so. But many maintain close ties to ancestral villages, where their relatives still live by ancient traditions... [M]any of its educated elite manage to transcend these problems [of strife and poverty] by *living in two worlds*. (Phillips 2006, A1; emphasis added)

The narrative (above) of the African chief actively carrying out traditional duties while living in distant/proximal America indicates some of the radically changed spatial exigencies of lifeworlds in the twenty-first century as compared to only a couple decades ago. Here it is tempting to report that the global village of Marshall McLuhan's (1962; 1994) has been instantiated. He wrote, some five decades ago:

the electro-magnetic discoveries have recreated the simultaneous 'field' in all human affairs so that the human family now exists under conditions of a 'global village.' We live in a single constricted space resonant with tribal drums. (McLuhan 1962, 43)

The story of the distant/proximal chief also illustrates how technological and social forces that alter spatial and locational social forms constitute a significant part of the evolving sociocognitive conditions of contemporary times. Ongoing research by a wide variety of scholars with a rapidly expanding body of literature across the humanities and social sciences investigates how the individual adjusts to these profound changes. A proposal for a new field of study-*psychotechnology*--encourages the examination of the "psychological conditions of people under the influence of technological innovation" (De Kerckhove 1997, 2). The *geographic imagination*, as sociocognitive manifestation, presumably undergoes modification as technology changes. Indeed, De Kerckhove specifies that a dominant concept of the televisual saturation of society during the 1970s was the spatiality of "Being everywhere at once" (ibid., 131). Whereas, today, De Kerckhove contends, a dominant spatiality of the computer penetration of society is the "Being here and now where it counts" (ibid.).

Much of the current interest in the mutating spatialities of human life is devoted to understanding individual responses to space- and place-altering digital technologies and contemporary social changes. As part of this new logic of spatiality, some scholars of human affairs posit a developing cosmopolitan mindset that considers not only global problems and issues, but is also one that produces an encompassing global consciousness, or *globality*, the term used by Roland Robertson (1992). At the other end of the spectrum, others observe renewed interest, activity, and awareness of local affairs and **local** self-identification as reaction to the alienating forces of modernization and globalization (Duncan and Duncan 2001; Gruchow 1995; Lippard 1997; Thomashow 2002). In terms of geographic research, Meyers et al. specify, "the geographical imagination is most fully exercised when it wanders across a range of scales, teasing out the connective tissue that binds different levels of the local-to-global continuum together" (1995, 255). This discourse revolves around issues of spatiality of the lifeworld: how individuals should adjust to the profound space-and-place altering changes, how they should live, how they should think.

An individual's store of geographic knowledge is increased by physical connections the person makes with places (e.g., through bodily travel), and by way of perceived connections of educational experiences (through educational materials such as textbooks, maps, etc.). However, as later will be made clear, in a society that is so heavily *mediatized*, the *geographic imagination* is also product of various means of electronic and digital information and communication technologies, including television, Internet, and cell phone, through their capabilities of distant and instant communication. The conceptual *self-emplacement* in interacting physical and mediated spacings, a particular

focus of the present research, is today a crucial part of the taken-for-granted lifeworld (Adams 2002; Alexander 2004; Meyrowitz 1985; Thompson and Cupples 2008).

Christopher Apap stipulates that for those who have followed in the wake of Henri Lefebvre (1991) (and his thesis that space is socially produced and thus the naturalized and hidden stage upon which events of the world and humans play)--"space has come to be seen as paradoxically veiling [or hiding] the interactive human conditions of its [space's] own formation" (Apap 2008, 12). That is, while space is socially "constructed and continually negotiated," it is nevertheless hidden from everyday awareness. If we take place-connection as a human need, but the space of place conceals the means of its manifestation (i.e., is actively hiding itself), then it follows that **people** today are finding novel ways of connecting to the spatial world. One salient manner by which this seems to be occurring is by *embodied connectivity* to the lifeworld through means of electronic and digital media (Turkle 2011). As people attenuate their connections with the "real" world, electronic and digital interfaces now perform a significant portion of the mediation for people vis-à-vis both the virtual and real (Nusselder 2009). Thus, people increasingly need (or at least use) electronic interfaces to help them maintain a semblance of connection to their lifeworlds--the "digitalization of reality" (Quartiroli 2011), including their place-worlds.

Cognitive Deterritorialization and Placelessness

As discussed above, the current era is one in which space, spatiality, and human perception of space are increasingly undergoing modification. In addition, over the last couple of decades, a great deal of attention from across the social sciences has focused on postmodern *nonplace* and *placelessness* (Auge 1995; Hooykaas 2009; Relph 1976; Ritzer 2004). Attendant with globalization, placelessness, spatial segmentation, and fragmentation and homogenization of lifeworlds (Adams 2002; Appadurai 1996; Berry 1977; Iyer 2000; Leach 1999; Meyrowitz 1985; Opie 2008; Tuan 1982), it is thought that Western societies, America in particular, have fostered places that have lost their distinctiveness--they become "nowhere" places (Kunstler 1993).

The present research develops the thesis that "placeless places" interoperate with "placeless people." There is the widespread belief, discussed above, that American society has had from its beginnings a deep strain of rootless, placeless restiveness. Some observers see rootless lifeworlds continuing apace, even intensifying, but due now also to modern forms of electronic and digital media (Meyrowitz 1985). Small wonder, then, that it is thought by many that the forces of modernization and globalization, implicated in building "nowhere," placeless places, along with modern forms of electronic and digital media, lead to "increasing confusion and incoherence in our social senses of space and time, in our [mental] maps of the places where we live, and our ideas about the times by which we organize our lives" (Strinati 2004, 208).

As places lose their distinction, people are thought to lose their sense of where they live--they become *deterritorialized*. It captures the notion of the "weakening of ties between culture and place" (Heise 2008, 21). Appadurai writes of the "growing disjuncture between territory, subjectivity, and collective social movement"--indicating a thinning of relations between people and place (1996, 189).

Social forces of hypermodernity and "space-altering technologies" (Adams 1992), including current forms of electronic and digital media (computers, cell phones, FAX, Internet, instant-messaging [IM], and text-messaging), plus jet travel, promote *time-space* *compression* (Harvey 1990a) and engender a ubiquitous spatial connectivity. They restructure our experiences of embodiment, identity, home, space, and place. Social scientists describe changing subjective experiences of spacings and place in an expanding array of terms: *omnitopia* (Wood 2009), nonplace, existential placelessness, rootlessness, loss of *sense of place, deterritorialization*, ubiquitous connectivity, *time-space compression*, spaces of flows, and a general globalization and thus "aspatiality" of phenomena and human experience. This is exemplified by an advertisement on the cover of an issue of *Credit Union Times* (2009) about "shared branching" (Figure 4.2). It shows a man fishing in Maine who "makes a cash deposit 1,200 miles from home" in a credit union that "branch shares" with his own. The advertisement proclaims, "**There's no place like everywhere**." As Denis Cosgrove might say, the bank's customers form a "network of invisible points linked by invisible channels over…a virtual globe" (2001, 236).

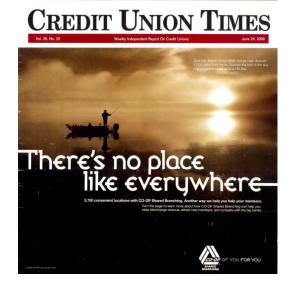


FIGURE 4.2. Credit Union Times (front-cover advertisement) (June 24, 2009)

Place Attachment/Sense of Place

A person's sense of place entails the collection of meanings, beliefs, symbols, values, and feelings that individuals or groups associate with a particular locale (Datel and Dingemans 1984, 135). Places are more than containers of the built environment, more than objects of the human landscape, they are locations imbued with history, memories, and emotional and symbolic meanings. Stedman (2002, 563) adds the personal attributes of attachment and satisfaction to symbolic meanings. Tuan asserts, "What begins as undifferentiated space becomes place as we get to know it better and endow it with value" (1977, 6). The meanings and values people assign to a place represent their sense of that place, whether they have visited there in person or not. It is thought that *sense of place* is important in framing and sustaining individual and collective identities. If it is a person's home city or area, it might involve deep, emotional connections.

A person's identity is partly determined by where he or she see him/herself as living. Further, as Eudora Welty has said, "One place comprehended can make us understand other places better. A sense of space [and place] gives equilibrium, a sense of direction." Thus, understanding the "whereness" of one's existence (the place-world)-one's degree of rootedness--not only helps in knowing oneself, it helps in understanding the wider world.

Notwithstanding the socioeconomic forces of globalization and distance-defying modes of electronic and digital media, which Meyrowitz (1985) believes leads to loss of *sense of place*, historical geographer Charles Withers pronounces, "questions of locality, sense of place and of identity in place matter now more than ever" (2009, 638).

At least in sociological terms at the scale of urban neighborhoods, Robert J.

Sampson (2012) finds a powerful, enduring impact of place (the "neighborhood effect") in the face of the effects of globalization. His extensive study of Chicago finds,

logic demands that if neighborhoods do not matter and placelessness reigns, then the city is more or less a *random swirl*. Anyone (or anything) could be here just as easily as there. ... [Instead] the city is ordered by a spatial logic ("placed") and yields differences as much today as a century ago. The effect of distance is not just geographical but simultaneously social.... (Sampson 2012, 3; emphasis added)

Further, many thinkers in the emergent research field of ecocriticism (the literarycultural-environmental studies movement) have written about *place-attachment* (e.g., Buell 2001; Heise 2008). This inclination, according to Berry, has been "to stay put, to say, 'No farther. This is the place" (1997, 4). Essayist Paul Gruchow signifies, "To inhabit a place means literally to have made it a habit, to have made it a custom and ordinary practice of our lives, to have learned how to wear a place like a familiar garment, like the garment of sanctity that nuns once wore" (1995, 6). This tendency, also, lies deep in American history (although Berry argues that it has been the weaker tendency). Thoreau, writing in his diary in 1858, admonished his potential readers: "Think of the consummate folly of attempting to go away from *here*! When the constant endeavor should be to get nearer and nearer *here*. … Foolish people imagine that what they imagine is somewhere else" (cited in Leach 1999, 15; emphasis in original).

Berry makes an important point about "placed" versus "placeless" subjectivity:

[O]ne cannot live in the world [as a whole]; that is, one cannot become, in the easy, generalizing sense with which the phrase is commonly used, a 'world citizen.' There can be no such thing as a 'global village.' No matter how much one may love the world as a whole, one can live fully in it only by living responsibly in some part of it. (Berry 1997, 123)

The "world-circlers," from Magellan's crew to astronauts, may have afforded humanity a

"whole-body experience of the whole Earth" (Chaplin 2012, xx), but "humanity" in the collective experiences the circumnavigation of the Earth only vicariously and as an abstraction. For individuals, except for the few "world-circlers," it is decidedly NOT a whole-body experience. Clifford Geertz encapsulates *placeless subjectivity*: "no one lives in the world in general" (1996, 262).

Yet, even short of a decontextualized living in the world "in general," and without seeing oneself as a world citizen, this does not mean that Americans are living fully "in place." J. B. Jackson begins his final chapter of *A sense of place, a sense of time* with this conundrum: "Which came first, the house or the road leading to the house?" (1994, 189). Yet, Relph points out that, to be human "is to live in a world that is filled with significant places; to be human is to have and know *your* place" (1976, 1; emphasis in original). Jackson continues on to ask, "Which do we value more, a sense of place or a sense of freedom?" (1994, 190). In the lives of many Americans, their *sense of "place"* lies with "freedom" and is found on the road. Clearly, the American *sense of place* is a site of contestation.

Place and Self

Place has long remained one of the fundamental concerns of geography, since at least the time of the multi-volume "atlas in prose" of Strabo, written at the end of the first century B.C.E. (Relph 1997). Place is also central to everyday life (Cresswell 1997 and 2004; Entrikin 1991; Massey 1994; Massey and Jess 1995; Relph 1976; Tuan 1974a and 1977; Withers 2009). However, it is a polysemous word that is "wrapped in common sense" that "seems to speak for itself" (Cresswell 2004, 1), yet it (along with space) is thought of as a concept that is "diffuse, ill-defined and inchoate" (Hubbard 2005, 41).

Primal and immediate to everyday life (and central to the study of human geography [Cresswell 2006, 356])--widely used in everyday affairs, commonsensical, illdefined--place as a concept in the social sciences is a contested notion and "continues to have 'more than material' aspects' (McKay 2006, 200), that is, it is more than location. Anthony Giddens affirms, "The term 'place' cannot be used in social theory simply to designate 'point in space,' any more than we can speak of points in time as a succession of 'nows'" (1984, 119). In simplest terms, *place* typically refers to "a meaningful portion of space," in that it is "characterized by the unique sense of [human] belonging and attachment that makes it different from other places around it" (Cresswell 2006, 356). As David Harvey claims, place is a "social construct," and must be considered as more than a "dynamic container" of "boundedness, homogeneity, and exclusion" (1996, 261). In the humanistic tradition in geography, its meaning is frequently similar to that given by Tuan, who views place in relation to space: "Space is transformed into place as it acquires definition and meaning" (1997, 136), thus it is space with a human face. Relph, from the perspective of Heideggerian phenomenology, emphasizes an experiential notion of place as "dwelling" and "being-in-the-world." He suggests that "the essence of place lies in the largely unselfconscious intentionality that defines places as profound centers of human existence" (1976, 43).

Place, then, is not mere location, nor only location imbued with meaning; it is, as Heideggerian interpreter Jeff Malpas remarks, "not founded *on* subjectivity, but is rather that *on which* subjectivity is founded" (1999, 35); that is, identity is partly based on and created by place (as place is created by human intentionality). Withers summarizes the views of philosopher Edward Casey (1993 and 1998): "to live as a human is to live locally, and further, that to know at all is first of all to know the place one is in" (Withers 2009, 640-641).

In addition, Tuan discriminates between two types of place: as "public symbol" and "field of care," depending on whether meaning is external or internal, respectively, to the individual. Places as public symbols are immediately visually accessible, easily identifiable, and known only from outside the person; examples include monuments and public squares (1996, 446-448). On the other hand, places as "fields of care," are visually inconspicuous, not easily identifiable, and known only from within the person; examples include a town, neighborhood, street, street corner, tavern, and home (ibid.). Places as fields of care, where there is "emotional investment," are as small as one's home and even bedroom. These "places-as-fields-of-care" are assigned meaning from within the individual, and are part of the *geographic imagination*.

Part of the human-face of space, and the being/dwelling-in-the-world of place, is the "human-body of place" (my term). Referring to Nigel Thrift (1983) (who draws on earlier work of David Seamon [1980] and phenomenologist-philosopher Maurice Merleau-Ponty), Tim Cresswell explains place as embodied meaning:

If we focus on the way we do things, Thrift argues, we get at a primal relationship with the world that is more embodied and less abstract. Place, then, needs to be understood as an *embodied relationship with the world*. Places are constructed by people doing things and in this sense are never 'finished' but are constantly being performed. (Cresswell 2004, 37; emphasis added)

Robert Sack is explicit about the mutually constitutive relations between places and self. He states, "The structural similarities between self and place--the fact that they both interweave elements of nature, meaning, and social relations--are the key to their interconnections... they are interthreaded" (1997, 127-128). Sack further explains that the sense of self extant in society undergoes mutations due to the changing nature of the elements of nature, meaning, and social relations through time. With changes in natural and social forms in time-space, both place and the self, interthreaded, change together (ibid.).

This brief discussion of "place" has demonstrated that "place" is central to everyday life, a social construct assigned meaning by humans, more than location, part of identity, and instantiates in embodied relationships with people--as people live in embodied relationships with place. This view of place (and *spatial embodiment*) means that the most intimate, personal, "place-as-field-of-care" is the human body (with its *embodied cognition*). This informs the deepest structure of the *geographic imagination*.

Geographic Identity

As already mentioned, an individual's spatiality constitutes part of his/her identity. In the discussion above, it was shown that American spatiality traditionally has ranged between the poles of *rootedness* and *placelessness*. But, looking beyond the locale and nation, the extent to which people identify with the global is problematic. Perhaps most people worldwide today are aware that global forces affect the spatial and cultural conditions of their lives. In studying nine focus groups, widely differentiated in occupations, age, and sex, in the U. K., Szerszynski and Urry (2002) found, contrary to their initial hypothesis, that few participants labeled themselves as "citizen of the world." Yet, within all the focus groups, they found general cosmopolitan attitudes, especially ideas of "time-space compression" (summary in Myers, Szerszynski, and Urry 1999). Reporting in a later study, *The soul of Britain* (a survey carried out in 2000), in which respondents selected which "geographical entity" they "belonged to" "first of all," 33 percent identified either England, Scotland, Wales, or Northern Ireland as their primary place of belonging; additionally, another 9 percent chose "Great Britain" and 9 percent chose "the U. K." Thus, just over half chose a "country"--England, Scotland, Wales, and Northern Ireland, which are officially designated "countries" of the U. K. This indicates the primacy, at least in the U. K., of national identity over local and global identities. A problem with the survey is that citizens of more-developed countries might not differentiate between their national culture and "global culture." They perhaps see their national culture and global culture as isomorphic; that is, they believe that their local version of Western civilization closely approximates and represents world culture.

Yet, because of processes and effects of globalization--those ever-tightening linkages between localities and globalities--other researchers stipulate the transformation of individual identities around the world. Psychologists who study identity sometimes use the concept *global identity* to describe the possibility that humans--imbued always with multiple identities--could in the Global Age retain their local identities (familial, tribal, regional, national, and ethnic and religious), as well as a self that is identified with the world as a whole. After surveying several cultures, psychologist Jeffrey Arnett, in a widely referenced paper, found that "the central psychological consequence of globalization is that it results in transformation of identity" (2002, 777). He labeled this phenomenon *bicultural identity--*identification with, first, the locale and/or nation and/or state and, second, with global culture. Arnett argues that most young people worldwide now develop this bicultural identity.

Yi-Fu Tuan (1996), in *Cosmos & hearth*, writes about his own custody of both local ("hearth") and global ("cosmos") identities. He maintains that people should know

their local geographies and "learn to appreciate intelligently our [particular] culture and landscape." But, Tuan claims to be a "cosmopolite" and believes,

Knowing places other than our own is a necessary component of the concept of 'cosmopolitan hearth.' The unique personality of our small part of the earth is all the more real and precious when we compare it with other climes, other topographies. Perhaps this is another way of saying that exploration (moving out into the cosmos) enables us to know our own hearth better--indeed, 'for the first time.' (Tuan 1996, 183)

Tuan, here, entwines the local and the global. He is describing a *glocal* geographic outlook (combining local and global).

Journalist and author Pico Iyer, a self-described "global villager," writes of the global "multiculture," and of "rootless cosmopolitanism," "nowherian" people, and a global lifeworld "of disconnection, of displacement, of being lost within a labyrinth of impersonal spaces" (2000, 36). He quotes Simone Weil: "We must be rooted in the absence of a place;" and Jawaharlal Nehru: "I have been...out of place everywhere, at home nowhere." It is striking that the thinking behind the quotes is about a "glocal" *geographic imagination*: the perception of place and space at both the local (rootless, in these instances) and of the global. But his "global-soul" world is populated by cosmopolitan people who exhibit only a *global identity* (and global *geographic imagination*), and who also clearly do not possess a local, thus glocal, identity. The local-global continuum (alluded to by Tuan) has been a "pervasive theme" in American geography (Gregory 2000). The present research tried to determine where on the local-global spatial continuum the research participants emplaced their own lifeworlds (data presented in Chapter VII).

Emplacement in the Lifeworld

This section, and the ones following, lies at the core of the present research. The arguments begin to construct the crucial conceptualizations of lifeworld, place-world, the lifeworld as personal nodal region, and these *self-space* regions as experiential time-space constructs.

The term *lifeworld*, as used by phenomenologists, anthropologists, geographers, and others, indicates the individual's common, quotidian, unthought-of world. Phenomenologist geographer David Seamon defines *lifeworld* as "a person's or group's day-to-day world of taken-for-grantedness that is normally unnoticed and therefore concealed as a phenomenon" (2007, n.p.). Humanistic geographer Anne Buttimer describes it as "the prereflective, taken-for-granted dimensions of experience, the unquestioned meanings, and routinized determinants of behavior" (1976, 281). Thus, the life-world, including its spatial particulars, gathers in all those personal enactments relating to the individual's spatiality.

Philosopher of place Edward Casey (2001, 406-419) discusses *place-world* (without strictly defining it) by joining the "Being-in-the-World" of Martin Heidegger (1962) with the *habitus* (of the "social body") of Pierre Bourdieu (1977). *Place-world* describes "a world that is not only perceived or conceived but actively *lived*" (Casey 2001, 413; emphasis in original). As such, it portrays more than simply the spatial world that people "inhabit" (not just live *in*), it is also place as constitutive of self, as place insinuates itself into personal identity (ibid., 406).

The next step in the account of the place-world and the *geographic imagination* (continuing the account begun in Chapter III under the First Meanings: Embodied

Spatiality section, and above under Place and Self) is to recognize the place of the individual subject. This is more than simply phenomenological interactivity between person and place which still posits a Cartesian spatial dualism. Instead, it is an ontological "person-as-place" (Gallagher 2007). As Gallagher puts it about a newborn child: "The unique feature of our first place [in the world] is, of course, that it is also a person [as the self-body of a neonate]" (ibid., 106). From the vantage of the individual, spatial experience necessarily proceeds from the person. We can, then, characterize the body as the vehicle for experiencing the world; in fact, the body is the "pivot" in this spatial schema (Casey 2001, 413). As Gallagher (2007, 102) expresses it: "the body isn't just a hat rack for the mind, but the crucible of development and the creator, monitor, and synthesizer of all our experience." With inclusion of body, the schema may be written as *place-in-body/body-in-place* to underscore the co-constitutive nature of place and body. It also schematizes the body as the (first and continuous) experiential and imaginative center of the place-world.

Dwelling Perspective

Philosopher Martin Heidegger (1962; 1971), as one of the great twentieth-century thinkers of being and place, with his conceptualization of "Being-in-the-World," opened up decades of further thought about the centrality of spatiality in human life (Malpas 2006). Heidegger wrenched real, human-lived place out of abstract, background space--which until Heidegger had been treated mostly as "homogeneous, measurable extension--and so [had] reduced [space] to a notion of position, simple location, or else mere 'site'" (ibid., 3). He found "inadequate the western philosophy of space as container; a more adequate view is spatiality as involvement, [such as] the ready-to-hand quality of tools...that generate a sense of space" (Peet 1998, 41). *Dwelling*, as one of his principle notions, "signifies that immersion of beings in the currents of the lifeworld... encompassing the entire way in which one lives one's life on the earth" (Ingold 2000, 3, citing Heidegger 1971).

British cognitive-environmental anthropologist Tim Ingold (2000) has evolved an approach he calls a "dwelling perspective" (indebted to Heidegger) about the manner in which humans are inextricably entwined in their inhabitation with the world. By *dwelling perspective*, Ingold means the "immersion of the organism-person in an environment or lifeworld as an inescapable condition of existence... [in which] the world continually *comes into being around* the inhabitant... within the current of [his/her] life activities (ibid., 153, 154; emphasis added). This is similar to the notion of psychologists Maturana and Varela (1987) (mentioned in Chapter III), who posited the "bringing forth the world" by the "being-doing-knowing" organism in coincidental/co-spatial relations with its environment.

The notions of Heidegger and Ingold are important to this dissertation (and to recommendations in Chapter VIII) because they elucidate from where and the form in which the *geographic imagination* arises. Ingold maintains that "the forms people build, whether in the *imagination* or on the ground, arise within the current of their involved activity, in the specific relational contexts of their practical engagement with their surroundings" (ibid., 186; emphasis added). He asserts that this dwelling activity is not carried out by "a disembodied intellect moving in a subjective space in which are represented the problems it seeks to solve" (ibid.). Moreover, "people do not import their ideas, plans, or *mental representations* into the world, since that very world, to borrow a

phrase from Merleau-Ponty [2002] is the homeland of their thoughts" (Ingold 2000, 186; emphasis added). As science historian George Dyson (2012) commented, "The human brain does not exist in a vacuum"--and thus neither does the *geographic imagination*.

Spatiality of the Geographic Imagination

This dissertation takes the conceptualizations of *embodied place*, *lifeworld*, *place-world*, and *dwelling* and incorporates them as components of the individual's *spatial self-emplacement* under the broad, increasingly employed rubric of the *geographic imagination*. In its most basic mode the *geographic imagination* is simply the consciousness of spatiality (Soja 1996), or "spatial consciousness" (the term used by David Harvey [2005] when he contrasted it with and critiqued the earlier, influential concept of "sociological imagination" used by C. Wright Mills [1959]). Denis Cosgrove thought it "part of the common experience of man" (1979, 43). As part of this common human experience, Apap defines it simply as "the ways that humans view, represent, and interpret spaces both actual and imagined" (2008, 5-6). Similarly, Marcus characterizes the *geographic imagination* as "the spatial knowledge--real or abstract--that allows individuals to imagine place" (2009, 481).

The *geographic imagination* consists of the *mental conceptualizations* and individual forms of the geographic spacings, places, and environments, including, importantly, the *mediated environment*, in the person's lifeworld. In the first instance, it constitutes the individual's perspective of his/her lifeworld lived in local places, and closely relates to the cognate terms *sense of place* (the "innate faculty, possessed in some degree by everyone, that connects us to the world" [Relph 1997, 208]); Yi-Fu Tuan's *topophilia* (Tuan 1974); and *dwelling* (Heidegger 1971; Relph 1976; Seamon and

Mugerauer 1989), or what Ingold (2000) calls the *dwelling perspective*. Second, it also is made up of the individual's conceptualization of where the "lived locality" nests in geographic space, from the local to global. Thus, the *geographic imagination*, at the level of the individual, is composed of *perception* of one's place in the world, and the conception of where one's lived place fits into the larger geographic space.

Social scientific inquiry and the humanities are increasingly leaving behind the "minimalist" conception of the human-environment relationship and "place as container" orientation (Hopkins and Dixon 2006, 174). Consequently, the concept of *geographic imagination* has been put into service as a useful construct to indicate the mental geographies possessed by human entities from the scale of individuals to that of societies, that is, how people imagine and represent space. "Essentially," according to the broad definition of Norton, "the concept involves an appreciation of the role played by space in all aspects of human endeavor" (1989, 189). With this sweeping definition, Norton (ibid.) gathers academic geography from the mid-nineteenth century regional geographies of Paul de la Blache and his followers to the landscape school of Carl Sauer to the *geosophy* of John K. Wright (1947) who wrote about "the place of the imagination in geography." Harvey (1973) adapted Mill's concept to coin the term "geographical imagination" in order to interrogate capitalist power dynamics with the purpose of promoting social justice. Later, he used the term to advance his notion of considering space and time as concepts socially constructed and rooted in the prevailing (capitalist) mode of production (Harvey 1990b).

Probing the *geographic imagination* has become advantageous for many researchers in the humanities and social sciences. The social-science use of the concept

increasingly has been employed for interpreting social histories. It has been used in historical-geographic treatments to interpret Medieval Europe (Tomasch and Gilles 1998); the development of American space and nationalism (Apap 2008); Daniel Webster and the early American Republic (Apap 2010); Antarctica from 1918 to 1960 (Dodds 1997); 1930s Italy in terms of aviation (Caprotti 2008); U. S. history from 1880 to 1950 (Schulten 2001); a recent U. S. president (Kruse 2009); and genocide (Tyner 2012). In literary studies the *geographic imagination* has been the focus of analysis of English social and art critic John Ruskin (Cosgrove 1979), and of Arnold Bennett (Hudson 1982), William Shakespeare (Gillies 1994), Ernest Hemingway (Kennedy 1999), Henry David Thoreau (Pipkin 2001), Joseph Conrad (Ho 2007), and Mark Twain (Alverez 2009).

Non-Marxist geographers have used the term in the more general sense of the spatial imagination as the relationship of societies and individuals to their perceived geographic/spatial conditions of existence--their myriad person-place interactions. It is "spatial knowledge--real or abstract--that allows individuals to imagine place," according to Marcus (2009, 481). How individuals view the world spatially constitutes part of their worldview and is operative on all scales from the microscale of one's *embodied space* and domicile, through the small-scale of the locale to the macroscale of global space. The concept is also used somewhat synonymously to indicate the spatial cognition of an individual without the need to presume the problematic cognitive structures of mental "maps." Pile (2008) uses the term to explore subjectivity.

A narrow view of the *geographic imagination* presents it as, (only) "the ability to imagine **other** people and **other** places" (Maude 2009, 375; emphases added). This view is overly restrictive, as conceptualized in the present research. As used here, the

geographic imagination is expanded critically beyond imagining other places, to incorporate people's ability to imagine, and *emplace*, **themselves** in their own placeworlds. The stance taken here is that the *geographic imagination* is not only inclusive of knowledge and understanding of distant geographies of other people and places (or even of local geographies). It is also the embodiment of the knowledge and understanding of one's own situatedness--one's *self-emplacement*--in the geographic scheme of the placeworld. It is not only the imagining of place, but also space; and how one imagines oneself fitting into spacings and place, from the local to the global. The present dissertation places its focus on individual (spatial) cognition; thus the concept is used to bring insight, not so much to place (as does, e.g., Marcus [2009] vis-à-vis Brazil), as into the subjective spatialities of people--their lived geographies.

This use coincides with that of Schwartz and Ryan, who broadly interpret the *geographic imagination* as "the mechanism by which people come to know the world and situate themselves in space and time" (2003, 6). Metaphorically, the individual travels the spatial world with the *geographic imagination* as guide-map. As such, the *geographic imagination* is ontological and resides at the core of *beingness*--Heidegger's Being-in-the-World.

A critical feature of the *geographic imagination*, as developed in this research, entails the **self-conceptualization of where people "emplace" themselves in their lifeworlds**. This *self-emplacement* is cognitive, in that it is a mental construct. It is ontological, in that it relates to a person's very beingness (their being-in-the-world). And it is phenomenological, in that it is perceived from the personal lifeworld as it is enacted in spacings and place, both physical and mediated. The conceptual *self-emplacement* in interacting physical and mediated spacings is today a crucial part of the taken-for-granted lifeworld.

The *geographic imagination* includes several components. The first component is comprised of the individual's perception of geographic space. This includes geographic knowledge of the physical and human characteristics of places at all scales, from the geography of the locale in which one lives to regional, national, and global spaces. Much of an individual's store of geographic knowledge, especially beyond the local, is enhanced by mass media, map study, formal educational experiences (through educational materials such as textbooks and videos), and bodily experiences (i.e., sensory and perceptual) with places through travel.

A second component, of crucial significance today, includes the mental *deterritorializations* (or social and experiential dislocations) and *reterritorializations* (mental re-emplacements) that result from the space- and place-altering impacts of the "new media" technologies (Gane and Beer 2008) in nearly ubiquitous use today (de Souza e Silva 2006; Lemos 2010; Morley 2010; Sutko and de Souza e Silva 2010). These new *territorializations*, both physical and perceptual, are lived out in the interplay of electronic/digital media "spaces" and the offline spacings of the physical lifeworld. The *deterritorializations* manifest in myriad contemporary spatialities, for example, the experience of extenuated living in "thinned-out," segmented, isolated (Sack 1986) placeless places. While specialized, segmented, thinned-out places are being constructed ubiquitously in the built environment, at the same time, the *reterritorializations* of place experience instantiate as ubiquitous "omnitopias"--"Allplaces"--in which traditional places are replaced by "perceptual enclaves" of, for instance, hotels, multiplexes,

shopping malls, office parks, and airport terminals. They are enclosures "detached from local geography," "designed to resemble the real world," with all of urbanity experienced as a single "place unto itself" (Wood 2009, 1ff.). Something similar was indicated by Starbucks Corporation CEO Howard Schultz (2006) about Starbucks coffee shops when he stated that, "America lacked a place. ...What we created was a place." In this example, traditional experiences of place are *reterritorialized* as the new places of corporate *omnitopia*.

Third, in human geography, measures of relative distance are often more meaningful than those of physical distance, and are topological in nature (Marsh and Alagona 2008). *Topological space* is the degree of connectivity (relative distance) between places, and as such, in terms of physical distance, "may provide a more accurate measure of the cultural distance between two places" regardless of the absolute distance separating them (ibid., 352). In social and behavioral formations, complex, topological networks occur in which individuals and organizations are the "vertices," and "the edges characterize the social interactions between them" (Wasserman and Faust 1994; cited in Barabasi, Albert, and Jeong 2000, 70). Other scale-free systems include the Internet (ibid.). In Western societies so heavily *mediatized*, an individual's lifeworld (and also the place-world of human/place interaction) is partly and increasingly a product of the various extant means of electronic/digital media and communication, including television, and the "new media" of the Internet, cell phones, and others (de Souza e Silva 2006; Lemos 2010; Mitchell 1995, 2003; Morley 2010; Sutko and de Souza e Silva 2010). Topologically imagined space operates like a "connectivity graph" (or cognitive "map") made up of physical-spatial interaction, media spacings, and electronic/digital

networks of human connections (with each individual human enacting a node, or vertex, of connectivity). As a result of people's lifeworlds (and place-worlds) interacting coconstitutively with their spatial cognition, *cognitive spatiality* is largely and necessarily topological in nature, in that cognition largely operates on the basis of scale-free characteristics.

Media theorist Andrew Wood (2009) sets forth a conceptualization of postmodern spatiality that is represented in the built environment and imagination by the structural and perceptual/fantasy enclaves of cinema multiplexes, office parks, airport terminals, shopping malls, motels, and others sites proliferating rapidly. As the term suggests, these are "allplaces," or "anywheres" that are the spatially and temporally disorienting sites of the "ubiquitous city." They are the structural and perceptual equivalents of the "aural enclaves" (or "electronic cocoons" or "digital bubbles") that many people, especially the young, walk around in, wearing headphones substantially cut off from immediate surroundings. "Omnitopian" spacings are the dislocated, ubiquitous places in which "traditional distances recede, enabling a sphere of interaction that renders each point equidistant from every other point" (Wood 2009, 8).

Wood signals this about the *omnitopian* people who inhabit these spacings:

Aided by technologies of convergence [that enable people to reproduce a miniature version of the world wherever they are], we carry our own artificial worlds around with us, tying together *personalized nodes* that allow us a more impenetrable dislocation from the places through which we pass and the people by which we walk. Conceptually, convergence allows us to craft our own hyphenated [multi-space] places, which are rarely bounded by structure. Psychologically, convergence enables a kind of *global self* that is both ubiquitous and solipsistic. (Wood 2009, 175; emphases added)

Wood describes an individual subject (he labels as a "global self") who lives

"cognitively nodal," at the core of his/her ubiquitous "everywhere" (thus not much anywhere in particular) lifeworld, and at the center of his/her "solipsistic place-world"--a "personal connectivity space" largely governed by distanceless topological relations. This recalls the spatial logic of the magazine advertisement above that declares, "*There is no place like everywhere*."

Geographer Theano Terkenli meaningfully amplifies the concept of lifeworld as "a collage of overlapping and ever-transforming personal and collective *geographies*, a system of irregularly shaped *nodal regions* that correspond to homes of individuals or groups of individuals" (1995, 324; emphases added). In his treatment, Terkenli spatializes lifeworld into a personal "region": the person at the center of a self-constructed personal geography with physical dimensions. In addition to the notion of Terkenli's (the person as occupying the center of a physical-nodal region) is the experiential space of Margaret Wertheim's (1999, 251-252), who argues that, "every one of us 'occupies' a 'volume' of some kind of '*self-space*,' a space that 'encompasses' us as profoundly as the physical space that modern science describes" (emphasis added). She suggests that, "something like this is precisely what we *experience* as thinking, emoting beings" (ibid.; emphasis in the original).

Anthony Giddens deepens the concept of *locale* by "regionalizing" it (his term) by assigning the time dimension to the "settings of interaction" (1984, 118-119). "Regionalization," he states, "should be understood not merely as localization in space but as referring to the zoning of time-space in relation to routinized social practices" (ibid.). To further develop the conceptualization here, the "personal, nodal region" of Terkenli (1995), and the *self-space* of Wertheim (1999), are deepened (and made more realistic) to include the time dimension. Therefore, this conceptualization views the individual as sited in a multi-dimensional time-space region. As Giddens makes clear, "movement in space is also movement in time" (1984, 112). Thus, a person's lifeworld, logically and necessarily, incorporates the time dimension, and functions as a time-space region (or a time-space self-space) with the individual as node.

Discussion

With the body/place social forms now instantiating in the postmodern world of "thinned-out" places (Sack 1986; 1997), the *place-world*, *person-as-place*, and the individual inhabiting a *time-space nodal*, *self-space* region, then, are keys to the analysis in the dissertation and pivotal to understanding the *geographic imagination*. Rather than "places as profound centers of human existence," in accordance with Relph (1976, 43), this research turns the conceptualization on its head and postulates, not only that the body is the center of human experience **of** place, but it is also the *situated body* (and person) **in** time-space and, thus, is the most primordial place.

If we assemble the personal spatialities delineated thus far, we may describe the contemporary subject as thrust into a world of *placelessness*, dislocated by *time-space compressions*, and *deterritorialized* by "distant proximities" (Rosenau 2003), and in an era (to add one more) when "technology and the human are not so dichotomous" (Bukatman 1993, 5). Possibly, in order psychically to re-emplace itself, the human subject employs modern electronic/digital technologies (among other connections) to (re)connect to a self-crafted, networked, online/offline place-world. Much of the individual's *personal-nodal* (Terkenli 1995), *self-space* (Wertheim 1999) region is topological in that the "paraspace" (Bukatman 1993) of cyberspace is dimensionless in

the usual, physical sense. Overall, these components of the *geographic imagination* are all included in "where" the individual mentally "emplaces" him/herself in both physical and abstract spacings. These spacings now include electronic and digital manifestations.

The statements above support the view (indeed, the *dwelling perspective* overlaps the conceptualizations developed in this research) that the *geographic imagination* arises in the specific relations people have with their spatial environment. In this perspective, as the world continuously comes into being around the person, the *geographic imagination* might be conceived as the cognitive schema structured by the immediate, monistic, experiential/cognitive interactivity of the un-bifurcated person/world (or lifeworld). In short, the *geographic imagination* is not so much a cognitive representation *of* the world, as it is that which occurs at the embodied interfacing *with* the world.

Summary and Concluding Comments

The goal of the review and discussion of the literature above was intended to lead to an understanding of how people today spatially articulate their lifeworlds. This chapter discussed *place* as a concept and how it might be experienced today in a world of *globalization, deterritorialization,* and *existential placelessness*. It presented the notions of a Global Age and global awareness, and the two traditional, American, *lived-geography* binaries of *rootlessness* and *attachment to place*. The review and discussion then addressed a number of salient conceptualizations of the postmodern era, including influence of electronic and digital media, *deterritorialization* and *placelessness, place attachment* and *sense of place*; and *geographic identity: global identity, bicultural identity* (i.e., local and global), and *rootless cosmopolitanism*.

The discussion then focused on the concepts of lifeworld, place-world, person-as-

*place--*i.e., living spatially in the world--and the *dwelling perspective*. From this phenomenological stance, the *geographic imagination* (the concluding section) sheds its *Cartesian duality* and is personalized in the most profound manner. Thus, the *geographic imagination* is partially, but significantly, understood ontologically as *self-emplacement* in the world. And, in the conception of the *geographic imagination* that is deeply influenced by electronic/digital media (as developed in this dissertation), it is cognitively topological in form (discussed further in Chapter VIII).

To capsulize the *geographic imagination* as developed here: It is conceptualized as the active interface between embodiment and place-world, manifesting as a nodal, topological, person-region. The body is emplaced; place is embodied. And, mind interfaces with both.

In other words, people today apparently are losing their traditional social and psychological bearings, prominently vis-à-vis the places they live, and are substituting electronic/digital media (including TV) to provide psychic anchors. This anchoring "tethers" them to their electronic/digital devices and their bodies, but is experientially diffuse in terms of where they reflexively understand the "whereness" of their spacings and place.

CHAPTER V

MODELS OF COGNITIVE SPATIALITY

The explanation of embodied spatiality in chapters III and IV was advanced as a philosophical basis on which this research rests. The review of the relevant literature presented in Chapter IV established the context for this research by presenting such spatial concepts as *deterritorialization*, *dwelling perspective*, and the spatiality of the geographic imagination. In order to provide some scaffolding for understanding these elements and their relationships that comprise the *geographic imagination*, this chapter presents three models of cognitive spatiality gleaned from social-science literature. They are intended for use as heuristic conceptualizations against which data from this research can be compared (in Chapter VII). A tentative fourth model has been synthesized by the present researcher from the existing literature of the spatiality of *self-formation* in the postmodern era of social processes such as globalization, space-time compression, placelessness, mediatization, and a general social and personal deterritorialization and *disembeddedness* of the lifeworld. A refinement and elaboration of the fourth model deterritorialized self-emplacement--is presented in the concluding chapter (Chapter VIII), utilizing results from the data gathered from the research participants.

Models of Conceptual Space/Place Experience

In the social sciences, according to Denzin and Lincoln (2000, 16), it has become increasingly common to look for interpretive models and relationship patterns rather than

for linear cause-and-effect. With this in mind, the following four theoretical models act as foundation for this research and span a wide area of theoretical positions. The first three of the models were taken directly from scholars in the field. The first concerns how individuals parcel their spatial experiences moving outward from the body. The second is phenomenological and thus concerned with individual meanings of spacings. The third considers the movement of identities from regional to global. The fourth synthesizes from the first three as well as from additional sources to provide a framework for this research (further refined in Chapter VIII).

Model 1: Subjective Partitionings of Space

Gale and Golledge (1982, 63), borrowing from Hoyt (1978) and Saarinen (1976), provide a scale which categorizes individual spatial experience--a "subjective partitioning of space." This is a useful framework for understanding an individual's overall *geographic imagination*. Its hierarchy of scalar positions partitions the individual experience of spacings from one's body to the globe, and is comprised of the following:

- Body zone--the immediate microspace of perceptual space;
- Personal space--the "portable territory" of perceptual space;
- Social space--the slightly broader sociospatial interactions of perceptual space;
- Public space--spatial relations outward to the far boundaries of perceptual space;
- Cognitive space--that which lies beyond the horizon of immediately sensed perceptual space; entails processes of cognitive mapping (Gale and Golledge 1982, 63).

Model 2: Relph's Modes of Insideness/Outsideness

This model (Table 5.1), taken from humanistic-phenomenologist geographer

Edward Relph (1976, 51-55), provides a conceptual structure useful for this research at the level of locality and for *place attachment* and *sense of place*. Relph proposes not only that different places have different meanings for an individual, but that the same place takes on different meanings for different people. These modes of place-experience reflect "a fundamental dialectic in human life" and are "grounded in various levels of experiential involvement" (Seamon 1996, 6).

Mode	Characteristics	
1. Existential Insideness	Deepest kind of place experience, with feelings of attachment, at-homeness, belongingness	
2. Existential Outsideness	Feelings of separation, being out-of-place, alienation; can be caused by placeless environments of modernity	
3. Objective Outsideness	Deliberate, dispassionate attitude of separation, with place treated as object; e.g., stance assumed by planners and policy makers	
4. Incidental Outsideness	Place as background or mere setting; e.g., "drive-through landscape" for travelers	
5. Behavioral Insideness	Deliberate familiarization with a new place	
6. Empathetic Insideness	Attempt by an outsider to deeply understand a place	
7. Vicarious Insideness	Deeply-felt secondhand involvement by way of imagination; e.g., through novels and film	

	TABLE 5.1. Modes of	Insideness/Outsideness	(after Ralph 1976)
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Relph's modes 1, 2, 4, and 5 (above, in boldface) appear to be the relevant modalities of place experience that reflect the potential life situations of the research

participants in the present research. Mode 3 is eliminated because it concerns the spatiality of professional planners and others. Modes 6 and 7 lack relevancy because they reflect the spatiality of nonresidents. (The research participants were all residents of the town of the study site.) Relevant Mode 1 involves the "insideness" feelings of attachment and at-homeness, i.e., a *sense of place*. Mode 2 involves the personal affectivity of "outsideness" of living with an alienated "out-of-placedness." Mode 4 ("incidental outsideness") describes the place experience of people who, while not feeling alienated from place, treat their locale essentially as background--they could just as well live anywhere with little notice or change. They are "nomads" to the place where they live. Mode 5 reflects those people who have migrated to a locale within the previous few months (sometimes a few years) and are still learning about it to gain a *sense of place*.

Model 3: Grounded Globalism

Anthropologist James Peacock (2007) devised a seven-step model of "movement from regional to global identity." He reasons that *disembodied globalism* (his step 6), although "transformative," is "insufficient, unbalanced, and insubstantial" for the individual (ibid., 9). He suggests,

Rootless globalism lives in cyberspace and in the air, alongside messages and persons transported around the world by electronic technology and by airplanes. It surfaces in our thoughts as we wrap our minds around faraway news stories, conflicts, disasters, and celebrations we cannot see up close, cannot touch or hear or smell. It is difficult to embody so vast and abstract a perspective, to weave it into our experience. (Peacock 2007, 9)

Thus, Peacock believes his final stage (step 7; grounded globalism) is a

"grounding in locale...necessary to human beings"; and that, "once we achieve global identities, we must ground them, integrating the global and the local in some way that energizes and sustains both" (ibid., 10). This model posits *territorial (re)attachment* in a

locality by the individual, subsequent to development of a global identity. In short, the individual becomes globalized (a global identity, i.e., *globality*), and then reprocesses cognitively to (re)identify with the locale.

Model 4: Conceptual Emplacement of Self

A conceptual structure of *self-emplacement* (Figure 5.1, below) graphically shows where individuals might fit in a framework that places them (or they *emplace* themselves) in their existential experience of spacings and place.

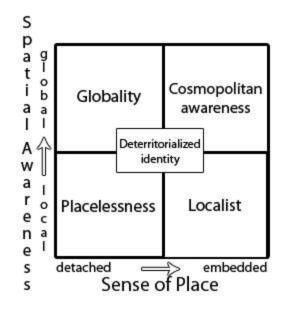


FIGURE 5.1. Model of Self-Emplacement

The present researcher developed this framework in consideration of the models above and after consulting the model by Hitt (1998, 14) that conceptualizes *global citizenship*. The Hitt framework sketches the performance of citizenship from local to two universal orientations: the *cosmopolitan* (less active) and the *global citizen* (the more active). The *self-emplacement* framework (discussed below) developed in the present research deals with subjective partitioning of spacings and, hence, is a mental model, an internal picture of the world as conceptualized by the individual. The Hitt model does not posit a central, "deterritorialized" overlapping category as does the one formulated here.

Discussion of Self-Emplacement Model

In the middle of the figure there is a place for *deterritorialized identity*. This is hypothesized as resulting from the dialectic produced by the interplay of the following spatialities and spatial flows experienced by people today (and as reflected in the socialscience literature of *placelessness* discussed in previous chapters):

- Microscale place--body and home;
- Enhanced social and spatial connectivity by way of electronic/digital communications of the Internet, online instant-messaging, cell phones and, especially among youth today, text messaging--a *ubiquitous network connectivity* in which the body enters the world and the world enters the body;
- Home connected to the world through television; the world enters the home, the home enters the world;
- Small-scale locality, commercially "glocalized" into the world, with distant connections; the global enters the local, the local enters the global;
- Place becomes *placeless* through processes of both homogenization and fragmentation of the landscape--so does the individual.

Scholars across the social sciences and media studies present a rationale for a hypothetical "deterritorialized individual" (graphically placed at the center of Figure 5.1). First, many theorists of globalization characterize a *deterritorialization* of social forms as a major consequence of accelerating global interconnectivity (e.g., Appadurai 1996; Featherstone 1995; Tomlinson 1999). Anthony Giddens emphasizes the "disembedding of social systems...the 'lifting out' of social relations from local contexts of interaction and their restructuring across indefinite spans of time-space" (1990, 21).

Second, Ansell discusses the actor-network theory of Bruno Latour (2005) who "proposes a flat ontology" of associations throughout a network and an "uncoupling of global/abstract from local/concrete" (Ansell 2008, 9). Latour argues for interactions which are neither local nor global but flat:

No interaction is what could be called *isotopic*. What is acting at the same moment in any place is coming from many places, many distant materials, and many faraway actors. If we wanted to project on a standard geographical map the connections established between a lecture hall and all the places that are acting in it at the same time, we would have to draw bushy arrows in order to include, for instance, the forest out of which the desk is coming, the management office in charge of classroom planning, the workshop that printed the schedule... the janitor, and so on. (Latour 2005, 200; emphasis in original)

Ansell concludes, in reference to places, that there is "no *a priori* distinction between global and local" (2008, 9). She adapts a "flat ontology" in considering children's embodied subjectivity.

Third, Brian Jarvis asserts that "the geographic imagination is wrought from a profound spatial *connectivity*" (emphasis added), such that, "it is impossible to divide up our experience of space" (Jarvis 1998, 8, citing Bush 1989, 13). Fourth, in terms of information and communication technologies and "technologies of personal performance" (such as the new personal, portable electronic/digital phone/computer/music devices), Wood describes that which he considers "may be genuinely revolutionary": the new social reality in which people can "wrap ourselves within peripatetic geographies, rather than define ourselves by the planned pathways of architects and designers... while inspiring our *imaginations of placelessness*" (2009, 169;

emphasis added). Wood describes the "intersection of technology and performance that allows its practitioners to carry a miniature version of the world with them even to the point of ignoring the world through which they pass" (ibid., 175).

Thus, in light of the four *argumenta* presented above--disembedding of social systems, flat ontology, spatial connectivity, and Wood's "dislocation from place"--the conceptual framework of Figure 5.1 provides for a spatial cognition of individual *deterritorialized identity*, even though, most likely, there are no neat distinctions among the two directions and four categories. The framework, nevertheless, offers initial, theoretical scaffolding generally *emplacing* the research participants in a *deterritorialized ontology*.

Concluding Comments

This chapter has provided four models of *spatiality of the individual*. The first three were taken from social-science literature; the fourth was developed by the present researcher in light of the literature on the contemporary individual's experience of spacings and place. They were presented here to provide a basis for further examination of the data presented in Chapter VII.

CHAPTER VI

RESEARCH DESIGN

This chapter presents the dissertation methodology. It supplies information about the research groups and particularities of the three research venues (town, school, and Internet café). In addition, the chapter includes procedures of the mixed-methods data collection. It explains how this research employed triangulation (or *crystallization*) to furnish a "thick," rich, and complex view of the topic under investigation. Specific steps that were employed in a phenomenological data analysis are set out. Also delineated is the interpretive, inductive analytic procedure that was devised to implement a *crystallization* of research results. Described herein, also, is the bio-narrative of the present researcher that functions as a self-reflexive disclosure of the situatedness of the researcher as primary research instrument. The chapter ends with some concluding comments.

The research methodology was designed to elicit responses from participants that addressed multiple scales. Scale is sometimes claimed to be one of the central concepts in geographic investigation (Massey 1998; Smith 1993)--"an abiding component of geographic description and analysis" (Abler and Richardson 2004, vi). Thus, consideration of scale is appropriate for study of the awareness of spacings and place. Each of the three data-collection modes--Questionnaire Instrument, Writing Protocol, and Interview Schedule--included questions relating to scale (examples below under Data

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Collection section). For example, in the group of questions querying identity (among others), there are two dealing with the locale, including one concerning identification with local landscape. At the macroscale, there are questions about cosmopolitanism and *globality*. In addition, both the writing and interview instruments included a self-administered scale disclosing *self-emplacement* on a local-to-global continuum. (The three instruments may be found in the Appendices to this dissertation.)

Mixed-Methods Research

The present research is largely qualitative. Nevertheless, quantitative methods have much to contribute as well, and the research utilized an approach to integration of the qualitative and quantitative data that reflects the typology of general research purposes of Newman and colleagues (2003). They present nine general purposes, each generally associated with either a quantitative or qualitative method. The present research ventured to incorporate three of these purposes:

- generating new ideas (through qualitative methods);
- testing new ideas (through quantitative research);
- understanding complex phenomena (through qualitative methods) (Newman et al. 2003).

Consequently, the research employed a mixed-methods research design.

Tashakkori and Creswell broadly define the mixed-methods approach as, "research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry" (2007, 4). The mixed-methods approach developed over time because researchers found that qualitative data gathered from field methods (e.g., observations and interviews) could be combined with quantitative data of traditional surveys to "neutralize or cancel the biases" of single methods (Creswell 2003, 15). Each of the three data-collection modes employed in the present research--questionnaire survey, writing prompt, and interviews--is a person-centered method designed to study real, rather than abstract, cultural subjects, and focuses on the meaning of lived spatial experience.

Triangulation/Crystallization

Creswell and Miller (2000, 126) define triangulation as, "a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study." Essentially, it is the acquisition of complementary documentary data. This fits with qualitative research because, as Denzin and Lincoln explain, "Qualitative research is inherently multimethod in focus" (2000, 5). Furthermore, the role of the qualitative researcher is to "try to develop a complex picture of the problem or issue under study," in order to make sense of the problem and give a "holistic account" (Creswell 2007, 39). This, the present research attempted to carry out.

However, Denzin and Lincoln maintain that "triangulation is not a tool or a strategy of validation, but an alternative to validation" (2000, 5). Instead, because "objective reality can never be captured," and "we can only know a thing through its representations," multiple methods should be used in an "attempt to secure an in-depth understanding of the phenomenon in question" (ibid.). It is "a strategy that adds rigor, breadth, complexity, richness, and depth to any inquiry" (ibid.). Denzin and Lincoln use the metaphor of the "crystal" to explicate qualitative research: "triangulation is the display of multiple, refracted realities simultaneously" (ibid., 6). They (as do Hemming [2008], and two other authors in the *Handbook of qualitative research* [2000]) borrow the *crystallization* metaphor from Richardson, who explains, "we [researchers] do not triangulate; we *crystallize*. We recognize that there are far more than 'three sides' from which to approach the world" (2000, 934; emphasis in the original). Crucially, in the postmodernist stance of Richardson, mixing methods cannot improve validity; instead, it produces a "deeper and more complex view of the issue under investigation" (Hemming 2008, 155).

Because the present research examined the spatial lifeworlds of young people, a complex subject that is initially at least somewhat liminal to the conscious thought of the research participants (and to most anyone), it necessitated a triangulation/*crystallization* of data collected by several methods in order to furnish more complete and holistic (*crystallized*) understanding (Denzin 1978). It employed *between-methods* triangulation (use of both quantitative and qualitative approaches) and *within-method* triangulation (in the present case, use of multiple qualitative methods) (Denzin 1978; Johnson, Onwuegbuzie, and Turner 2007). In general, the present research extracted data from each of the three data collection modes, reported the multiple perspectives, and identified several factors involved in the research participants' lived spatialities.

More specifically, the present analysis compared, quantitatively, the survey questions of the Likert-scale questionnaire with the two other modes of qualitative data collection (written and interview). For example, Question #13 on the questionnaire--"I identify with the local landscape here"--was re-asked in the interviews, which led to discussion and disclosure on the part of the participants about their views, not only concerning the local landscape, but also of their personal identification with the locale.

The data collection also included "the voices of the participants" (Creswell 2007, 37), taken mostly from the written responses and interviews. For example, both the Writing Protocol and the Interview Schedule contained the local-to-global scale on which participants marked (or in the interview, verbalized) where they reflexively understood their lifeworlds were emplaced in the world.

Data from each of the three data-collection modes fed sequentially into the one(s) that followed. For example, the Questionnaire Instrument (Phase I) supplied the initial look, with quantitative facts, into the spatial cognition and geographic outlook of the participants. Before that point in time, at the beginning steps in the research process of reading the social-science literature, the present researcher was rather convinced, from the vast literature on globalization, that a "globalized" spatial orientation constituted the primary perspective in most peoples' spatiality. Thus, the development of the concept of geographic hyperopia, as the first of the Research Propositions (Chapter II), was borrowed from a related concept in environmental psychology (Uzzell 2000). Socialscience literature had produced various renderings of the notion of *globality* (global awareness), such as the "overview effect" of the Space Age (White 1987), the "Apollonian perspective" (Cosgrove 1994 and 2005), and the "geological image of the world as a globe" (Ingold 2000) (discussion in Chapter IV). The results from the Questionnaire Instrument did not support this view, but they did provide the realization that electronic/digital communication technologies were having some unknown cognitive effects on the spatial orientations of the participants. This led to development of the concept of cognitive deterritorialization (Research Proposition II)--a spatial disorientation of placelessness (Chapter IV).

It became obvious at that point that an additional method was required to delve deeper into the mental make-up of the participants. This led to design of the Writing Protocol (Phase II), with a scenario intended to allow the participants to self-reveal some of their inner spatiality by way of their own writing. These written texts, then, supplied useful information--and further confirmation--that even more, and especially "richer" and deeper, data were needed from the participants. This led to the design of the Interview Schedule (Phase III) in order to collect rich participant data and clarify questions (including Research Proposition III about a supposed "return to locality") that had arisen as result of the data collected in phases I and II.

As a specific example of how the *crystallization* process worked, the following narrative sketches the manner in which data from one participant became interpreted--data that were descriptive (from the Questionnaire Instrument [**QI**]); written (from the Writing Protocol [**WP**]); and oral (from the Interview Schedule [**IS**]). Also included are notations that indicate when the researcher drew from social-science literature (**SSL**).

Participant #5 (Chapter VII) had lived her entire life in the study-site city (QI), yet had traveled numerous times overseas (QI) (twice, I had seen her with family at the regional airport on their way overseas). She had roots in the area, as her parents and grandparents were all from there (QI) and she thought there was only a "small chance" she would move permanently from the study-site city (QI). She exhibited a strong degree of *place-attachment* (SSL), as she wrote, "*my heart is in* [the study-site city] (WP). However, in seeming contradiction, she wrote, "*I would have to consider myself a global citizen*" (WP). A possible explanation of this apparent contradiction is that, not only was she well-traveled internationally, but she was also a "news junkie" who spent considerable time staying informed via radio in her "networked car" (SSL), TV, online, and several newspapers which she read in the attorney's office where she worked parttime (IS). A second possible explanation of the seeming contradiction of her *place*attachment (SSL) to the locale at the same time that she considered herself a global *citizen* (SSL) is that she regularly communicated with a few people overseas--"*available* at the touch of keys to my fingertips" (WP). As an example of "spatial scrambling" (SSL), she wrote that a cousin who lives "down the street is just one click away" (WP). Thus, in very real terms for communication in hypermodern society (SSL), the type of communication that is carried out is the same whether it is to a place on another continent or one down the street (or in an adjacent room) (SSL). The Analytic Conclusion concerning this participant (Chapter VII) was that she exhibited a "spatial balance" (SSL) in her self-identity (SSL) and spatial orientation (SSL)--from local to regional (she considered herself a Southerner [WP]) to global. The researcher formed a holistic, contextual, crystallized "portraiture" (Davis 2011) of the inner geography and geographic imagination of this participant (and the other seven interviewees) by using descriptive, written, and oral data from the data-collection instruments and by "silhouetting" her life against the contemporary cultural background (Postman 1992, 156-157).

The descriptions above make clear that this research progressed in a highly iterative, "spiraling forward" process (Berg 1995). Each data-collection phase fed forwards and backwards into data of the other phases--and especially back/forward into the literatures on several fronts: adolescence, education, geography, media studies, philosophy, psychology, and all the other human sciences. The entire iterative process became one of *crystallization* of data, literature, and concepts--and interpretation.

Research Participants

The research population was a purposive sample created from students in the high-school geography classes of the present researcher at his school work-site. They all were students in Advanced Placement (A. P.) Human Geography courses he taught. All were students in grades 11 or 12, and were 16 to 18 years old (except for one student who was 15 at the time of the Questionnaire but turned 16 by time of the interview). Some of the students previously had been in either the researcher's regular ninth-grade World Geography course or his advanced ninth-grade geography course.

The appropriate research design called for a non-random sample--a purposive or judgmental sample--from Advance Placement Human Geography students, in grades 11 and 12. This was deemed appropriate because the A. P. students, with their demonstrated greater articulateness and presumed greater self-reflexivity, more likely would be expressive of the sophisticated nature of the concepts of *place* and *sense of place*. Numerous qualitative researchers have stressed the importance of selecting participants who are capable of providing insightful, rich data (e.g., Polkingham 1989; Strife 2012). As Tim Cresswell notes, although *place* is a word "wrapped in common sense" that "seems to speak for itself," yet "no-one quite knows what they are talking about when they are talking about place." He argues that place is "slippery," and thus a conceptual "problem" (2004, 1). Hence, in order to reveal the even greater slipperiness of information about *sense of place*, the present research necessitated thoughtful, articulate participants.

Because many of the participants had parents who held professional degrees and

employment, many lived somewhat privileged lives, and some had traveled a fair amount, even multiple times to other countries. The relatively high family incomes were not uniformly the case, as most students simply fell within the middle-class socioeconomic ranks below upper middle-class. Due to nearby U. S. military installations, some military-family students had lived overseas. Overall, partly due to family background (income, travel, and parental involvement) and partly due to the highly regarded school system in the town, the researcher assessed these students as relatively sophisticated in terms of knowledge about the world. This well suited the present research needs.

Research Venues

Because people are always embedded in specific spatial contexts, described herein are some relevant physical and social characteristics of the town and school, characteristics that surely informed something of the spatiality of the research participants. Sack (1997) reminds us that ideas and social relationships are structured within places. Hence, the space-and-place of the town and school served through the duration of each participant's residency as everyday sites for formation of the participants' views (and affects) of their spatial lifeworlds. Also explained below is the rationale for holding the interviews in a local Internet café.

Study-Site City

One raison d'être for the early existence of the town (approximately 20,000 people, located on the Mississippi Gulf Coast) was its original draw as a seaside destination for city dwellers, especially from New Orleans, about eighty miles distant, as well as other vacationers from inland areas. It had long been considered a beautiful small town, widely recognized as one that possessed many desirable amenities, including an oak-shaded, viable downtown, beach, festivals, thriving shops, restaurants, bars and night-clubs that drew shoppers and patrons from nearby towns. With nearly no manufacturing base, the town, today, existed partly as a bedroom community to surrounding towns, with casinos and a U. S. air-force base and other military installations nearby. However, in part, the town also functioned as a medical center and drew patients from surrounding communities. From its long tradition, the town contained many artists. Because of a relatively large number of managerial and professional people, the town had possibly the highest per-capita income in the state. It was a solidly middle-class community, for the most part, with no readily discernible underclass (although the U. S. Census Bureau indicated existence of some poverty).

Because the town was struck by Hurricane Katrina, in 2005, there was a lingering social memory of the tragedy, although in terms of infrastructure and economic indicators, the community had more than fully recovered. The latest development was the potentially catastrophic Deep-Water Horizon drilling-platform oil spill that occurred off the coast, approximately 120 miles distant, with some oil washing up on local beaches. It remained to be seen what long-term environmental, economic, and psychological impacts, if any, the latest disaster would have.

School

The school (in 2011) was a large (more than 1,700 students) public high school, with grades 9 through 12. The racial and ethnic mix was approximately 92 percent Caucasian, 4 percent African-American, and 3 percent each of Hispanic and Asian. Asians, an increasing population, were a diverse mix primarily of Vietnamese, Filipino, Pakistani, and Indian ethnicities. Socioeconomically, reflecting the town as a whole, family incomes were generally solidly middle-class. Many students were relatively cosmopolitan, as some had traveled overseas on vacation with families, with church missions, or lived on military bases. The mostly middle-class status of the student body included minority students as well as Caucasians who comprised the majority.

Offering a wide range of Advanced Placement (A. P.) courses--nearly every A. P. course sanctioned by the College Board--and, since 2009, moving into full International Baccalaureate (I. B.) accreditation and courses, the school, in cooperation with so many professional-class parents, had an institutional culture that labored to academically challenge students at all levels of academic performance. The school culture strove for inclusiveness of the student body, with clubs, for example, devoted to break dancing, skateboarding, Japanese culture, and gay-lesbian issues.

It is important to make note of an overall evaluation of the school. Generally, the school was regarded as a relatively high-performing institution. It exhibited a school culture of cultural inclusiveness and wide offerings of academically challenging programs and courses. The student body was generally sophisticated in terms of academic abilities and cosmopolitan sensibilities as evidenced by the amount of overseas travel and residence.

Internet Café as Interview Venue

The semi-structured interviews took place in a coffee shop very proximate to the school. The coffee shop provided wireless-computer (Wi-Fi) Internet connection and was generally familiar to most participants. This afforded suitable circumstances to engage in conversation rather directly about the research participants' everyday experiences of

spacings and place. For example, due to the extramural location of the site, the students likely would have their cell phones with them (which they all did), thus presenting in-themoment opportunity to discuss their use of the phone for its real-time (and "real-space") connectivity via its several modes: telephone, Internet connection, and texting.

In this segment of the research design (the in-depth interviews), the researcher engaged to directly observe and discuss research participants' views and performances of their everyday spatiality. Specifically, the participants were queried about their *sense of place* of the town and their use of communication and media technologies. Pertinent to this, Seamon, in conceptualizing "bodily routines" in space, terms this a *place ballet*: "an interaction of body and time-space routines rooted in a particular environment" (2007, 3). The interviews at this venue helped ground discussions in the real-time, real-space materiality of an actual place. This is where the research participants and the researcher most directly interacted in their *place ballet*.

It is fitting that interviews attempting to reveal the spatial lifeworlds of interviewees would take into account the very space of the interview (Anderson and Jones 2009; Herzog 2005; Riley 2010). According to Herzog, the interview location becomes not just research logistics and stage for the interview event, but part of the construction of meaning itself. As such, it becomes both "cultural product and producer" as it "plays a role in constructing reality" (2005, 25). Because the Internet café was not the school, it reduced the likelihood that participants would give meanings of spacings and place that were school influenced. The "place-ballet" of an Internet café--a student hangout--is not the same as the "**school** place-ballet."

Therefore, for this research, it was necessary to conduct interviews away from the

school venue, away from the student/teacher-role meanings that the school contains for the research participants (and for the researcher/teacher). These meanings include the power relations existing between student and teacher. Conducting the interviews off-site in a public space well known to most students, where some go to access the free computers and Internet connection, helped create a milieu for more egalitarian construction of the subjectivity of both interviewer and interviewees. Importantly, because the present researcher aimed to explore the *subjective partitioning of space* and the *geographic imaginations* of research participants, the interview venue itself--a local site of face-to-face and Internet social contact, with commercial products from around the world (coffees and teas), and with TVs--itself became part of the conversation about globalization, connectivity, and the participants' sense of place and space. If, according to Jordan-Bychkova and Jordan, the "[postmodern] world has surrendered to placelessness and [been] obliterated through topocide" (2000, ix), then the Internet cafe--site of both global connections and local meanings--would well serve an investigation into the subjectivities and subjective partitionings of youth-space. If there is a "worldview in flux" among young people (Norwine and Smith 2000), then a conversation about that worldview should take place in a site of youthful performance and flux. Subsequently, the interview location itself played some role in data collection and analyses of the findings (Herzog 2005, 26).

Data Collection Procedures

Methods of data collection took three forms: 1) a Questionnaire Instrument; 2) a Writing Protocol; and, 3) an Interview Schedule. The questionnaire surveys and Writing Protocol were administered to a purposive sample of 25 students in the researcher's Advanced Placement (A. P.) Human Geography classes, during school-year 2010-2011. The student participants were in 11th and 12th grades, ages 15 to 18, stratified to achieve a balance of males and females. Due to the nature of the subject matter of the proposed research--the *subjective partitioning of space* and the *geographic imagination*--the sample was purposive in selecting only A. P. students, in order to obtain a more intellectually advanced set of students who were judged able to express their personal spatiality in writing and interviews.

The Questionnaire Instrument and Writing Protocol were explained to participants in the researcher's classroom, during regular school hours. Participants completed the questionnaire and wrote their essays in response to the scenario prompt and questions, as homework. Afterwards, the classroom functioned as the venue where the researcher not only collected the questionnaires and written responses, but also conducted short class discussions about the contents of the two instruments.

Questionnaire Instrument

The Questionnaire Instrument (Appendix A) contained 31 questions, both open and closed, including a final space that allowed further reflection on any previous questions. The closed questions were constructed in a Likert-style format using a scale of five, six, or seven positions, usually including "neutral" and "undecided" positions. The first eight questions acquired demographic information, ranging from age, gender, and grade level; and, also, spatial, such as whether the participant was born locally, as well as the number of countries visited and lived in (tabulated in Tables 7.2 and 7.3 in Chapter VII). Next were 15 Likert-format questions about spatial orientation (tabulated in Table 7.4 in Chapter VII), such as attitudes to globalization, *globality*, and world citizenship; for example, "Do you see yourself as a world citizen?" Two questions exemplified the essence of the survey: item #11--"Likelihood you will move permanently from here sometime"; and, item #14--"I feel I belong here." These two questions provided some measure of *place attachment*.

Although there is conceptual overlap among some categories (e.g., cosmopolitanism and *globality*), the questions were aggregated into these groups:

- Demographic--Four questions (items #1, #2, #3, #10) provided numeric data about gender and age, and whether the research participants were born in or near the research locale, and whether the parent(s) was born in another country.
- Identity (local)--Two questions (items #13 and #17) provided numerical data about the self-identity of the research participants in terms of degree of local identification. For example, item #13 queried identification with the local landscape.
- Cosmopolitanism--Two questions (items #18 and #19) provided numerical data about identification in terms of world citizenship. For example, item #18 asked for degree of identification as a "world citizen."
- Temporal--Three questions (items #4, #8, #9) provided numerical time data linking each participant temporally to the locale. For example, item #9 asked for the number of years the participant's parent(s) lived in the locale.
- Direct spatial experience (other than locally)--Three questions (items #5, #6, #7) provided numerical data about experience of travel and residence in other places.
 For example, item #7 asked for number of foreign countries visited.
- Spatial integration (perception of)--Three questions (items #21, #22, #26)

provided numerical data about perception of person-place interaction or placeplace interaction. For example, item #26 asked about perception of one place influencing other places.

- Globality--Three questions (items #23, #24, #25) provided numerical data about global awareness. For example, item #23 asked about awareness of global events and culture.
- Connectivity--Four questions (items #27, #28, #29, #30) provided numerical data about electronic/digital media connectivity. For example, item #28 asked for number of text messages sent per day.
- Place attachment--Five questions (items #11, #12, #14, #15, #16) provided numerical data about attachment to the locale.

Writing Protocol

The present researcher devised and administered a Writing Protocol (Appendix B) that included a scale, with interval values, of the spatial continuum from local to global on which participants marked where they understood their lifeworlds to be "taking place."

Nicholas Entrikin (1991) believes that place is a "betweenness" that needs to be understood as narrative. The protocol writing by the research participants afforded them the opportunity to express their personal narratives of how they experience home, place, and space from local to global. The scenario prompt in the Writing Protocol was developed to create a narrative of what the researcher (as a teacher and father of a daughter in the same age cohort) understood as the typical experience of the spatiality of middle adolescents. The scenario included experiences of spacings and place of both the local (sitting on beach) and the global (breeze from Cuba, mission trip to Honduras, earthquake in China). The scenario also included several prompts about modes of communication and transportation: car, texting, telephone, Internet, television, and movie. Overall, it was an attempt to convey both a sense of situatedness in the locale and sense of connectivity with macrospace beyond the local. Thus, the questions in the Writing Protocol sought to elicit the participants' sense of "whereness" of their lifeworlds.

The hard copies of the Writing Protocol texts were digitally scanned using optical character-recognition software to convert to electronic files, then the hard-copy written texts were visually compared to the electronic files and corrections of legibility made. They remain stored as computer files on the researcher's home computer.

Interview Schedule

The Interview Schedule (Appendix C) was revised after the results of the Questionnaire Instrument and Writing Protocol were initially analyzed in order to address any new areas suggested by the data and to refine the questions so as to address areas in need of deeper investigation. The design (and general purpose) of the questionnaire was a means for collecting experiential narrative data as a resource for developing "thick description" (Geertz 1973) of the spatiality of participants' lifeworlds. This method obtained experiential descriptions and reflections from the participants designed to elicit the place meanings of their lived spatial experiences. For this reason, it was designed as a semi-structured instrument with much room for open-ended responses. Interviews in social-science research have long functioned as "conversations with a purpose" (Burgess 1984, 102), as was true for the semi-structured interviews carried out in the present research.

As justification for selecting the semi-structured interview mode of data collection, helpful were the thoughts of anthropologist of place Keith Basso: "relationships with places are lived whenever a place becomes an *object of awareness*" (1996, 54). Further, "it is at times such as these, when individuals step back from the flow of everyday experience and *attend self-consciously* to places--when, we may say, they *pause to actively sense them*--that their relationships to geographical space are most richly lived and surely felt" (ibid; emphases added). The semi-structured interviews asked direct questions about spatiality and *lived geography* and were designed to enable the research participants to "step back," attend to, and reflect on the places and spatialities of their lifeworlds.

To pilot the Interview Schedule, the researcher guided two participants, in separate sessions, through a *cognitive-interview* process to revise the content of the Questionnaire Instrument, in order to reduce the threat to instrument validity. Cognitive Interview methodology is a "think-aloud interview" process and has been shown to remedy most common threats to surveys (Desimone and Le Floch 2004), by allowing for in-depth analysis of individual instrument items. Threats to instrument validity usually arise from the "complexity of phenomena that researchers seek to capture" (ibid., 6)--as are the concepts of space, place and spatial cognition used in the present research. Also, participants might "answer in a socially desirable way," and questions may be misleading (ibid., 6). Cognitive interviews serve an "exploratory function" by revealing the participant's comprehension of the intent of a question and, importantly, any "conflicted understanding of the constructs central to the study's conceptual framework" (ibid.).

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Participants are asked to "talk through their thought processes as they answer questions" on the instrument (ibid.). Because people's affects and thought processes vis-à-vis sense of place and space are widely believed to be complex, the cognitive-interview technique employed as a pilot study helped to identify any underlying, problematic, substantive issues in the Interview Schedule and thus produced an instrument of greater validity.

When the Interview Schedule was refined and ready, eight participants were selected who had earlier completed the Questionnaire Instrument and Writing Protocol. The students were purposely selected based on balancing the number of males and females; thus four males and four females were selected. Second, three participants were selected from the aforementioned A. P. Human Geography class who had some family connections overseas. Each of the three was born in the U. S. and had lived there his or her entire life, although each set of parents had previously immigrated to the U. S. Lastly, the present researcher chose five other participants (eight in total) whose questionnaires and written texts had shown the widest range of experience of spacings and place. The goal was to obtain rich data of wide experience, not only the most typical experience. From the rich data, hopefully meaningful "rich features" (Barton 2002) would be identified across the texts. The verbatim written and interview rich textual data presented in Chapter VII afforded the opportunity to identify "rich features" pertaining to the participants' spatiality.

An important part of the interviews was the same local-to-global graphic scale used in the Writing Protocol, in which participants chose a numerical position on a scale to indicate their conception of where their lifeworlds were located. The strategy distinction, in this instance, was to use the graphic scale as focus of in-depth discussion

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of a complex, liminal subject, so that participants could express, in their own words, how they understood the spatiality of their lifeworlds.

The audio-recorded texts that resulted from the interviews using the Interview Protocol were stored initially in the digital recorder device. These interview recordings were then transferred to the home computer employing a downloaded software program (*Express Scribe*) that affords on-screen controls for convenient audio playback so that they could be transcribed simultaneously on-screen. The transcriptions were then stored as files on a home computer.

Methods of Analysis

The overall analysis employed analytical triangulation/*crystallization*: a combination of methodologies involving both quantitative and qualitative approaches (Denzin 1978; Johnson, Onwuegbuzie, and Turner 2007). The latter approach included heavy emphasis on the phenomenological analytic method. These procedures are described in the following sections and provide further explanation of the interpretive, inductive, contextual, iterative approach used in this research to achieve *crystallization*.

Quantitative Analysis

Statistical analyses were carried out on the 31 items of the Questionnaire Instrument. Several types of descriptive statistics were calculated for each question, including simple counts, percentages, and measures of central tendency (the means in each case, but also median and mode values where relevant). Comparisons of key questions were carried out to identify associations among questions. Survey questions that provided binary answers (e.g., gender, and born here/not born here) were compared using the nonparametric Mann-Whitney U Test (confidence level of p=0.05). For example, gender was compared with item #16 ("I have attachment to this town"); item #13 ("I identify with the local landscape"); item #29 (about participation in online social-networking sites), and item #15 ("What happens to my town is important to me").

The quantitative analyses were used in two iterative processes. First, they furthered the development and refinement of the Research Questions, Research Propositions, and construction of the Interview Schedule. Second, they proved useful for defining meaning units (or theme) discovery within the three modes of data collection. The quantitative results were compared to the transcript data of both the Writing Protocol and the Interview Schedule.

Phenomenological Analysis

Mixed-method approaches are increasingly used to study a wide range of topics in human geography (Eyles and Smith 1988; Hemming 2008), although the label "interpretive" and "interpretive geography" might be better terms (Eyles 1988, 1). Interpretive methods have been used in the field of geography education, for example, in a study of the importance of using place and everyday life as curriculum in formal education of children (Ellis 2004). "Interpretive" is the proper label, Eyles believes, because "the material we use to describe the world are our representations and constructions of other people's representations and constructions of what is occurring in the social world" (1988, 3). This statement by Eyles aptly describes the present research: It is an interpretive geography.

Creswell emphasizes the interpretive and contextual nature of qualitative research that well describes the direction of this dissertation: "qualitative research today involves closer attention to the interpretive nature of inquiry and situating the study within the political, social, and cultural context of the researchers, the participants, and the readers of the study" (2007, 37). *Hermeneutics*, as a methodological refinement of phenomenology, is useful in this regard. It describes "how one interprets the 'texts' [lived experience] of life" (van Manen 1990, 4). For the purposes of this research, one of the "existentials" (of existence)--or "fundamental lifeworld themes"--is *lived space* (ibid., 101). The "thickly descriptive" approach of Clifford Geertz (1973) also fits closely with this interpretive approach. These three related interpretive research approaches (in qualitative research)--hermeneutical phenomenology, *thick description*, and interpretive geography--purposefully "construct a system of analysis in which 'the aim is to draw large conclusions from small, very densely textured facts"" (Eyles 1988, 3-4, citing Geertz 1973, 28).

For the present researcher, the study of the interpretation of *lived space* (or *lived geographies*)--the general topic of the present research--is also a personal project of self-awareness (and self-discovery). In a "triple hermeneutic" in which the researcher interpreted the lived spatialities of the research participants (who were interpreting reflexively their own lifeworlds), he reflexively was also (re)interpreting his own lived spatiality in face of all the contemporary forces of space-altering contingencies that operated in his lifeworld, as they were for the research participants. The analyses of the data presented in Chapter VII reflect this methodology as an interpretive geography of the revealed lived spatial experiences (the thick descriptions) of the participants.

Phenomenological Procedures

As outlined above, the overall qualitative approach taken in this research was phenomenological and followed the guide developed by Creswell (2007, 159), that lays out steps for phenomenological analysis. The following steps combined data from the three components of analysis: quantitative, qualitative, and triangulation, and proceeded as follows:

- A. Begin with a full description of the researcher's personal experience of spatiality--his own subjective partitioning of space, his own *geographic imagination*.
 - This description was provided, below, in the Researcher Geo-Biography section.
- B. Develop a list of non-overlapping, significant statements about the participants' experiences of spatiality (called "horizontalization" of the data); each statement is treated as having equal worth.
 - In the present research, this step was accomplished by selecting significant statements from each of the three data-collection modes, but, predominately, from the texts that resulted from the Writing Protocol and transcripts of the Interview Schedule. Significant statements were selected to provide the widest range of experiences of the *lived geographies* of the participants.
- C. Group the significant statements into larger "meaning units," or themes.
 - This step was carried out by grouping the statements into meaning units that emerged from the quantitative and textual data collected from the participants. They were then correlated with existing social-science literature that seemed to closely explicate, more or less, the participants' spatial behaviors. These were the seven meaning units that emerged:

existential insideness; existential outsideness; spatial monogamy; spatial promiscuity; media multitasking; always-on/always-on-you personalmedia use; and deterritorialized spatiality.

- D. Write a description--a "textural description," including verbatim examples, of the experiences of the research participants related to their spatiality, as reflected in their statements. Both Creswell (2007, 159) and Moustakas (1994, 122) use the word "textural" (not "textual") to indicate that the description (distilled from participants' statements) points to the **structure or fabric of the phenomenon** under investigation, rather than the text (participants' statements) *qua* text.
 - This description was accomplished in Chapter VII, which presented the verbatim texts of the participants, as rich data related to their spatialities, grouped into the "textural" contexts of these same meaning units (listed in C, above). Crucially, for the present research, this means there was a description of participants' material, *lived spatialities*--the spatial structure or fabric of their lifeworlds, but as they interpret them---necessitating an outward-proceeding scalar description from home, to locale, to country, to world. Indeed, this was the very heart of the overall topic of the present research: It is about these spatial orientations and contexts--their *lived geographies*--as the participants self-reflexively understood themselves living them.
- E. Write a description--a "structural description" of the setting and context of the participants.
 - The material spatial contexts of the *lived geographies* of the participants

(where they take place) were provided in the Research Venues section (above) (with Town, School, and Internet Café subsections).

- F. Write a composite description incorporating both textural and structural descriptions in a culminating elucidation of the "essence" of the phenomenon. It explains the experiences of the participants and the context of those experiences.
 - These "essences" of spatial experience were provided in Chapter VII as analytic comments concerning the verbatim texts of each of the eight interviewees, and, near the end of the chapter, as analytic and general conclusions. Almost the entirety of Chapter VIII can be seen as a textural discussion of the "essences" of the phenomenon of the spatiality of the middle-adolescent research participants.

Comments by Klaus Krippendorf about the content-analytic method of analyzing text seem appropriate here, as it parallels the procedure carried out in the present research. His stance is, "Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the *contexts* of their use" (2004, 18; emphasis added). The phrase "to the contexts of their use" is a point of considerable importance in Krippendorf's account, as he explains, for example, that the "container metaphor" for the meaning of a text (that a text contains inherent meaning "waiting" to be extracted) is insufficient, in that it negates some of the valid involvement of the analyst as interpreter of "what counts as content" (ibid., 19-20). Instead of text as container, Krippendorf advocates analyzing **text relative to a particular context**.

This definition and stance provided by Krippendorf (2004) fit the present research, due to the complex nature of its subject matter (*lived geographies, cognized* *space*). A very simplified content-analytic method was combined with the phenomenological steps (above), in order to make inferences about the "texts [which] can provide information about...ideas in people's minds" (ibid., 23)--or, in terms of phenomenology, to distill the "essences" of the experiences of the participants. As Krippendorf asserts,

Every content analysis *requires a context* within which the available texts are examined. The analyst must, in effect, *construct a world* in which the texts make sense and can answer the analyst's research questions. (Krippendorf 2004, 24; emphases added)

The "worlds" alluded to by Krippendorf (above), in which the present researcher made inferences and constructed meaning units, were the spatial lifeworlds of the research participants. The texts of the Writing Protocol and the transcripts of the Interview Schedule were interpreted and placed in contexts that gradually emerged from the participants' written and spoken texts themselves, but also from the contemporary literature concerning spacings, place, and spatial cognition. In the present research, the "**context** of the texts" and the "fabric of the phenomenon" (i.e., the spatial context of the lifeworlds) was the point of the research.

Historian and psychologist Philip Cushman explains his use of the *hermeneutic circle*--"the scholarly tacking back and forth between the part and whole" (1995, 4)--as the contextual method he uses in his cultural history of psychoanalysis and the self in America. Here he summarizes his hermeneutic approach:

[It is] a determination to focus on the everyday, lived *context* of whatever, or whoever, one is studying. This approach focuses on **situating one's object of study in the cultural and historical context in which it is embedded**. ... Studying humans by abstracting them from their cultural context and observing them in a dispassionate, putatively objective manner in the psychological laboratory is more akin to removing fish from water than picking up

a rock from its resting place. ... Individuals and their context form a dialogical, interpenetrating *unit*. **By studying one, the researcher inevitably studies the other**. (Cushman 1995, 17; italics in the original; boldface added)

The present research was by no means a full-blown historical-hermeneutic treatment of the entire lifeworld contexts of the participants. It did narrow the focus of inquiry into the spatial contexts--the contextual "resting places"--of *home, sense of place*, and the *spatialities of media use*. It carried this out, per the recommendation of Cushman (above), **by situating participant data in some cultural context**--by tacking back and forth between the "parts" of the participant data and the "whole" of the cultural context as reflected in literature of the human sciences. This research studied, metaphorically, the fish *in* the water. In this sense, this research approach was an attempt at holism, in its effort to place the revealed, enunciated spatialities of the participants into the fabric of the sociocultural context of the extant lifeworld of the contemporary socio-historical era.

In light of the above, these research foci--*home*, *sense of place*, *globality*, and *spatiality of media use*, as gleaned from the relevant literatures--were deemed by the researcher to form the critical planks in the cognitive platform on which interpretations of the *geographic imaginations* of the participants could be constructed.

Validity Issues

In order to deal with plausible validity threats to the potential conclusions of this study, the present research carried out several validity-checking procedures. Validity, in general terms, is "the level of *accountability* and *legitimacy* that is strived [for] through data collection, analysis and interpretation (Gelo, Braakmann, and Benetka 2008, 273; emphases in the original). In discussing validity for qualitative inquiry, Creswell and Miller explain it as, "how accurately the account represents informants' realities of the

social phenomena and is credible to them" (2000, 125). Maxwell (1996, 87) uses the descriptives "correctness" and "credibility." Fischer explains qualitative validity as, "the fit between a descriptive representation and instances of what was described" (2006, 441). Since the strength of qualitative research is the understanding of meaning (Maxwell 1996, 17), validity should be thought of as the correctness, credibility, and fit of the meanings produced by the inquiry.

Cho and Trent describe two general approaches to validity in qualitative inquiry: *transformational* and *transactional*. *Transformational validity* in qualitative research is "a progressive, emancipatory process leading toward social change that is to be achieved by the research endeavor itself" (2006, 321-322); this approach does not align with the research intentions of the present researcher and was not used. Instead, validity of the present research was modeled on the *transactional approach*: "an interactive process between the researcher, the researched, and the collected data that is aimed at achieving a relatively higher level of accuracy and consensus by means of revisiting facts, feelings, experiences, and values or beliefs collected and interpreted" (ibid., 321).

Content Validity

To help ensure that this research measured the research questions, as previously described, the research design triangulated/*crystallized* with three methods: Questionnaire Instrument, Writing Protocol, and Interview Schedule. With the three modes of data collection, there was an increased likelihood that the research questions were actually "measured." Or, per the above stance, that there was a deepened, complex "*crystalline* form" of comparative understanding of the *lived geographies* and *geographic imaginations* of the research participants.

Data Interpretation

The present researcher systematically solicited feedback ("member checking" or "member validation") from the research participants, in order to correctly understand their perspectives and the meanings they attached to their survey responses, writings, and interviews--to test conclusions. Lincoln and Guba consider member checking "the most crucial technique for establishing credibility" (1985, 314); it should occur throughout the inquiry (Cho and Trent 2006). It is a process in which collected data are "played back" to "participants to check for perceived accuracy and reactions" (ibid., 322). Lincoln and Guba link the process of systematic feedback to objectivity: "The guarantee of objectivity in human science is the participation in the *dialogue* between the investigator and the investigated, in which reciprocal interaction occurs" (1985, 357, citing Hesse 1980; emphasis in the original).

To ensure objective dialogue between research participants and researcher, the present researcher presented each of the three sets of data to the pertinent participants and "played back" their answers/writing/interviews in order to solicit their feedback, reactions, and views. At this point, this researcher presented to each participant, for his or her input, any conclusions reached about young people's *sense of place, spatiality*, and *geographic imagination*. This researcher took notes of these transactions and used them in further formulating research conclusions.

Discrepant Evidence

Identification and analysis of *discrepant data* (those not seeming to fit preliminary or proposed conclusions) are a key part of finding defects in any research conclusions (Maxwell 1996). Because the research took an interpretive approach to understanding the lived spatial experiences of individuals, no data were dismissed as invalid. After all, the data are "true" in themselves as coming from individuals who are providing their individual meanings to their spatial experience. Their lifeworlds cannot be discounted. Therefore, all evidence collected in the research was reported, examined, and analyzed. Otherwise, as Maxwell notes, the research could become "a self-fulfilling prophecy" (ibid., 109). This issue for Maxwell--of developing alternative explanations and maintaining "the scientific state of mind"--is "just as important for qualitative proposals as for quantitative ones" (ibid.).

Researcher Bias

In the Researcher Geo-Biography section below, the present researcher selfreflexively acknowledged prior biases (which evolved diachronically) toward the general research subject matter: globalization/localization and how humans relate to space/place. His own spatial lifeworld (as reflected in his bio-narrative) and formal studies of geography have led him to keen interest in how people, including himself, view the world geographically: their (and his) *mental geographies* and *senses of place*. This is the basis for personal interest in the research. However, through increased exposure to various learned viewpoints on the subject, the present researcher claims neutrality as to any ideological stances toward globalization and the valuing of global versus local spatiality. Even though the present researcher has intensively researched this area of knowledge for more than seven years, he strove to avoid a "confirmatory bias"--inattention to contradictory evidence once a researcher has formed a strong hypothesis. This is the case, because the propositions presented here were simply useful for comparing findings, and, in any case, were not strongly held by the present researcher. Thus, he made every attempt at "bracketing" his own framework and assumptions, in order to not impose any preconceived views.

Researcher Geo-Biography

The general topic of the research--the *inner geography* of spacings and place-required the researcher to understand that he, in his own reflexive, embodied space, was an integral part of the study design. Reflexivity is the "self-critical sympathetic introspection and the self-conscious analytical scrutiny of the self as researcher" (England 1994, 82). England encourages us to "reflect on the spatial fabric of everyday life" (ibid., 80). As Denzin and Lincoln note, "Qualitative research is a situated activity that locates the observer in the world" (2000, 3). This is certainly the case in the present research because the phenomenon of the lived experience of spacings and places--its fabric--is lived, perforce, by the researcher as well as by the research participants. The lifeworld of the present researcher, as is that of the research participants (and everyone), is also a spatial lifeworld. Therefore, as he strove to understand the spatiality of the research participants (their "felt space" [van Manen 1990]), he also was interrogating his own understanding of all the space- and place-altering forces to which ordinary people (and himself) are subjected today. The challenge of the context of the present research was partly that of the researcher being situated existentially in his own "fabric of felt space," while researching others' self-disclosed fabric of existentially felt spacings.

Consequently, the present research employed a phenomenological viewpoint, one that holds open a place for the voice of the researcher. As van Manen argues, "The purpose of phenomenological reflection [on a chosen research topic] is to try to grasp the essential meaning of something" (1990, 77). (Further discussion of phenomenology and phenomenological geography education in chapters III and VIII.) In addition to the endeavor of grasping essential meaning of some aspect of human experience, a researcher using constructivist techniques assumes the role of the "primary instrument" in the research process (Marshall and Rossman 1999; cited in Williamson 2006.)

As the primary instrument of this largely qualitative, interpretivist/constructivist, phenomenological research project, the present researcher opens this section of geographical biography--a "geo-autobiography." This personal narrative (now voiced in first-person) recounts some of the development of my own *geographic imagination* (my *inner geography*) and *sense of place* (both terms discussed in Chapter IV), and ties directly into the subject matter of the present research. An apt title for this section might be "Confessions of a Globalist Teacher," as, in fact, much of my prior bio-narrative had imbued me with a geographic orientation influenced by *globality* (awareness of the world as a whole [Robertson 1992]), and led me to become a classroom geography teacher of globalization and promoter of the ideas of globalism. I now have reservations about the value of that pedagogical enterprise (although, as appropriate for any researcher, I remain agnostic vis-à-vis the research findings in the present research).

Perhaps the first influence on me of the wider world beyond my hometown in western Kentucky, and development of my *geographic imagination*, began with the large box of U. S. postage stamps my mother had collected during World War II, handed to me when I was about age six. I would send off for stamps from around the world and place the brightly colored stamps with exotic pictures--e.g., from Bechuanaland, Rhodesia, and Tanganyika--in my stamp-collection albums. Thus, philately was the initial impetus for developing my *geographic imagination* of the global. A few years later my grandmother began bringing to my home issues of *National Geographic*, perhaps an occurrence that is the prosaic beginnings of many geographers today. I plastered my walls with colorful maps and wondered about the faraway lands represented there. I was a paragon of what Carl Sauer intimated about the need for personal proximity to maps: "Show me a geographer who does not need them constantly and want them about him...." (Sauer 1956, 289). In my adolescent study of the maps on my walls, like Miles Harvey, I became a young *mapperist*: "an ecstatic contemplator of things cartographic" (2000, xii). My experience was similar to that of Ken Jennings, a self-described nerdish "maphead," who opined that "map love" is a fancy "which you catch either during your Kool-Aid years or not at all" (2011, 11). As a young *cartophile*, I continued developing a global *geographic imagination*.

However, as a young adult I rebelled in intellectual reaction and opposition to what I judged as my father's small-town provincialism. He was a journalist, editor of my hometown newspaper, and a somewhat renowned, local-colorist writer, who, with a great deal of intent, placed under the flag (or masthead) of his newspaper this spatial delimitation and geographic perspective: "As far as this newspaper is concerned, the sun rises in the Green [the river delineating the eastern border] and sets in the Pond [river on the western border]," of Muhlenberg County, Kentucky. He was quite proud of his localist geographic orientation. *Contra* my parochial father, I was mentally estranged from the small-town lifeworld of my hometown.

After high school, at the University of Kentucky I discovered academic geography (earning BA Geography, in 1970) as a subject that spoke to me of much of what I had been interested in from childhood until that point. Later, I returned to college to obtain an AAS degree in Land Reclamation so I could work for the Kentucky State Department of Natural Resources as a strip-mine inspector in deeply "hollered" (from "hollow," a deep-sided valley) Appalachia. I was trained and worked directly with reading the landscape, another area noted by Sauer, when he wrote, "The geographic bent rests on seeing and thinking about what is in the landscape...." (1956, 289). I, in fact, became a professional reader of landscape.

When I became a geography teacher (with MA Geography, MA International Affairs, MS International Agriculture, MEd Secondary Social Studies), especially when I arrived at a teaching position on the Mississippi Gulf Coast, in 1996, I began, quite purposefully, to teach globalization per my academic training, and the influence of three and half years with U.S. Peace Corps in Jamaica, and some extended stays in other places overseas (e.g., a school-year teaching in Taiwan, and four and half months living in the rainforest of Costa Rica). I used to lecture with overwrought confidence to my high-school students that globalization relates to nearly everything significant occurring in the world. As Bude and Durrschmidt critique the recent genealogy of the concept of globalization: "it seemed to be an innovative and ground-breaking concept... [that] once promised...to provide the umbrella for the analysis of the society of the twenty-first century" (2010, 482). Globalization was the lens through which I viewed the world and the foundational concept of my pedagogy. I had left behind my previous training and predilection of perceiving and interpreting (local) landscape, and became much more interested in nearly all subjects international and global.

I had become what I thought was a geography teacher *par excellence* with the proper perspective on spatial affairs: A geography teacher who taught the primacy of

global connections. Besides, I had nearly become what Pico Iyer (2000) has called a "global soul," a serial migrant who attempts to be "at home in exile." To wit: In the 20 years between 1976 and 1996 I had moved more than eight times--Kentucky to Jamaica to Ohio to California to Taiwan, back to California and on to Mississippi, and now Tennessee (in 2011); and traveled to a couple dozen other countries, sometimes staying for months at a time. Although as Carl Sauer signaled, "The geographer and the geographer-to-be are travelers, vicarious when they must, actual when they may" (1956, 289)--I had nearly "forgotten how to hear, communicate, and participate in meaning making with [my lived] places on the living earth" (Gruenwald 2003b, 624). I was living rather "topo-agnostically" (my term) in my lack of attention to the "whereness" (Downs and Stea 1977) of my literal place on Earth. Possibly worse, I was participating in a pedagogy that dragged my students along with me in cognizing the whole planet before we ever considered the local place where we were living, which in a deeply existential way we should have recognized as "home."

Similar to geographer Richard Peet, writing in the Preface of his book on modern geographical thought, I discovered "how intricate the connections are between contemporary geographical thought, social theory, and philosophy" (1998, vii). The deeper I delved into trying to understand how (and why) young people think about spacings and place (and their *self-emplacement* in them)--their spatiality--the more it led to geographic, social-science, and human-science theory, and to the philosophies of spacings and place.

During my childhood (to borrow the words of Stephen Trimble), "Geography seeped into me, a bedrock awareness of landscape and place" (1994, 19). These

childhood experiences, part of my personal geo-autobiography (presented above), along with my study of geography and social/human sciences, have led to keen interest in how people (including myself) experience their geographic worlds--their *geographic imaginations* and *senses of place*. Surely all children become keenly aware of the spacings and places in which they live (whether or not they are natural places). The question is, then: What is the "geography" that has seeped in? This question is the *raison d'être* for the present research.

Being a "mapperist" (or "cartophile"), a teacher of geography (world and A. P. Human Geography), and student of academic geography--all go only a partial way in helping to understand one's emplacement in the world. One must delve deeper in order to understand and evaluate one's place in the geographic world. It is the deepest kind of geographic inquiry: the study of real lives in real geographic lifeworlds--mine included.

Ethical issues

Before administering each of the three data-collection instruments, the present researcher obtained from each participant a permission form signed by a parent and the participant (Appendix D). The permission forms were retained and stored. No harm could come to the students who participated in the present research because their identities have remained anonymous and no information was identified with any individual.

Other Issues

The lingering social memory, in 2012, of the 2005 Hurricane Katrina tragedy and its effects on students were not clear (data for the present research were collected in 2010-2011), although this researcher also experienced the storm firsthand and lived through the chaotic aftermath, which included listening to students' stories of their experiences of storm, evacuation, and cleanup. Surely, there were instances of posttraumatic stress disorder for some people for some time after the event. For purposes of this research, it is not known how the storm changed the participants' spatial views, particularly their personal risk analysis and sense of place for an area susceptible to destruction by tropical storms. At the time of the disaster, in 2005, they were about 11 years old, and some families had their homes "slabbed," that is, demolished to the foundations. Others, even if they then lived in the area, had little damage to their dwellings. The present researcher knew people who permanently left town or desired to relocate so that they would never have to risk another cyclonic episode of the dimensions of Katrina. On the other hand, other people seemed to feel a heightened sense of communal solidarity with having survived the crisis more or less as a community. Anecdotally, as a classroom teacher, the present researcher noticed a palpable change in attitudes among students in how they thought of the study-site city. No longer did he hear that the town was "boring" and that there was "nothing to do" there. Since the disaster, he heard many more positive sentiments about life in the community.

The most recent "natural" disaster to appear on the horizon (literally) was the May 2010 oil spill in the Gulf of Mexico (after the Questionnaire Instrument was administered, but before the interviews). Again, it was unclear how students assessed living there and their *sense of place* of the community because of this event.

A second issue is that, while acknowledging the truism that "every place on Earth is unique," the community in which the participants resided was recognized as a highly desirable place to live. This might have skewed the *sense of place* of some of the participants toward more highly valorizing this locale than would be true for many other

communities (although several participants clearly did not exhibit positive attitudes towards the town). It is under-theorized as to how the particular amenities of specific places influence an individual's *sense of place*, especially of young people. For example, the present researcher grew up in a town and region that few would evaluate as a desirable place to live. Yet, paradoxically, his hometown has engendered, by all accounts, a strong *sense of place* among its residents, both among those living there now and those who have migrated away. Again, each place is unique, but we have to study real individuals (rather than abstract cultural subjects) who live in actual and unique places. The present research endeavored to account for only specific participants who lived in a specific study site at the particular time period of data collection, thus the generalizability of the results must be cautioned against, commensurate with this caveat.

Concluding Comments

The analytic results of both the Questionnaire Instrument and Writing Protocol were used as data in their own right as part of the analysis, and also to revise and deepen the questions in the Interview Schedule. As the research progressed, meaning units (themes) emerged from each of the three data-collection modes. These themes were compared and contrasted iteratively to the pre-research concepts and frameworks (chapters III, IV, and V) which evolved from the literatures on *home*, *place*, *dwelling*, and *sense of place*, *placelessness*, *globality*, and others (Chapter IV). The iterative, comparative process (using social/human science literatures and collected data) continued through the triangulation of the three analyses resulting in a *crystallization* of data results for a more holistic understanding of the multiple facets of the research participants' spatial experience.

CHAPTER VII

DATA PRESENTATION AND ANALYSIS

This chapter presents the results of the data collection and analyzes those results. Due to the nature of attempting to study and make visible the largely hidden *inner geographies* of individuals, a person-centered methodology was required. To accomplish this, a triangulation (or *crystallization*; Chapter VI) of mixed data-collection methods, in three sequential phases, was developed to focus on the meanings of the participants' lived spatial experiences. The Questionnaire Instrument provided some quantification of data; the Writing Protocol and Interview Schedule supplied data of "thick description" of spatial experience. This methodological procedure was an attempt to use empirical evidence to fashion an "interpretive geography" (Eyles 1988) of young people's own interpretive geographies.

The overall direction of this research was an attempt to elucidate the psychological, philosophical, and social-science background of the *geographic imagination*, an essential constituent of each individual's ontological horizon. Empirical data were collected from middle-adolescents to gain their perspectives, in their own words, about their own lifeworlds to answer the specific question that shaped this research: How do middle-adolescents *self-emplace* in spacings and place? The research purpose was set to investigate a particular constellation of the *inner landscapes* of individuals: The experience and conceptualization of spacings and place

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(the *geographic imaginations*) inclusive of all spatial scales from local to global. There were eight middle-level research questions that guided this research, ranging from *sense of place* to *cosmopolitanism* to the use of personal-media technologies (Chapter II). The three data-collection instruments were designed to address those general questions and these four specific Research Questions: 1) What extent do middle-adolescents exhibit *sense of place*? 2) Are the research participants more globally aware (exhibiting the cognitive characteristic of *globality*) than locally aware? 3) What is the relationship between gender and awareness of global space and local place? 4) What is the relationship technologies?

To fashion a more holistic interpretation of the collected data the *crystallization* approach was used. *Crystallization* as a qualitative research methodology was developed as an improvement on methodological triangulation. Triangulation is a validity procedure that is used in a multimethod search for convergence of the data (Creswell and Miller 2000), and as in all qualitative research, to develop a "complex picture" and "holistic account" of the topic under study (Creswell 2007, 39). The metaphor of the crystal has been used by some qualitative researchers to highlight the assumed "multiple, refracted realities" of any research subject (Denzin and Lincoln 2000, 5). This approach is used by researchers, not in the quest for greater "validity," but for a "deeper and more complex view" of the research topic (Hemming 2008, 155). Besides the Questionnaire Instrument and Writing Protocol (which themselves supplied depth, especially the latter method), the methodological *crystallization* approach in the present research was operationalized further by the in-depth interviews of eight research participants, adding "rigor, breadth,

complexity, richness, and depth" (Denzin and Lincoln 2000, 5) of distinctive, individual voices to the collected data. Each of the interviewees had a unique perspective ("refracted reality") on the *lived geographies* of contemporary life of middle adolescents. An epistemological caveat is in order: As the Renaissance essayist Michel de Montaigne warned in his *Essais*: "There is more work in interpreting interpretations than in interpreting things." Nevertheless, the goal of revealing some of the essential *inner geographies* of young people surely is worth the effort, and may be critical to how American education directs its efforts to fashioning a coherent, salutary socio-environmental future for us all.

Data Collection Results

The following sections present empirical data collected from the three research instruments introduced above. Each data-collection modality (or Phase) is presented as a separate section, but with some insertions as needed from the other modalities to fashion a more holistic (and *crystallized*), analytic presentation. The interview section (before the concluding section) gathers the results into more detailed interpretations; however, analysis and interpretation are interspersed throughout this chapter.

Phase I: Questionnaire Instrument

There were ten males and fifteen females who completed the Questionnaire Instrument (Appendix A) (for an n = 25), except for the three-part question (item #30) for which the n was eight participants. (The instrument included six questions for which the participants wrote short answers.) These data are discussed in the conclusions. Several Tables present results from the comparisons which searched for associations across the responses from the Questionnaire Instrument, and testing their direction and strength using the Mann-Whitney U Test. Only the questionnaire responses that exhibited statistical significance (at the ≤ 0.05 level) were included. The P-value of < 0.01 is herewith defined as "very significant" (GraphPad 1999).

Participant Demographics

Table 7.1 tabulates demographic information of the participants. The group included 15 girls and 10 boys drawn from an Advance Placement Human Geography class at a public high school on the Mississippi Gulf Coast. Average age was 17, with the youngest, a 15-year-old (who turned 16 by the time of the interviews). Four participants were Asian-American with both parents born overseas (but not the participants, all of whom had lived their entire lives in the U. S.); each set of parents was from a different Asian country. One participant was mixed-race (Black/White); the remainder (20) was Non-Hispanic White. (Chapter VI provided further general information about the socialeconomic background of the participants, including the school and city.)

	Number (<i>n</i> = 25)	
Gender	Male	10
	Female	15
Age (years)	Average	17
	Range	15 to 18
Ethnicity	Non-Hispanic White	20
Mixed-race (Black-White)		1
Chinese-American		1
Vietnamese-American		1
Indian-American		1
	Pakistani-American	1

TABLE 7.1. Participant Demographics

Participant and Parental Geographic Profiles

Additional participant background information relating to geographic experience,

along with that of their parents, is tabulated in Table 7.2. (Question numbers in each of the following Tables match the question numbers in the Questionnaire Instrument.)

Of note, more than half the participants (14 of 25 participants) were not born in or near the city of the research venue. Yet, the average length of local residence was 13 years, with a range of residency from one year (one participant) to 18 years. Eleven of the participants (44%) had lived their entire lives in or near the city; two others were within one year of living their whole lives locally, and four others had lived the majority of their lives locally. Therefore, nearly 70 percent of the participants had lived the greatest portion of their lives in the local area. The 25 participants had lived in a total of 71 cities (or military bases), an average of 2.8 cities per participant (range = 1 to 7; median = 2.0); but, nine participants had lived in only the local city. Five participants had lived overseas. This shows a diverse range of residency experience.

As expected, the data on parents show similar diverse geographic characteristics as their children. More than half the parents (fifteen sets of parents) were not born in or near the study-site city; three participants had one parent born locally, and seven had both parents originally from the local area. Four sets of parents were born overseas, while three participants had one parent foreign-born. Therefore, 25 percent had at least one parent foreign-born. The range of "parental local residency" (length of residency of both parents summed together) ranged from three to 100 years, with an average of 47 years.

Note should be made of the ethnic makeup and geographic backgrounds of the participants and their parents, which might have influenced their responses, and the overall results. The group of participants selected for this research was a purposive, nonrandom sample made up of all students in two Advanced Placement Human Geography classes. None were eliminated from the population of two classes from which they were drawn. There were no Hispanic-Americans in the group (although the school had Hispanics), and only one mixed-race (black/white). Significantly, four students were Asian-Americans who had both parents born overseas. Each of these Asian-American students had traveled to their parents' country of birth and had relatives there with whom they actively communicated. These four students tended toward cosmopolitan views. For example, the Chinese-American student (born in the U. S. and seemingly thoroughly Americanized and very active in community activities, including the Mayor's Youth Council) wrote,

I thoroughly enjoy international music: French, Korean, Chinese, and Japanese. I have several international friends; two of my best friends live in Canada. I text and Skype them frequently. Also, our home phone makes calls to China included in the phone plan, and my family is generally talking on it.

The following can be gleaned from data about the geographic backgrounds of the 25 student participants and their parents (Table 7.2). The data indicate a wide range of geographic experiences of both participants and parents. Second, because of the nature of the study-site city and local area of some transiency due to several factors of the local economy (Chapter VI), many parents have moved into the city from elsewhere, and many have stayed long enough for their children to experience relatively stable lives. Third, these particular participants--drawn from Advanced Placement Human Geography classes (of top students) in a school widely regarded with a positive academic reputation, with parents generally of a professional status in education and income, and with some parents born overseas--were relatively sophisticated in terms of travel and educational opportunities (see note above about the four Asian-American students). For example,

among the 25 participants, a majority (16 students) had traveled overseas (Question #7), either for vacation or church mission-work, for a total of 51 countries. Still, nine participants had never traveled overseas.

Question #	Characteristic	Data (<i>n</i> = 25)
3	Born here or near here	Yes = 11 No = 14
4	Years lived here or near here	Average = 13 years Range = 1 to 18 years
5	Cities lived in, including in the U.S., foreign cities, and military bases	Average = 2.8 cities Range = 1 to 7 cities
6	Foreign countries lived in	5 students had lived overseas 1 student had lived in two countries
7	Foreign countries traveled in	Average = 2 countries Total = 51 Range = 0 to 11 9 students = 0
8	Parents grew up here or near here	Neither parent = 15 One parent = 3 Both parents = 7
9	Years parents lived locally (both parents summed together)	Average = 47 Range = 3 to 100
10	Parents born in foreign country	Neither parent = 18 One parent = 3 Both parents = 4

TABLE 7.2. Participant and Parental Geographic Profiles

Place Affectivity

Table 7.3 tabulates data from eight questions (items #11 to #17, and #21) relating to *place affectivity*, i.e., *sense of place*, consisting of *place attachment* and *place identity*, which lies at the heart of this research. Four of the eight questions were used to measure *place attachment*, in terms of moving away (item #11), returning (item #12), *belongingness* (item #14), and *emotional attachment* (item #16). Four other questions measured *place-identity*, in terms of *landscape identification* (item #13), *personal*

importance of place (item #15), *place identification* (item #17), and *personal impact of place* (item #21). The data from these questions helped to answer Research Question 1: *To what extent do adolescents exhibit* sense of place?

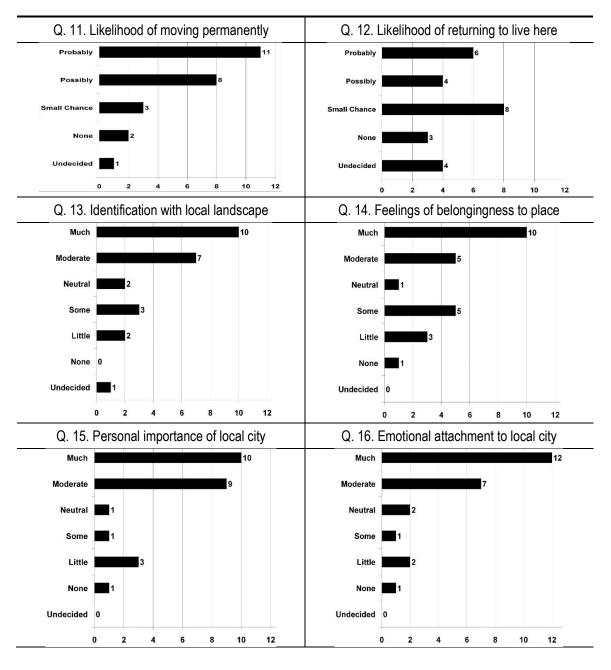
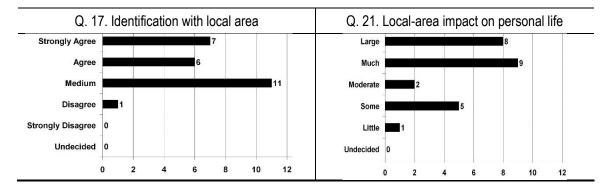


TABLE 7.3. Place Affectivity



<u>Place Attachment</u>. Question #11 queried the likelihood that the participants would make a *permanent move away from the study-site city* of residence. Of the 25 participants, only two indicated that there was a "none" chance they would move permanently; at the other extreme, eleven marked that they "probably" would move permanently. The responses to this question indicated that **most participants showed little** *attachment to place*. Both participants who indicated there was a "none" chance they would move permanently had both parents born locally.

Question #12 showed a wide range of views of whether participants would *move back to the study-site city*: Three indicated "no chance," while eight--nearly a third (32 percent)--marked "small chance"; only one marked "yes," but five marked "probably," while four were "undecided." Therefore, 11 (44 percent) indicated "no chance"/"small chance" that they desired to return to the study-site city. This, too, along with Question #11, indicated **weak** *attachment to place* among most participants.

Question #14--*belongingness to place*--was the third question used to measure *place attachment*. Ten of the 25 participants (40 percent) indicated that they felt "much belonging," while only one felt "none," three others felt "little," and one was "neutral." Question #16--*emotional attachment to place*--mirrored Question #14, in that 12

participants (48 percent) indicated "much attachment," while only one felt "none," two felt "little," and two were "neutral."

The responses to these two questions above (items #14 and #16) about *belongingness* and *emotional attachment to place* seemed to contradict the responses to the two previous questions (items #11 and #12) about where the participants might choose to live. On its face (keeping in mind the diversity of views), the responses to the four *place-attachment* questions seemed to indicate a paradox, in that, most participants would move permanently from the study-site city, with little likelihood of a return move, yet at the same time, most felt much belongingness and attachment to the study-site city while they were living there.

Question #29 in the Questionnaire Instrument queried participation in *online* social networks (such as Facebook), with a binary "yes"/"no" answer choice. When this question was compared with the other questions, it provided statistically significant data for one question--item #14 about *belongingness to place*. The comparison results indicated that the 18 participants who were active in online social networks demonstrated a stronger relationship to *belongingness to place* (the study-site city) than those who were not participants in online social networks. This finding was difficult to confirm with the qualitative data (below) because the Writing Protocol was open-ended and did not specifically ask for online-use habits; further, the interview participants, purposively selected for their articulateness and wide range of experience, were all active in online social networks. Nonetheless, it could be speculated that those participants in online social networks have many local people in their personal group of interlocutors, thus helping to embed their lives into locally based social networks. <u>Place Identity</u>. The first of the four place-identity questions (item #13) queried participants about their *identification with the local landscape*. Ten participants indicated they were "much" identified; while at the other extreme, no participant marked "none," and two marked "little." Most participants (17 participants of 25, or 68 percent) felt either "much" or "moderate" identification with the local landscape. However, two were "neutral" and one "undecided." It should be noted that the study-site city, generally, is considered by residents and visitors alike to be an attractive small town (further description in Chapter VI). In the written responses to the Writing Protocol, five participants mentioned preference for hills or mountains (the opposite of the very lowrelief local landscape), while three preferred a cityscape (in contrast to the small-town atmosphere of the study-site city). One participant wrote this about his experience of the local landscape:

One of the most comfortable places that I feel is in the bayou. I have been around my whole life, wakeboarding and fishing. Kind of like the CCR song, I feel as if I was "Born on the Bayou." Comfort can be expressed by experience, and I certainly have a lot of experience in [study-site city].

Question #15 queried the *importance of the study-site city* to the participants. Again, similar to Question #13, ten participants indicated that the city had "much importance" to them; while at the other extreme, one participant marked "none," three "little," and one "some." Most participants (19 of 25, or 76 percent) indicated that the city had either "much" or "moderate" importance to them.

Question #17, the third of the questions dealing with *sense of place*, asked about *identification with the local area*--the study-site city and the Mississippi Gulf Coast. None of the participants "strongly disagreed" with local identification, while only one "disagreed." On the other hand, six "agreed," seven "strongly agreed," while 11 marked "medium." This indicated that nearly all participants (23 of 25, or 92 percent) felt at least **"moderate" identification with the local area**.

Question #21 concerned the *self-perception of local impact* and showed that most participants (17 of 25, or 68 percent) reported "**much**" or "large" impact of the local **area** on their lifeworlds. At the low end, one participant reported "no" impact, two felt "some," while two indicated "moderate" impact.

Overall, the responses to the questions designed to measure *place attachment* and *sense of place* showed wide diversity. Second, the participants, for the most part (keeping in mind the diversity of sentiments), claimed high levels of feelings of *belongingness* and *attachment to place*, yet paradoxically were generally likely to move away and not likely to move back. Third, the participants generally exhibited high levels of identification with place, along with, generally, high levels of viewing its importance and impact on their lifeworlds. To summarize, in terms of *placedness*, there were, generally, high scores related to *belongingness, attachment*, and *feelings of importance and impact of place* among these participants, yet indications of a strong willingness to leave it all behind.

<u>Birth Place and Place Affectivity</u>. This group of data (Table 7.4) showed results from comparisons of place of birth (either local or not-local) with the questions associated with *place affectivity*. Results indicated statistical significance for items #13, #14, #15, #17, and #21. The first question (item #13)--"I identify with the local landscape"--indicated a statistically significant level of association between the mean ranks of the two groups: born locally, not born locally and identification with the local landscape. Thus, these comparisons indicated a statistically significant relationship between those born locally and greater identification with the local landscape. In terms of its opposite: There was no statistically significant relationship for greater identification with the local landscape for those not born locally. (Note: The local landscape consisted of very low-relief coastal terrain, bayous, beaches, barrier islands, and natural vegetative regimes of wet-pine savanna and southern pine/live oak-magnolia-coastal hardwoods in drier areas.) Several participants indicated they preferred a mountainous or hilly terrain; others preferred a larger urban environment.

Comparisons were also applied to *place of birth* and other *place-affect* questions: items #14 ("I feel I belong here"), #15 ("What happens to my town is important to me"), and #17 (degree of identification with the local area--the Mississippi Gulf Coast). Results from comparison tests showed the same similarities as above (displayed in Table 7.4). Each of these questions (items #13, #14, #15, and #17) about place of birth (local or notlocal), when compared with the questions about *place affectivity*, indicated a statistically significant association with participants who were born locally. Thus, we might infer that these **participants born-locally exhibited a greater degree of positive** *place affectivity* **than the participants not born locally**.

Question #21 was slightly different from the other place-affect questions, in that it queried *degree of impact*, either positive or negative, upon the participants. Furthermore, the mean ranking results from the Mann-Whitney U Test indicated that all variables (items #13, #14, #15, #17, and #21) were statistically significant for those "born locally." Thus, we might infer that these **born-locally participants tended to believe that the local area had a greater impact on their lives**.

TABLE 7.4. Place of Birth and Place Affectivity

Question #	Question	Born locally	N	Mean rank	Z-score	Significance
13	Identify with local landscape	No Yes	11 14	7.95 16.96	-3.180	.001 ***
14	Feelings of belonging to study- site city	No Yes	11 14	9.55 15.71	-2.169	.030 *
15	Importance of study-site city to participant	No Yes	11 14	9.68 15.61	-2.119	.034 *
17	Identification with local area	No Yes	11 14	8.77 16.32	-2.713	.007 **
21	Impact of local area on participant	No Yes	11 14	9.73 15.57	-2.062	.039 *

(Comparisons using Mann-Whitney U Test)

Note: * Level of significance at .05 level

** Level of significance at .01 level

*** Level of significance at .001 level

Gender and Place Affectivity. This group of data (Table 7.5) was subjected to the Mann-Whitney U Test. Results indicated statistical significance for items #14, #15, #16, and #21. The first question (item #14)---"I feel I belong here"--indicated a very significant level of assumed difference in the mean ranks of the two groups, male and female. These data showed that, for this population, the females exhibited a greater degree of affect for *belongingness to place*. This would be expected, if the life habits of this population of middle-adolescent females followed what Doreen Massey discussed as the traditional "sex associations" ascribed to women, including that they "tend to lead more local lives than men" (1994, 9). Massey argued against this notion as being part of "sexed systems of meaning" that include the dualisms of global/local and space/place. This question (item #14) did not query the participants specifically about *where* their lived geographies take place, i.e., the physical locations. All the participants (as do everyone), male or female, live local lives-after all, "to live is to live locally" (Casey 1996, 18)--but we

might infer from the statistical results of the Mann-Whitney U Test that this group of **young females, generally, felt a greater sense of** *place belongingness* **to the locale than did the males**.

The second question (item #15) that was very significant when tested by the Mann-Whitney U Test with gender--"What happens to my town is important to me"-- showed similar results to the previous question. **The females, generally, considered the study-site city more important to them than did the males**.

TABLE 7.5. Gender and Place Affectivity

Question #	Question	Gender	N	Mean Rank	Z-score	Significance
14	Feelings of belonging to study-site city	M F	10 15	8.35 16.10	-2.690	.007 **
15	Importance of study-site city to participant	M F	10 15	9.00 15.67	-2.353	.019 *
16	Emotional attachment to study-site city	M F	10 15	8.45 16.03	-2.709	.007 **
21	Impact of local area on participant	M F	10 15	8.50 16.00	-2.612	.009 **

(Mann-Whitney U Test)

Note: * Level of significance at the .05 level

** Level of significance at the .01 level

Cosmopolitanism, Globality, and Globalization

Tables 7.6, 7.7, and 7.8 tabulate descriptive data from seven questions (items #18,

#19 and #22 to #26) designed to assess cosmopolitan attitudes, a global outlook, and

awareness of globalized spatiality. Data in these three subsections helped answer

Research Question 2 (Chapter II), about whether the participants exhibited globality; i.e.,

whether they were more aware of global spatiality (geographic hyperopia) than of their

own locality The responses to these questions, combined with the ones concerning place

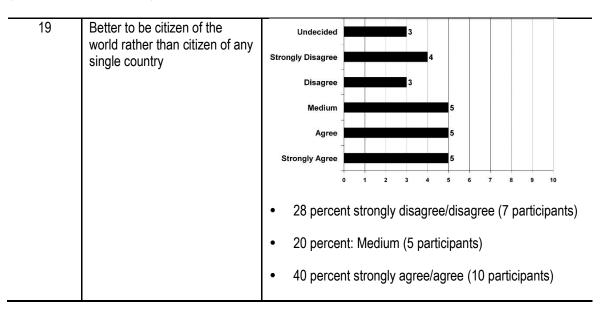
affectivity (of the local lifeworld) (items #11 to #17 and #21), provided empirical data along a continuum of spatiality from local to global, and thus afforded some insight into the *inner geographies* and *geographic imaginations* of this group of middle adolescents.

<u>Cosmopolitanism</u>. Table 7.6 tabulates data about world citizenship. *World citizenship*, in part, involves the "sense that we are a part of a functioning world community that is interactive and interdependent" (Corson-Finnerty 1982, 5). As Gerald Delanty argues, "Citizenship is not entirely about rights... essentially, it is about the learning of the self and the relation of self and other" (2002, 64). As employed in the present research, the cognitive dimension of the "other" incorporates a spatial perspective of *self-emplacement* in an ordering of *global spacings*. Thus, these two questions (items #18 and #19), relating to cosmopolitanism, afforded some insight into the spatial *selfemplacement* of the participants.

Question #	Characteristic			Da	ta (n = 2	25)		
18	Identification as world citizen	Undecided		2				
		Strongly Disagree		2				
		Disagree					7	
		Medium						9
		Agree			4			
		Strongly Agree	1					
			0	2	4	6	8	10
		• 36 perce	nt stron	gly di	sagree/	disagre	e (9 par	ticipants)
		• 36 percent: Medium (9 participants)						
		20 perce	nt stron	gly a	gree/agr	ree (5 p	articipa	nts)

TABLE 7.6. World Citizenship

(Table 7.6--Continued)



Question #18, concerning self-identification as a *world citizen*, showed that nine of the 25 participants (36 percent) either "disagreed" or "strongly disagreed" with their self-perception as a *global citizen*. Only one participant "strongly agreed," and four who "agreed." The largest single group of participants (9, or 36 percent) was in the middle. Two of the four participants who indicated "agree" were Asian-Americans, with deep international connections, including both parents who were born overseas. One of the other participants who "agreed" that he was a *world citizen* had one parent born overseas (in England). The fourth participant who marked "agree" had lived in seven cities, two foreign countries, and traveled in 11 other countries, and had one parent foreign-born. The participant who marked "strongly agree" had neither parent born overseas, but he was known to the present researcher to be headed to a state university after high school where he was to major in international studies.

The second question that concerned cosmopolitan views (item #19) queried whether it was better to be a world citizen or a national citizen. As might be expected, due to the somewhat ideological and normative nature of the question (that Americans should "belong" to or feel allegiance toward a world community), the views shifted somewhat toward the two extremes: Four participants "strongly disagreed" that it was better to be a world citizen rather than solely a single-country citizen, while five participants "strongly agreed" that it was better to be a world citizen. Comparing the "strongly disagreed"/"disagreed" participants to the "strongly agreed" showed a slight valorization toward cosmopolitan views. However, the responses to these two questions (items #18 and #19) seemed to show slightly paradoxical results, in that more participants believed it better to be a *world citizen* than actually identified themselves as *world citizens*.

These data showed that in terms of *world citizenship* more participants seemed to hold it as an ideal that it is better to be a *world citizen* (40 percent--item #19) than those who actually self-identified themselves as such (20 percent--item #18). For whatever reason, **most of the participants were resistant to self-identification as** *world citizen*. One of the participants expressed this view:

I am aware of world events, though I see myself as a local citizen rather than a global citizen. I am a member of [study-site city] before I consider myself an 'earthling.'

It should be noted that the present researcher, as the classroom teacher of these participants while they were in his Advanced Placement Human Geography class, never discussed *cosmopolitanism* or *world citizenship*. Rightly or wrongly, the meanings of the terms were not explained to the participants. None asked their meaning, so it was assumed that they possessed some understanding of the meanings of the terms.

<u>Globality</u>. Table 7.7 tabulates data about *globality*. *Globality* refers to the

awareness of global spacings in one's lifeworld. As in the two previous questions (items #18 and #19) which concern *world citizenship* and identity, Questions #22 and #23 again concern global spacings, but in terms of global activity directly relating to the personal: from the global toward the individual (global impact on the person--item #22), and from the individual outward (awareness of global events and culture--item #23). In Question #22, the greatest number of participants (10, or 40 percent) judged a "medium" global impact on their personal lifeworlds; eight participants (32 percent) viewed "little"/"some" global impact, while seven (28 percent) saw "much"/"large" global impact. Question #23 queried the degree of "tuning in" to global events/culture. It indicated a fairly balanced spread; nine participants (36 percent) indicated "little" or "some," while nine (36 percent) marked "much" or "large," with seven (28 percent) in the middle. The responses to these two questions (as have the previous ones) exhibited a diversity of views.

Question #	Characteristic				Data (r	n = 25)			
22	Global impact on personal life	Little Some Medium Much Large		3	5			10	
23	Degree tuned in to global events and culture	Little Some Medium Much Large	0	2 2 3 3 2	4	6 7 6 6	8	10	12

 TABLE 7.7. Globality

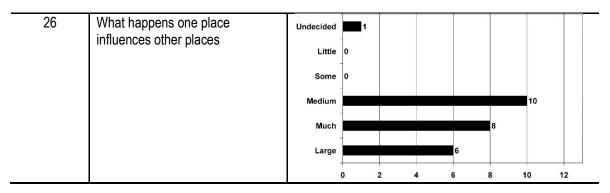
Globalization. Table 7.8 tabulates data about perception of the process of

globalization in the lives of the participants. *Globalization* entails "growing transplanetary connectivity" (Scholte 2005, 59). Question #24 asked whether the participants believed the world to be increasingly globalized. The responses showed that most participants believed globalization was indeed occurring: 19 participants of the 25 (76 percent) marked "much" or "large." Question #25 placed globalization in colloquial terms of whether the world was seemingly becoming smaller: 18 participants of the 25 (72 percent) indicated "much" or "large." Question #26 queried perceptions of the process of *globalization of space* (spatial influence among places): 14 participants of the 25 (56 percent) marked "much" or "large;" but the largest single category was "medium" marked by ten participants (40 percent).

Question #	Characteristic			D	ata (n :	= 25)			
24	World is increasingly globalized	Undecided	1						
		Little	0						
		Some	0						
		Medium			4				
		Much	-				8		
		Large							12
			0	2 4	4 (6	8 1	0 1	2
25	World becoming "smaller"	Undecided	1						
		Little	0						
		Some		2					
		Medium	_		4				
		Much					8		
		Large						10	
			0	2	4 (6	81	0 1	2

TABLE 7.8. Globalization

(Table 7.8--Continued)



Spatiality of Personal Media

Table 7.9 tabulates data from seven questions relating to use of personal-media technologies. The first three questions (items #27 to #29) had an n of 25 (as did all the other questions shown in the other Tables), but after some piloting of the questions it was decided that three questions (items #30a to #30c) dealing with the *spatiality of media use* might prove meaningful.

It is one of the themes of this research that electronic and digital media help shape the *spatiality* of people today. The interest in media use by young people (Chapter III, Researching Adolescent Spatiality section) is warranted due to the now-common observation that "American youth are awash in media" (Roberts and Foehr 2008, 11), and may now total almost 11 hours per day, when including *media multitasking--*the temporally overlapping use of more than one medium (Morimoto and Friedland 2011, 551). As Morimoto and Friedland suggest, "young people's lives are so thoroughly saturated by media use that media cannot be analyzed separately from the larger structures in which young people come of age" (ibid., 550). One of the positions taken in this research is that young people's *lived geographies* cannot adequately be analyzed separately from their media connectivity.

Question #	Characteristic	Data
27	Hours per day	0 hours = 1
	on Internet	1-2 hours = 13
	(<i>n</i> = 25)	3-4 hours = 9
		5-6 hours = 1
		7+ hours = 1
		Average Range = 2.1 to 2.7 hours
28	Text messages per day	Range = 0 to 400
	(<i>n</i> = 25)	Median = 100
29	Hours per day on social networking	0 hour = 7
	Internet sites	0.25 hour = 1
	(<i>n</i> = 25)	0.5 hour = 2
		0.75 hour = 3
		1 hour = 6
		1.5 hours = 4
		2 hours = 2
30a	Use media technology	Yes = 8
	to connect locally (<i>n</i> = 8)	No = 0
30b	Use media technology	Yes = 6
	to connect regionally (<i>n</i> = 8)	No = 2
30c	Use media technology	Yes = 3
	to connect globally $(n = 8)$	No = 5

TABLE 7.9. Personal Online Media Use

Online Media Exposure. Question #27 acquired data about the amount of time per day the participants spent on the Internet. Thirteen participants (the largest category, at 52 percent) indicated that they averaged between one and two hours per day; another nine (36 percent) reported three-to-four hours. Question #28 acquired data about the number of cell-phone text messages the participants sent and received per day. There was a large range, from zero to 400, with a median of 100 (nine participants marked 100). Question #29 acquired data about hours per day on online social-networking sites, such as Facebook. Seven indicated that they spent no time on those online Websites; six marked one hour. One of the participants wrote that upon answering the question (item #27) about time on Internet that it "made me realize that I am a computer bum" (the participant marked three-to-four hours per day).

Note should be made, in view of the extensive media multitasking by young people mentioned above, that there did not seem to be a valid way to ascertain the total amount of time the participants spent using electronic/digital media. This is supported by youth researchers Roberts and Foehr (2008, 18) who observe that asking children about their "total media exposure," or time, is "almost pointless." This is due to the current multitasking media-use habits of young people--what Sherry Turkle (2008) has labeled the "always-on/always-on-you" practice of media use (below). Media multitasking mixes in with other daily activities, such as doing school homework (as has been observed by the present researcher in his own home with his teenage daughter). (The other two data-collection modes employed in this research also acquired data on media use.)

Spatiality of Personal-Media Use. The next three questions (items #30a to #30c) (with n = 8) acquired data that gave some indication of the *physical spatiality of media use*. (Only eight participants answered this question, because, as mentioned above, it was added later in the time period of the research, after media use became obvious as a factor affecting the *spatiality* of the participants.) Question #30a acquired data on local media use: All eight participants indicated that they used media to interact locally. Question #30b acquired data on regional media use; six participants reported "yes," while two marked "no." Question #30c acquired data on global media use: Three participants reported "yes," while five marked "no." A typical participant wrote about the spatial extent of her media use:

I text and Facebook a lot of my local friends. My regional friends, I Facebook. I don't have friends internationally.

In contrast, another participant, an athlete who was very active in traveling to

regional sports competitions, communicated locally, regionally, and internationally by email, texting, Facebook, and Skype. Similarly, another participant wrote this about her spatially extensive media contacts, who ranged from local to global:

I have access to the world through my computer, my phone, and my television. I can learn about any one of the one hundred and ninety five countries and their cultures. I can text my friends from Venezuela that I met this summer while I was at the University of Mississippi and my friends from Germany can keep in touch with me through social networking sites such as Facebook. At the same time, I can also get on my bicycle and travel down the road to a friend's house. The world is really as big or as small as I choose for it to be. I can be global, continental, national, or local, depending on my fancy.

People use electronic and digital media to connect *spacings* from the very local to the global. A personal anecdote: The present researcher observed a student in his Advanced Placement Human Geography class surreptitiously texting on her cell phone. In the past, students have told him they were texting friends in other classrooms in the school building, or a parent somewhere in town, or a friend sitting in a classroom in another state, or their father in Iraq--spacings from local to regional to global. Not this time: This student was texting a friend three desk rows (about eight feet) away. Before the cell phone and its associated technologies, it would have been difficult to communicate electronically with someone so physically close, except possibly in offices where workers had desk intercoms/telephones. With the personal communication technology of the cell phone, the experience of spacings is scrambled. From the microspacings of texting someone a few feet away to receiving "tweet" messages (online microblogging in Twitter accounts) from celebrities somewhere in the world--from spacings micro to macro--not only has "supermodernity" produced experiences of timespace compression, but also occurring is an embodied experience of "time-space

scrambling," in which the experience of space is homogenized.

Place of Birth and Personal-Media Use. Table 7.10 tabulates results of comparing the place of birth (born locally or not-born locally) with online media use. The data showed that those participants who were not born locally tended to use online media technology more than the participants who were born locally. This situation might be explained by a presumed lesser amount of "social capital" (e.g., fewer number of friends) possessed by the participants who had lived fewer years in the study-site city (they were not born there), than the participants who were born locally. By this reasoning, the greater amount of time spent online by the not-born-local participants might be used as a source of recreation (the Internet-enabled cell phone can be used as a game console) and communication (usually by texting) with friends and family members who lived distant. However, the work of communication researcher Barry Wellman and associates (e.g., Mok, Wellman, and Carrasco 2010) has demonstrated "the anti-thesis that geography still matters," in that there is overall lower contact with members of one's "personal community" who live further away. But as the data collected in the present research has shown, many of the participants not born locally use the Internet for accessing national and international news and sports.

TABLE 7.10. Place of Birth and Online Media	a Use
(Mann-Whitney U Test)	

Question #	Question	Born locally	N	Mean rank	Z-score	Significance
27	Time on Internet	N Y	11 14	17.00 9.86	-2.670	.008 *

Note: * Level of significance at the .01 level

Gender and Personal-Media Use. Table 7.11 (below) tabulates data that resulted from comparing the gender of the participants and use of online media (items #23, #28, #29a, #29b). The results from Questions #28, #29a, and #29b indicated that, in general, the female participants were more involved with cell-phone texting and with time spent social networking online. However, Question #23 indicated that male participants exhibited more involvement in tuning into global events and culture (i.e., interest in international news and content reading).

 TABLE 7.11. Gender and Media Use

Question #	Question	Gender	N	Mean rank	Z-score	Significance value
23	Degree tune into global events and culture	M F	10 15	16.45 10.70	-1.972	.049 *
28	Number of text messages	M F	10 15	9.40 15.40	-2.045	.041 *
29a	Involvement in online social networks	M F	10 15	9.00 15.67	-2.851	.004 **
29b	Time online social networking	M F	10 15	8.10 16.27	-2.767	.006 **

(Comparisons using Mann-Whitney U Test)

Note: * Level of significance at the .05 level ** Level of significance at the .01 level

These data collected in this research and presented here would be generally in agreement with the literature on electronic and digital media use by American adolescents; that is, if the literature reflected the wide diversity of media-use habits that the present research collected from its participants. Most of the participants of this research appeared to conduct their lifeworlds within the usual range of intense media habits of the contemporary mainstream of American adolescents. However, there were sharp differences, as shown in the next section.

Phase II: Writing Protocol

The Writing Protocol (Appendix B) was developed as an attempt to elicit qualitative data from the participants in a manner more open-ended than was afforded in Phase I by the Likert-scale Questionnaire Instrument (which "forces" responses into predetermined categories). The Writing Protocol presented a hypothetical scenario as a prompt to stimulate open-ended thinking by the participants in regard to their *sense of place* on a spatial continuum from local to global. Specific concepts broached in the prompt included *home, personal sense of place,* how *relational spacings/place* fits into the participants' lifeworlds--all this while keeping in mind various usages of personal communication technologies.

Spatial and media-use themes that emerged after careful readings of the participants' written texts are presented below. Using these procedures, illustrative quotes were placed under the thematic subheadings.

These five (sometimes overlapping) themes of *spatiality* and the *spatiality of media experience* emerged:

- Spatial monogamy (Heller 1995)/Existential insideness (Relph 1976)
- Existential outsideness (Relph 1976)
- Spatial promiscuity (Heller 1995)
- Media multitasking
- Always-on/always-on-you personal-media use (Turkle 2008)
- Deterritorialization/Omnitopian spatiality (Wood 2008 and 2009)

The semi-hermeneutic approach (employed below)--the "tacking back and forth between the part and whole" (Cushman 1995)--took the data collected by means of the Writing Protocol and placed them in the typology of these five thematic contexts, as well as adding other analytic comments.

Geographic Monogamy/Existential Insideness

Geographic monogamy is the experience of "home" based on tradition, as described by Agnes Heller (1995). She categorized this home experience as one in which individuals could readily identify a "centerpoint" in their lifeworlds, a locus, even a geographic point on Earth around which their lives revolve. The example Heller gives is of someone who is deeply committed to a place--"the place where he was born and expected to die" (ibid., 1). The following are textural examples written by participants who exhibited this spatial orientation (characteristically, some of the writings read like boosterism for the study-site city).

The first is an eleventh-grade female. She mentions the beach in the study-site city (located about a mile from school), as a place imbued with positive associations (as did most all the other participants). This participant was one of the few who gazed into her future place-world:

I have an attachment to where I live, the town and the state because I have lived here my entire life. I have realized that I live in a wonderful town. When I go to the park...I realize that it is very nice that our town has so many beautiful parks for the children. When I go to the beach, I pass all the stunning oak trees and enormous houses, and see how clean the sand is kept, and realize that our town is blessed with quite a bit of beauty and wealth. I can now see myself raising children here and taking them bike riding through the town and to the beach. ... I can also see myself strolling my children through Wal-Mart and buying them candy at the register before we head to the park, just like my mother did. I have become very attached to this town over the years... Another participant had deep ancestral roots (or what passes for "deep" in America):

I can honestly say that I feel most at home right here in [study-site city]. My mom is from [town about 15 miles away] and many of her relatives migrated with her to [study-site city]. ... My dad's ancestor actually founded [town immediately adjacent] and my dad holds the middle name [of the adjacent town]. Also, there's a historical Mississippi sign at the cemetery in [adjacent town] which states that my ancestors were buried there. The Old Place in [adjacent town] is also within my family. I am an [toponymic adjective for study-site city] through and through.

Edward Relph (1976) provides a typology of place experience (presented as a

model in Chapter V). His existential insideness signifies a sense of at-homeness,

attachment, and belongingness as one type of place experience. These two participants

(above) seem imbued with existential insideness as well as geographically monogamous

devotion to a single place. They appeared devoted to the study-site city (or near area):

The first recognized a place tradition within the lifeworld of her immediate family; the

second recognized place-based tradition from several previous generations.

Existential Outsideness

This, the second modality of Relph (1976), includes *place-alienation* and feelings

of being out-of-place (Chapter V).

The following narrative is unusual (and unexpected) in that it was conveyed by a

life-long, though thoroughly disaffected, young resident of the study-site city:

Though I have resided in this dull suburbia for my entire existence, I am quite reluctant to call [study-site city] my home and do not feel emotionally connected to it in any way. This sterile, soccer-mom filled wasteland offers no opportunities for the aging child and is absolutely devoid of entertainment. The only wonderfully positive aspect of this boring community is the people that I have befriended within. They all brighten up this darkened cage of a town and improve my everyday life. ... Perhaps I am overly harsh and perhaps as I get older my aggressive stance on this place will mellow out, but for now I feel as if I am rotting, stagnating in this abysmal kingdom of boredom. I long to escape to college, to furnish my surroundings with new places, people, and knowledge. ... I feel more at home in a Waffle House than the rest of the town. ... Maybe in the future I will look upon this place with a nostalgic smile or two, but I will most definitely not reside here.

Another "dislocated" (or *cognitively deterritorialized*) participant who had lived

in the study-site city for six years--the longest of her life--expressed this alienated

placelessness:

This town doesn't feel like home to me. I never really made a definite connection with [study-site city]. All my life I've been a military brat moving from place to place making and losing more friends than I can count. ... So THIS town is <u>not</u> MY town and I make or have no connection to this place and I never will. [emphases in the original]

Geographic Promiscuity

Agnes Heller (1995) introduced the concept of *geographic promiscuity* as a type of *deterritorialized* home experience. The prototype described by Heller (an actual person known to her) was a woman employed by an international-trade firm, who owned three apartments in three cities, spoke five languages, traveled regularly between seven or more cities on three or more continents, and who called "home" wherever her cat lived. This kind of experience of *home* and *spacings*/place is the same as that described by Pico Iyer (2000) as the "global soul" (Chapter IV), in search of some semblance of home among the paradoxes of *familiar strangers, distant proximities*, and *omnitopian places*.

The participant who indicated on the "Personal-Space Scale" (Figure 7.1, below) that he was the most global of all the participants (11 on the 11-point scale) revealed that, because he had lived in several other places, his bedroom was his "home":

Perceptually I like to think that when I'm home I'm back in Rhode

Island, or Boston, or Connecticut. ... Because I move around so much my room is my home. I'd say my home is global because no matter where in the world I am my home is always with me. Since my home can be anywhere I'd say I live in a global environment.

This participant (above) appeared to be an example of an individual existing in a *deterritorialized* lifeworld, since he imagined he was somewhere else--or even an experiential "everywhere," but "nowhere" in particular. His bedroom was his home. His home, as he imagined it, seemed to exist in abstract spacings rather than in a particular, physically situated place. Another participant who had lived in seven cities, two foreign countries, and traveled in 11, wrote that he carried "home" with him wherever his family temporarily settled:

The meaning of 'home' to me is wherever my family and I are. Being a military child I never got too attached to one place over another or to people at one place. When you move around a lot the only thing that stays constant is your family around you so they are what makes home feel like home for me.

As Yi-Fu Tuan (1996b, 941) remarks, "Home, then, is people." Still, these two participants (above) exhibited a *spatial orientation* that was "rootless," in that their "sense of home" (Relph 1996) was not rooted in a physical place other than where their families and houses were temporarily located. The credit union advertisement reproduced in Chapter IV is captioned, "There's no place like everywhere." In the case of these two dislocated participants, the "everywhere" of their sense of home could be located in an "anywhere" of physical and media *spacings*. Their *deterritorialized* contexts of place were largely unnoticed by them; "home" located in abstract *spacings* seemed good enough. In case of the second participant, whose "*home is global*," and "*can be anywhere*," it could be said about him that "there's no home like anywhere," since he carried it with him through serial *spacings* and time. Or, better, there's no "home" as traditionally thought, if it does not deeply and richly occupy a real place on Earth.

Media Multitasking

Media multitasking is the engagement "in more than one media activity at a time,"

and now has expanded to include social-media multitasking with friends and

acquaintances (Mesch 2009, 58). It is also, according to communications researcher

Clifford Nass (2010), one of the dominant trends today in media use worldwide. A male

participant stated this about his time spent using electronic and digital media:

I feel alive when I have a room full of electronics to keep me occupied like a computer, Xbox 360, PS3, and a television of course to keep myself updated on the world.

Here is an account supplied by another male participant:

Much of my time is consumed online whether it is playing fantasy football, my favorite sport, or spending hours on end playing XBOX LIVE against someone that could be as far as Japan or as close as my next door neighbor. Like most teenagers these days I have a cell phone that is usually with me all the time wherever I go, which I use obviously to text my friends, but also to keep in touch with family members across the nation. As a matter of fact I am texting, watching TV, and am on Facebook as I am writing this.

This quote (above) is an example of a young person--a "high multitasker" (Nass

2010)--who spent his evenings media multitasking. Not all of the participants media

multitasked to the extent of the participant above (Nass terms them "low multitaskers").

For example, one participant revealed that he never used Facebook (but his mother did),

although he depended on the Internet for shopping and schoolwork.

Always-on/Always-on-You Personal-Media Use

Sherry Turkle (2008), psychologist of human-technology interaction, describes

the "new placement" of the subject (and also a "new state of the self") as nearly always

connected, or tethered, to his/her electronic/digital communication devices, inhabiting a

private *media bubble*. She suggests, "our [communication/media] devices have become more closely coupled to our sense of our bodies and increasingly feel like *extensions of our minds*" (ibid., 132; emphasis added). Further, the "new place" of the subject comes as the experience of "co-presence" with other people and other places, in "a liminal space between the physical real" and life on the screen (ibid., 121-122). These new media spacings are fully exhibited by nearly all the participants in the present research. Here is an account by another media-saturated participant:

I am always attached to some electronic device, if not multiple. I feel as if I'm constantly connected to as many people as I want to be, and I could be talking to all the important people in my life at once. The fact that I have the ability to do that is crazy. I am on Facebook a great deal when I'm at home, and I've got three personal computers including access to others. ... If I'm talking to someone on the phone, I'm probably also watching TV, on the Internet, or texting someone else. Ever since I got a cell phone, my parents don't hesitate to just call me for something from the next room.

This participant (above) demonstrated the "always-on/always-on-you" media habits of many (probably most) young people today. When it came time for the in-depth interviews, two of the eight participants, when sitting down at the Internet-café table, immediately pulled out their Internet-tethered cell phones and placed them within about 12 inches of the recording device. All the other six had their phones with them; several periodically checked for messages, of whom a couple participants communicated with a parent during the interview session.

Omnitopian Spatiality

As discussed in Chapter IV, *omnitopia* is *ubiquitous space* that "reflects the practice and perception of multiple locations being accessed through a single site" (Wood 2008, 125). As paradigmatic examples of an "omnitopian site," Wood (2008 and 2009)

means places such as office parks, motels, tourist enclaves in Las Vegas, or food courts in shopping malls that offer various international cuisines. But he posits an expanding *omnitopian spatial experience* as one that is increasingly common beyond the postmodernist sites just mentioned. Wood continues, "Put another way, omnitopia posits the shrinking of human geography into a singularity in which any place becomes every place and every place is the same" (2008, 125). The three participants (below) seemed to inhabit "omnitopian spaces" conceptualized by Wood (2008; 2009). One female participant evoked this about her sense of *spacings and place*:

However, as well as a sense of [study-site city], I also have the feeling that wherever I am, I am not very far from anywhere else.

Another participant depicted the dispersed "whereness" of her life:

It seems to me that I live in many different places at once.

Another participant described her sense of the spatial effects of media on her:

The media creates a sense of connection. ... I feel close to the place I live...But as well, I feel I live in the non-place of the world. The non-place, being the Web.

In a comment that speaks directly to perceived annihilation of distance, one participant voiced to the present researcher: "*There's not any distance between anybody anymore*."

These four quotes (above) illustrated some of the hybridized scalar and spatial ambiguity of media use (and one of the important findings of the present research): The Internet performs more as *connectivity* in space as it breaks down distances, rather than as *connection* to real places. Co-occurring with the *time-space compression* (Harvey 1989) and *time-space distanciation* (Giddens 1990) of the postmodern *mediatization* of social life, it seems that "communication is person-to-person rather than place-to-place...and communication media are ubiquitous" (Baym 2010, 5). As shown by the voices of these participants, it appears that young people, in particular, exist increasingly in a "betweenness" of electronic/digital, ubiquitous space, rather than connected to concrete, physical place, and confirms Yi-Fu Tuan's observation that Americans seem to live in space rather than in place (1974, 8).

Personal-Space Scale

Included in the Writing Protocol (Appendix C) was a graphic number-scale (from 1 to 11) on which the participants chose "where" they considered they lived--from local to global (Figure 7.1). This exercise in self-placement lies at the heart of this research. Geographer Roger Hart and psychologist Gary Moore state, "We can only *infer* internal representations from external representations (e.g., drawings, maps, verbal reports, models) or from overt spatial behavior" (2005, 248; emphasis in the original). Therefore, this graphic scale provided a concrete heuristic that used participants' own *spatial self-emplacement* to infer their *personal situatedness* in space.

Lo	cal								Glo	obal
1	2	3	4	5	6	7	8	9	10	11
•	-	Ū	•	Ū	Ū	•	Ū	Ū		
Dire	ctions:	On a co	ontinuun	n from le	ocal (yo	ur home	e) to glo	bal (the	entire w	orld),
			er carefu							

FIGURE 7.1. Personal-Space Scale: Where You Live from Local to Global

Minimal directions were given by the present researcher to the participants about completing the Personal-Space Scale. If participants asked about what it meant or how to think about "where" they lived, the researcher stated, minimally, that their "whereness" could be considered concretely and/or abstractly. The Personal-Space Scale exercise evidently produced some cognitive dissonance within at least some (perhaps all) of the participants. To mark the scale at either end required under-valorizing the opposite end. At least six participants did just that--there were five participants who marked #2 (near the "local" end), and one participant who marked #11 (at the extreme "global" end) (Table 7.12). In consideration of the previous questionnaire items about travel, *cosmopolitanism, globalization*, and media use, the participants were nudged into an ideation of their *embodied location* in a world in which space is theorized as socially constructed (Lefebvre 1991), but bodily experienced (chapters III and IV). According to environmental philosopher David Abram, Maurice Merleau-Ponty (2002) showed that the "sensuous, corporeal world,"

exists in both proximity and distance [and] is characterized by a distant horizon that surrounds me wherever I move, holding my body in a distant embrace ... The experience of depth is the experience of a world that both includes one's own body and yet spreads into the distance ... a world where indeed no thing can be seen all at once. (Abram 1996, 84)

The participants' task entailed what amounted to consideration of the description (above) by Merleau-Ponty of their *embodied spatial emplacement*. That is, they were required to place themselves spatially in a world they could see only partially (i.e., in terms of the whole world) and think about (in some part) abstractly (e.g., personal involvement in *electronic/digital spacings*). At the same time, the participants had to consider their concrete placement in real spacings, i.e., in actual places, such as their actual, physical locale.

The indications of *self-emplacement* by the participants on the Personal-Space Scale ranged nearly across the entire spectrum: From #2 (near the local end of the continuum) to #11 (at the extreme global end). The two individual points on the Personal-Space Scale chosen by the largest number of participants (with five each) were #2, very close to the local end of the scale, and #6, at exactly the middle (one participant wrote in 6.5). Eleven participants placed themselves in the "local" half of the scale; while seven participants placed themselves in the "global" half. Thus the two most common choices were "very local," and exact middle.

Scale Number	Number of Participants							
1 (local)	0							
2						5		
3	-		2					
4	-			3				
5	-	1						
6					4			
6.5	-	1						
7				3				
8		1						
9	-	1						
10	0							
11 (global)		1						
	0	1	2	3	4	5	6	

TABLE 7.12. Personal-Space Scale: Local-to-Global(Number of participants who marked the scale number)

Averages for the markings on the Personal-Space Scale were a mean of 5.1 and median of 5.5. Thus, the two averages fell in the middle range, slightly toward the local. Taking the middle four place marks on the scale (#4 to #7), 12 participants of the 22 (55 percent) (note: three participants did not complete the scale) placed themselves in a range around the middle. As has been found true with the other data collected in this research, there was wide diversity of responses. However, the results showed that a majority (55 percent) of the participants viewed themselves as living near or at the spatial center of their *lived geographies*, midway between local and global; while a significant portion (32 percent; the seven participants who marked #2 and #3) placed themselves very near the local end of the scale.

The following are personal accounts by participants explaining their marks on the Personal-Space Scale. One participant who had one foreign-born parent explained her *self-emplacement*:

I put a 2 [near the "local" end] as my answer because while I pay close attention to the affairs of the world, I think of that information as separate to my daily life. I compartmentalize it. One part of my life is here, in [study-site city], and another is national and global. Yet these two equal parts of my life are completely separate in my thinking. I don't often think about how world events will affect me.

This participant (above) was relatively globally aware (he was another student

who after high school entered the International Studies program at a state university), yet

he split his spatial thinking, as he indicated, between local and global. This *dualistic*

cognitive spatial configuration--holding simultaneously a local and global orientation to

the world--is, perhaps, common.

A participant who marked #4 on the Personal-Space Scale stated she was mostly

oriented to the state and felt insignificant in relation to global space:

For some reason or another, I have always felt I am foremost a citizen of the state of Mississippi. I don't exactly know why I feel this way. I've lived ten years of my life in Biloxi, Mississippi, and eight years in [study-site city]. I suppose it could be because I haven't lived in the same city my whole life, but I have always lived in the same state. Although I do feel myself connected to the United States of America, and even the global community, I just do not feel as if I mean more than just a number when I'm included in such a large group. In Mississippi, I feel like I mean something, and that I could really be somebody here if I wanted to be.

A participant who marked #9, close to the global end of the Personal-Space

Scale, related to the world, and her place in it, from the standpoint of a feature of physical

geography--the world ocean:

For me, my home is on the water. A lot of my childhood I can remember being on the boat or being on a beach or swimming in my backyard in the bayou ... The water is where I feel most comfortable and invigorated ... Maybe the water is my safe haven ... In my mind I live in a dream world surrounded by water ... The home I like to think I live in is anywhere where I can feel an ocean breeze where the salt sticks to your skin, which I guess globally can be any coastal area or region. And since the majority of earth is covered in water, globally I can be almost anywhere.

As an indication of the multiplicity of media use and spatial experience exhibited

by the participants, the following is a final sample of written text by a male who did not

quite fit the pattern of average adolescent spatial experience. He was not "average," in

that his use of electronic/digital media (both cell phone and Internet) was limited.) Yet,

surely there are many others like him in the U.S.)

I live my life close to home and within my generally area. ... As far as my use of social devices (cell phone, face-book, twitter, my-space, and others out there) goes my use of any of these is little to none. With a cell phone taken out of the picture my places in life is limited down to the local level, however, my lack of use of the Internet takes my personal sense of place and grinds it down to the very few places I regularly attend. ... I don't prefer to text...I still like to talk on the phone making conversation is my preferred way of communication. I don't get much off the Internet...I don't do a lot of downloading content either. My life generally consists of a homebody, a homebody who goes out every once in a while to do things with other people but besides that I don't get out much. What I do is stay in my local community and also keeps my sense of place there. ... I live my life locally and stick to a close range around the house. My place in life is gradually becoming a mutated piece in a uniform puzzle, I haven't got caught up yet in the networking or connected generation.

This participant (above) lived "close to home," "down to the local level," and with a *sense of place* that, because he did not much use the Internet, as he expressed it: "grinds it down to the very few places" he physically and regularly frequented. The *inner geography* of this participant appeared more localized than all the other participants (or at least his lifeworld was more locally based), because his Internet and personal-media use were severely diminished--he felt he was "*becoming a mutated piece*." However, he confided this information:

I do watch a lot of television and hang out with my friends. I do keep in touch by phone...by actually calling the person. I think this lets one have closer ties to a person than sending messages. ... This I think keeps me maybe a step up in the world when it comes to socialness. I also visit people not only on the local level but throughout America. I have been to Missouri, South Carolina, Destin, Florida, New Orleans, Chicago, Minnesota and other places, although I have never been out of the country. ... My place is mostly here. It is a kind of force that is one's familiar that always welcomes you back from the strange unknown. The world to me is vastly unknown.

Phase III: Interview Schedule

In-depth interviews were conducted with eight participants, a subset of the 25 participants who participated in the Questionnaire Instrument. These eight were chosen using several selected criteria: articulateness, a balance of male and female participants, and a perceived diversity of place experience, including some who were thought by the researcher to fall within a hypothetical middle range of place experience. Four males and four females participated; each was an 11th- or 12th-grader. The interviews were conducted at a local Internet café, close to the high school, well known to all the participants, and lasted for 55 to 75 minutes each. The interviews were conducted in April-May 2011.

Chapter VI discusses the reasoning behind the decision to conduct the interviews

away from school (due to differentials in researcher-participant power positions), and reasons for choosing an Internet café, as it is a site of social and media connectivity. An Interview Schedule was used as a general guide (Appendix C), but the interviews were conducted purposely to encourage open discussion and possible introduction of new topics (by both the researcher and participants) not included in the Interview Schedule.

Instead of the "across-participant" thematic approach used in detailing the written statements from the Writing Protocol and the responses to the Questionnaire Instrument (both above), here it was thought to be more useful to present a more holistic portrait of each participant by providing selected transcription data one participant at a time. Some data from the Questionnaire Instrument are also woven into the presentation of the individual participants. Overall, the interview questions were designed as an attempt to reveal the *lived geographies* of the participants.

Participant #1, a twelfth-grade, second-generation Asian-American female, began the interview session by placing her cell phone within about ten inches of the interview recording device, as she stated, "*Just in case I need it*." She stated repeatedly to the effect that she felt no emotional attachment to the study-site city, even though she had lived there all but the first year of her life. In her words:

Small chance I will move back here [after college]. I don't really have much attachment to [study-site city]. I really enjoy living here, but I do not have much sense of attachment to living here. ... I feel I have attachment to my home, my house, and just like anywhere I have my stuff around...like, my car is **my** car, and my room is **my** room. I feel like those are what I feel attached to; but the town itself... like, I could have those things anywhere. ... I don't really know a lot about [study-site city]; I have the gist of it, but I have never been one of those who go downtown. ... I don't feel like I belong here. [emphases added to reflect participant's voice inflection]

This participant (above) expressed that she spent considerable time in her car,

which to her felt like a home. She stated she felt at home in

...my car, where I have my stuff where I am comfortable. I could just sit in my car and I'd like it. I'm comfortable in my car; I can sit there and listen to music and sing, and talk to anyone I want. ... It's a private location.

The automobile for this participant (and probably to, at least some extent, all the other participants who drive) functioned as a safe haven, resting place, and networked media-center place in which she both withdrew from and re-connected to the world. She *media multitasked* in the private *spacings* of her car by listening to music on either the car radio, portable music player, or her cell phone; and by texting, telephoning her parents, and going online on her cell phone, which might include accessing Facebook. Her auto became a "networked car" (Varnelis and Friedberg 2008, 25). The spatial experience of this participant might be one theme for much of the spatial orientation of young people today: Withdraw to "private" *spacings* in order to re-connect to the "public" world on one's own terms. The spaces, then, become *networked spacings* in which even "private" space is *tethered* to the networked public *spacings* of the world.

In her home bedroom, Participant #1 had desktop and laptop computers, TV, DVD player, IPod, and cell phone. On a normal night, she Skyped for about three hours with her boyfriend, who was in college about 200 miles away. They played online Monopoly "together." They watched movies "together" by subscribing to an online movie service, and talked to each other via Skype about when precisely to begin the movie on their respective computers. Then, on their computer screens, they could minimize either the movie or the screen which projects what their respective computer cameras transmit. This activity enabled them to share a movie and chat and see each other during the movie at the same time--all in real-time. When not watching movies together, they talked, as she stated,

until I fall asleep. I fall asleep all the time when we Skype, usually when we are watching a movie or playing video games.

In terms of use of other media technology, this participant stated she texted

friends who had gone off to college (in five different states). At one point during the

interview, she texted; in her words:

I sent out a text to all my friends asking if anyone was going to walk the [local place popular for walking, jogging, bicycling].

When the present researcher marveled at her use of distance-defying technology

and asked the participant whether this also amazed her, she answered,

This does not amaze me, because it seems natural to me. It's like we are staying in a room together watching a movie.

This participant commented further about communication technology:

Before technology, people would just be there in their town. In just your town, you probably knew everyone down the street. But, because of technology, people can spread out and go to different places, and know what's happening in different towns. Technology gives you the opportunity to know stuff about other places.

In terms of her experience of local and global spacings, this participant offered

these thoughts:

I know what's happening in other parts of the world, but compared to other parts of the world, I don't know as much detail about the rest of the world, I know more locally than globally. ... I don't know that I see myself as a world citizen... Maybe as a "world daily visitor" ...I don't feel that I belong in the [whole] world.

Comments re Participant #1: This participant stated that she did not feel she

belonged to the study-site city and had no sense of place for it (her words), even though

nearly her entire life had been spent there. She saw little chance that she would move

back after college. She indicated she did not "belong" to the "whole world" and did not

see herself as a *world citizen*, although she had a "sense of the whole world." She spent many hours each week in distance-annihilating electronic/digital communication with her boyfriend, and friends and cousins around the country, talking on phone, texting, and Skyping. She voiced that she spent many hours sitting and networking in her car and felt at home there. In a telling remark about her use of media technology, this participant stated,

It does take away from your sense of place in your local town where you live in, but it gives you a greater sense of the world that people did not have before.

This statement (above) neatly coincides with the observation by Turkle (208, 129)

that the "digitally placed subject" is able to distance himself/herself ("resist pressure")

from local communities and re-connect to distributed, distant communities on the

Internet.

Participant #1 might be a "world daily visitor" while weakly tethered to the

"whole world," which she admitted she did not know well, but she also seemed to be

merely a visitor to every other place she frequented--except perhaps her car.

Participant #2, a twelfth-grade male, stated this about how he viewed the

different spacings and places in his lifeworld:

I kind of see them connecting, like, through me, kinda like I'm at the center. ... then you have city, state, world...and it all runs back to me because it is hard for me to see...the exact relationship between them, even if I understand it. Like, I understand the hierarchy --global, national, state, local, but to me it is all...relative? Is that the word I'm looking for? I see it all running back to me... I see how I relate to the world and how I relate to [study-site city] and how I relate to Mississippi. ... Like, I see it through my own lens. I see how each of those things has an impact on myself...and I understand how each of them has an impact on each other, but first and foremost I see how they relate to me... From there I can put them together and draw my own conclusions. **Comments** *re* **Participant** *#***2**: In the remarkable statement (above), this participant seemed to have conceptualized his embodiment as a *nodal point* of communication and spatial interactivity. He not only embodied as a communication hub, he was aware that spacings and places connected through him; in his words: "*I'm at the center* ... *I see it all running back to me*." This participant appeared to reflect and embody a vision of *self-emplacement* that is true for the spherical Earth as a whole. As Roger Bacon (1928) observed in the thirteenth century: "Every point of the earth is the center of its own horizon." Participant *#*2 twice mentioned a nesting of scalar relations from local to global with his being embodied at the center. He seemed to exhibit what might be called an *Omphalic spatial cognition*: solipsistic embodiment placed at the center of spatial experience. He envisioned his own "self-space" (Wertheim 1999) as occupying the centerpiece of the spatial world.

If there is any danger in such a solipsistic *geographic imagination* largely created by the "electronic landscapes" (Morley 2000, 3) of ubiquitous media, it might be that expressed by acclaimed essayist and "decayed-modernist" novelist William H. Gass, who suggests that the contemporary individual is "no more than the vanishing cross-hatch where the media intersect" (cited in Gitlin 2002, 9). By reading the interview segment of Participant #2, it appears that he resided existentially on two intersecting planes: in the cross-hatch of electronic/digital media, on the one hand, and physical spacings and place, on the other, and possessed an *Omphalic spatial cognition* as a result. As he saw it, the world literally revolved around, and intersected through, him.

Participant #3, an eleventh-grade female, was born and raised in the study-site city, but had traveled fairly extensively overseas with her family on sea cruises, for

example to the Mediterranean region. She indicated that the world was increasingly globalized (she marked #4, high on the 5-choice Likert-scale of Question #24), yet she saw little global impact on her life (she marked #2, low on the Personal-Space Scale).

Participant #3 expressed that she "*feel[s] very local*," and has more responsibility to her local community, as she "*belong[s] more so here than to anywhere else*," and "*mainly pay[s] attention to the things going on around me in the city*." She believed that there is "*a 50/50 chance of moving back to* [study-site city]" after college.

This participant felt most at home in her bedroom where she had her laptop and desktop computers, TV, and, of course, cell phone. She also spent time talking with family in the kitchen, with another TV within sight--"*but, it's background.*" She was usually online on two popular social-networking Internet services: Facebook and Tumblr. She stated she was "*always connected*" to friends, mostly local--"*a lot every day*"--but also to a few friends who had left for college, either by texting on cell phone during the day or at home media multitasking. She read and sent approximately 200 texts per day, spending one to two hours on the Internet, and one hour on Facebook.

Comments *re* **Participant** #3: This participant was more in the middle of the range of spatial orientations expressed by the participants. She had traveled rather widely with her family, but still was quite attached to home, family, and the study-site city. However, she was also attached to her electronic and digital media technologies. In fact, she was an average example of the *networked*, *tethered* individual living in a *telecocoon* (Habuchi 2005; cited in Varnelis and Friedberg 2008, 24); that is, virtual, networked *spacings* created by individuals that consist of a nearly constant stream of digital interaction connecting people across any distances. Feeding this spatial experience is the

always-on/always-on-you use of personal-media technology (Turkle 2008) mentioned above. These media-use habits instigate the *tethered-self* (of the postmodern individual) who travels the *spacings* of his/her lifeworld in a personal *electronic bubble*.

Participant #4, a 19-year-old male, had lived in the study-site city for 14 years, graduated the previous year, and was in college in a neighboring state. (He took part in the Questionnaire Instrument the year previously and was interviewed in the same Internet café as the other interviewees when he was home on break from college during the same month as the other interviews.)

In an informative account about his spatial experiences, this participant revealed to the researcher some online virtual activity (previously unknown to him) that is instructive of the new *spatiality* of many young people. He played Microsoft Xbox online video games with four or five other male friends with whom he graduated high school the previous year. The six friends (each with his own Xbox) were scattered in various universities across several states. They texted, telephoned, or used Facebook to communicate with each other to set up a game night (about twice a week), which was played in real-time. Online they would find another team (a "lobby") to play against; the other lobby could be an *ad hoc* group made up of "gamers" who did not know each other, scattered anywhere in the world. Through computer microphone, each lobby could communicate with only its own lobby members during the game.

Participant #4 responded to a question about his group playing online, with individual members positioned in six different places:

Now that I think about it, I kinda actually feel we are back in [study-site city] just hanging out at someone's house--it's weird. ... It's kinda mind-blowing to think that all of us from one place are in different places back in the same place, back to the original place [of the study-site city] without even traveling there... That's a lot to take in. ... When I'm in my Call of Duty [the Xbox game] mode, I'm focused, I'm there...like we are in one room with one TV and we're playing.

He was still attached emotionally to the study-site city where he had the most friends:

I'd say very attached. I grew up here; I love it here; I don't want to leave; I want to stay here for a while.

About the study-site city: "It would be the place where we could all come back to;

but we could always stay connected on Facebook, back to [study-site city]." He

mentioned he often used the phrase to his friends on Facebook: "...back to [study-site

city]."

Yet, contradictorily, this participant at one point in the interview stated he felt

more connected--had more roots--to a Midwestern city far to the north of the study-site

city, where his parents were from and where he had visited many times. On his cell phone

he received ESPN sports texts and had a Twitter account for some sports commentators

that enabled him to stay connected to sports in that city.

This participant had several other instructive observations:

I feel like the world is a smaller place; you can contact someone who lives physically so far away. But it is within seconds that you can reach each other now. So, it's like you're living almost all places at once.

When I asked him to respond to the phrase "the whole world," he stated,

I think of from space, like satellite pictures. It is a picture of the whole planet. ... I've always been fascinated by satellite imaging and stuff. I've always thought there's nothing cooler than looking at the Earth from space. It's beautiful; I saw it on video games, Xbox, as an astronaut looking down on Earth. ... For some reason the Olympics popped into my head. It is a 'connectivity' [his term that he heard on Xbox], in that it brings the whole world together. It's such a big, event worldwide. Two billion people watch the World Cup.

In terms of world citizenship:

I'd say I'm not much global, because I kinda see the world in a very American way. So I consider myself an American first, and then Earth second... I just don't know the world.

In terms of media technology:

Everyone can connect. ... I can get up from my bed and take ten steps to my computer, and then I'm connected to thousands of miles away to Germany [where he has a former exchange-student friend].

When queried about the meaning of "space," this participant stated that space was

in some sense the connection between places:

So, like the physical between place, and the connection between place--is the space; and how quickly we can make the connection. Like, if you're connected in Germany, and I'm here in [study-site city], if we're connecting on Facebook or something, then there's that space between is made through that connection. That space is shrunk, the space is smaller because of that connection that is rapidly made. ... It goes as fast as one computer to another; I don't know how fast it goes. I guess it is almost immediate, so I guess it's little of any space at all now.

Finally, where did he feel most at home?

...on my recliner [which he took with him to college] playing Xbox with my friends, in my room, three-and-a-half feet away from the TV.

Comments re Participant #4: Perhaps due to his playing online video games

with friends who lived dispersed across several cities and states, and communicating with

a friend overseas (he was not alone in this, as some of the other participants also had

overseas connections), this participant seemed aware of time-space compression--in his

words, "that space is shrunk, the space is smaller." Even though he expressed attachment

to the study-site city, he was involved in communication and travel to other places in the

U. S. (as were other participants).

Participant #4 seemed to express the spatial logic of media theorist Derrick De Kerckhove, that computer activity creates the sense of "being here and now when it counts" (in contrast to television which scatters *sense of spacings/place* into an "everywhere at once") (1997, 2). This participant stated that when playing virtual online games with his friends from his hometown, each of whom then resided in a different city, he felt he was "back to the original place" without physically being there. In these moments, he was focused, he was "there," as if they were co-present in the same room, with, of course, the appropriate electronic/digital devices cohabiting with them and connecting them. In his "*space-is-shrunk*" *time-space compression*, the spatial orientation of this participant had been *reterritorialized* so that he sat in his old recliner (carried to a new place), played video games in real-time with old friends (who physically lived in distant places), and felt right at home across these now-collapsed and *re-embedded* spacings.

Participant #5 was a twelfth-grade female who had lived her entire life in the study-site city (with grandparents from there), but had traveled to eight other countries. She stated that there was only a small chance she would move permanently from the study-site city, as she had much emotional attachment to it--"*my heart is in* [the study-site city]." Yet, she stated, "*I would have to consider myself a global citizen*," and "*think[s] everyone belongs globally*." She recognized that "*the environment is global*," although she did not believe in anthropogenic global warming. She strongly agreed that the world was increasingly globalized and was becoming "smaller."

In terms of media use, on Facebook she communicated with a friend in Zambia

("*available at the touch of keys to my fingertips*"), and acquaintances in Costa Rica, where she traveled on a church mission trip; cousins in a northern state ("*just one click away*"), and a cousin who lived "*down the street is just one click away*." She scoffed at online video gaming--"*I don't like making, like, another world*." This participant spent considerable time keeping up with news via radio, TV, online, and several newspapers (reading them in a legal office where she worked part-time).

Comments *re* **Participant #5**: None of the eight participants could be considered typical, and this participant illustrated this. She was very active in the local community-quite attached to it--and wanted to move back after college. And, like most of the other participants, she was thoroughly connected via electronic/digital media to friends and family spread over long distances. Yet, by way of her personal worldviews and consumption of news media (and perhaps travel), she was globally aware and considered herself a *world citizen*. Thus, she was somewhat unique in that she was both locally attached and globally aware, considering herself both a local and *world citizen*. In addition, in her responses to the Writing Protocol, it was clear, also, that she considered herself a Southerner, one of the few who expressed this regionalist viewpoint.

Participant #5, despite her extensive involvement with media, particularly news media (or possibly due to her news-media saturation), seemed to exhibit a balanced spatial orientation: She self-identified as local, regional, and global. However, this orientation did not nullify her retaining a local *attachment to place*.

Participant #6 was a twelfth-grade male, a self-described "military brat," who had lived in the study-site city five years, in two other countries, and traveled in ten others. Neither parent was originally from the local area; both had lived there only as

long as had the participant. He would "probably" make a permanent move away, with "no chance" of moving back. He had "little" emotional attachment to the study-site city. In terms of his self-identity:

I have some attachment to [study-site city] because I went to high school here. I'm not much of a Mississippian, or even of [study-

site city]. I'm a military brat and have lived all over. But probably of all the places I've lived I associate the most with [study-site city] because I have lived here the most and went to high school here.

This participant texted "a large amount," but did not have Facebook because he

did "not want to deal with it." In other technology use:

I live mostly...at home where I spend most of my time, on my computer, on the TV to see what's going on. In the background I'll have my TV, PlayStation, and my computer--a laptop.

Similar to the media-rich experience of this participant (above), Turkle (2008,

131) quotes an architect who relates, "It used to be my home was a haven; now my home

is a media center." This quote on its face appears to be a lament. Contrariwise, the

participants of the present research seemed to equate that same media-center bedroom

culture with being the very haven of their lived geographies.

In terms of connectivity:

I'm pretty connected. I check online news a lot every day just to see what's going on in the world and other places in the U.S. I'm more connected to places where I've lived or have family there, more than just some random person. I get on their local news sometimes, online news and online TV stations, usually reading more articles than watching. ... With your cell phone you're pretty much connected to wherever you want.

In terms of *globality* (global awareness):

I'm not super-aware, but I'm pretty aware just from keeping up with what's going on; and from traveling to places. I have a pretty good grasp of people in other places. I'm more interested in places I have traveled; I lived in Germany three years and traveled around

Europe and all over.

In terms of *world citizenship*, he saw himself (perhaps paradoxically) globally oriented (but not as a *world citizen*), yet more locally connected:

I think of myself as a pretty global person, because of my background of having lived in various places; but not so much a global, more of a U. S. identity. ... Well, I think I know a good bit about the world... It's difficult to express: I see myself as more here in [study-site city] than globally, more affected by what happens here.

Yet, the likelihood that he would move permanently from the study-site city was "probably" (the highest category), with "no chance" he would move back after college.

When asked about his home, he responded rather indifferently, in contrast to some of the others: "*It's not anything special--just where I sleep at night*."

Comments *re* **Participant** *#***6**: This participant represented the "bedroom culture" of young people today (Livingstone 2007, 302), in which "identity, privacy and the self has become linked to the domestic spacings of the child's bedroom in late modern society." It seems the average young person today looks out at the world (or, perhaps more accurately, *into* the world) from the microspace of the bedroom, employing the "three-screen" strategy of connectivity: TV, computer, and the Internet-connected cell phone (Nielsen Company 2009).

Even though this participant did not use Facebook, he texted a "large amount," and was deeply immersed (as were all the participants) in what media critic Todd Gitlin (2002) terms "the media torrent" that has profoundly changed the American psyche. It is now reported (Paul 2012, 64) that the average American spends about 12 hours each day consuming information from various sources. For example, this participant indicated that he spent three to four hours daily on the Internet. It was mentioned in Chapter III (citing Morimoto and Friedland [2011, 551-552]) that the lifeworld of the average young person is so thoroughly enmeshed with media that no neat separation can be ascertained between the person and media, and that involvement with media is "a form of life itself" (ibid.).

For this participant and young people generally, instead of "media use" it might be more accurate to speak of "media life," a symbiosis in which the user and machine are "growing into interconnected systems" (Sparrow, Liu, and Wegner 2011, 778). If there is no clear separation between self and media--between the lifeworld and media spacings accessed on the "three screens"--then the *geographic imagination* must necessarily be more or less informed by the degree of personal enmeshment in media. As advanced in Chapter III, human *spatiality* is now deeply *mediatized*.

Participant #7 was an eleventh-grade female, first-generation Pakistani-American, with both parents born in Pakistan, and half her family residing either in that country or India. She had lived in the study-site city for 13 years, and "probably" would move away permanently someday and "possibly" would move back at a later time. Yet, she felt she currently "much" belonged to the study-site city.

This participant *media multitasked* on cell phone (mostly texting, about 400 texts per day), spent three to four hours per day on the Internet (on her laptop), and communicated with friends in at least three other states. Her TV received foreign channels, but she "*seldom keep[s] up with foreign news and affairs*." In terms of international connectivity:

I'm connected through the media, like the news. I'm connected through Facebook to different people around the world. I email my cousins in Pakistan, and my mother uses Skype, I guess, on a daily basis to talk to her relatives in Pakistan, also. So, we're video communicating, emailing, texting--well, not really texting-calling, and many different ways [with family in South Asia]. She stated this about the "space" of the Internet:

I guess it is not a literal space...I mean... It's, like, connected because... I don't know... It's like being connected to everyone at one time. ... I still feel the greatest amount of comfort [when] sitting at home on the Internet...but I mean...I feel real comfort, because I am familiar with the websites I use.

This participant "strongly agrees" that the world was both increasingly globalized

and becoming "smaller." She marked the highest number on Question #19, indicating that

she thought it would be better to be a citizen of the world rather than only a citizen of any

single country.

In terms of *globality*:

I rated myself as an 8 [on the Personal-Space Scale], as part of the global world. I feel I have a better sense of globality than other people my age because I watch the news every day and read the paper, and I'm aware of, like, current events. And so I feel I have a better sense of that; whereas other people do not keep up with the news and are wrapped up in their own lives and have no time for anything else.

In her responses to the Writing Protocol, Participant #7 stated this about the sense

of place of "most everyone" (though in the context of her other statements, it seemed also

to be a sentiment about herself):

Although they have a sense of place in their hometown, or the city in which they reside, they also associate their sense of place with the global community.

In terms of globalization:

We can connect more to other people living around the world because of globalization... Like, even something like fast-food restaurants all over the world, so people can relate to each other. Before, we couldn't really relate, because we had different situations ...so, now we have malls going up everywhere... [and other] different [things], like, everyday things. Similar to Participant #2 (above), this participant spoke of a nested scalar hierarchy of *self-emplacement*:

First, I think of myself as local: [study-site city], and then the Gulf Coast, then the U.S., then global... I don't know, it depends on the situation: If a natural disaster were to happen [somewhere in the U.S.], it would be the U.S. If something happened to the Gulf Coast, then I would feel part of the Gulf Coast.

Comments *re* **Participant** *#***7**: Similar to Participant *#***5** (also a female) this participant exhibited a spatial orientation that balanced spacings from local to global. Similar to Participant *#*2 (a male) she spoke of a scalar hierarchy of places proceeding outward from her. Unlike Participant *#*5, she probably would move permanently from the study-site city, thus indicating little *place-attachment*. Participant *#*7 was strongly cosmopolitan (both parents were born overseas), yet (a partial cause, perhaps), she "*feel[s] the greatest amount of comfort… real comfort*" in the spacings of the Internet.

Participant #8 was an eleventh-grade male who strongly identified with the local area. Both his parents were born locally, as was he. He indicated a "large" degree of local impact on his life, had "much" emotional attachment to the study-site city, and felt he "much" belonged there. In terms of landscape, he "much" identified with it. In fact, this participant spent hours on a bayou in his boat--"*yeah, boating in the bayou is a huge deal.*"

When the interview turned to discussing his use of technology, this participant revealed that on a typical weekend he and many of his friends formerly would meet at one of the houses of the group to socialize (another participant called it their "Super Saturdays"). However, since he got his Smart Phone (Internet connected with textmessaging capability and other features) he had reduced substantially the in-home group activity that was traditional with this teen social group. When asked why, he took his cell phone out of his pocket and stated that the phone was the reason: He could (and did) keep apprised of activities of his friends in real-time (or when he checked his incoming texts) as they sent them. One of his friends in the informal group confirmed the veracity of his statement. Participant #8 claimed he stayed home more (and in nearly constant contact with his friends), instead of driving to physically meet with them. This was his reply, when asked this question: From computer, bedroom, to whole world--where do you live?

"Are those choices? I'd say, in between cell phone and town."

In additional media use at home:

[In his bedroom] I have a laptop; usually it is open and I'm doing a lot. It stays there [he does not take it to school]. The laptop is the main base, and the phone a little one. Everything I can do on my laptop I can do on my phone as well. ... Everything I need to stay connected is my laptop and my phone. [And the TV]...scrolling through the channels, usually watching sports.

When asked about sense of place (and not media technology), this participant still

directed his thoughts to technology:

Now they have FaceTime, too, like Skype. [FaceTime is a videotelephony software application that allows users to receive and transmit audio-video signals over the cell phone in real-time.] I can call somebody and see pretty much what they're doing and everything... I can capture a sense of place just by calling them, because in the background--what's behind them--I can see the place.

He continued his comments, blending technology, geographic knowledge, and

sense of place:

The phone is the only real way I can keep up with the world... I have these text message things--breaking news... When bin Laden was killed, I had this thing pop up; I was the first to hear about it, and it gave me a sense of place of the world...

On comparing home and phone (this was not a question asked by the researcher; it

was spontaneously volunteered by this participant during the interview):

The thing I'd most rather have, if someone asked whether you would rather have shelter or rather have your phone, I'd rather have my phone, because my phone can lead me to shelter. If someone were to ask which would you rather have, I'd say I rather have my phone for the rest of my life. I'd have to pick my phone because it's more important. ... And, if something happens and my friend calls me up, the phone is more a sense of place than the house, definitely.

Queried about world citizenship, he stated,

Not at all; I mean, I'm not a world citizen. I don't know what's going on in China, Japan, India, all those places. I don't contribute to what they do at all. Take away my recycle bins, I'm nothing to the world.

Comments re Participant #8: This participant's spatial orientation and

experience were mostly local, with few contacts outside the study-site city, although as was true for many of the others, he stayed informed, as best he could, with national and world news (mostly via podcasts on his cell phone or computer). Much of his media involvement was spent in following sports.

It is safe to say that this participant's use of media technology (as was true for all the other participants) informed much of his spatial experience. When queried about *sense of place*, he mentioned technology. When asked about knowledge of the world, he stated that his phone was the "real" way to keep informed. As part of the "constant contact generation" (Clark 2005), he kept up with his friends' activities via his phone. The Internet-connected phone that was so personally crucial to this participant and most of the others was used as an all-purpose computer and a base of operations for learning about the world and staying connected to family and friends. It was also, importantly, a *space-altering technology*. Due to its *always-on/always-on-you connectivity* he stayed connected nearly continuously to his friends and family, curtailing his former physical

social intercourse. He, in fact, was substituting online *connectivity* for face-to-face meetings. This adolescent behavior has been observed by other researchers: A professor of transportation notes: "More time on Facebook probably means less time on the road" (Buchholz and Buchholz 2012). For this participant, and for all the others, the "three-screen" technologies have altered the spatial routines--embodied and cognitive--of his everyday living. Instead of "place ballet" conceptualized by Seamon, in which "an interaction of body and time-space routines [are] rooted in a particular environment" (2007, 3), this participant, and others, seemed to be playing out a *space ballet* in which his embodied spatial interaction occurred in more abstract, diffused space unanchored to real, material place. From long tradition, "Americans," Yi-Fu Tuan asserts (mentioned in Chapter IV), "have a sense of space rather than a sense of place" (1974, 8).

In reference to how electronic and digital media can profoundly alter spatial experience, psychologist of media technology Kenneth Gergen notes (cited in Williams and McIntyre 2000, 394),

that with each new symbolic connection to the larger world 'the traditional face-to-face community loses its coherence and its significance in the life of its participants...Their sense of "belonging" is no longer, or even primarily, rooted in the local soil.' (Gergen 1991, 215)

In the case of Participant #8, virtual space interwove with, and even somewhat replaced, the "place-ballet" experience of physical place. He lived in hybrid virtual/physical spacings/places "between cell phone and town."

Analytic Conclusions

The following are eight "meaning units" (presented as geographic themes) that emerged from the spatial experiences and orientations of the participants as detailed above.

- Participant #1 provided the geographic theme of the *individual withdrawn to private spacings in order to tether and re-connect to the wider world.*
- Participant #2 provided the geographic theme of the *individual as spatial node in a scalar hierarchy*: The individual as embodied "electronic *Omphalos*" at the center of the world.
- Participant #3 provided the geographic theme of the *networked individual tethered to electronic/digital spacings* while cognitively traveling the world, partly insulated in an electronic "telecocoon," or "private digital bubble."
- Participant #4 provided the geographic theme of *time-space compression*, and the experience of retaining a *sense of "home" reterritorialized as an embodied always- "here,"* wherever one currently is "located" (physically, digitally, and cognitively), networked to friends wherever they currently are "located" (physically, digitally, and cognitively).
- Participant #5 provided no new geographic theme--unless it is one of *spatial balance*. Perhaps her geographic experiences and orientation simply provided a welcome confirmation that, despite the usual communication/media saturation of young people, she exhibited a spatial balance in her self-identity and spatial orientation. She was demonstrably attached to place, yet understood the global impact on her life and the value of a global orientation. Her *inner geography* valorized spacings from local to regional and global. Perhaps hers was the most surprising of this group of participants.

- Participant #6 provided the geographic theme of *the geographic imagination as largely a product of personal enmeshment with media.*
- Participant #7 provided a geographic theme of spatial-experiential complexity, in which the local was moderately valorized, but without much personal *place attachment*. This occurred while accessing all scalar spacings (to real people and places), and while tethered to electronic/digital media accessed from **the most local of places**: *The individual at the controls of distance-defying electronic/media technology, cognitively digital-tunneling through topological hyperspacings to Anyplace/Everywhere*.
- Participant #8 provided the geographic theme of the *hybridization of online* spacings/offline places--he lived in liminal spacings, as he phrased it, "between cell phone and town."

These eight geographic themes (above) are ideal types, though drawn from real people (the research participants), based on their actual words. However, the lifeworlds of contemporary humans are complex, ever-changing, and permeated with multiple spatialities. A complete, holistic portrait of the *inner/lived geographies* of the participants would have necessitated the composition of an extensive treatise on the *lived geographies* of each individual: a complete "geo-biography." As it was, sufficient material was collected, it is hoped, to have formed at least a deeply insightful sketch of the complex spatial experiences and orientations of a group of middle-adolescents who have at least some significant affinities with their demographic cohort across America.

General Conclusions

This chapter has inquired into the lived, everyday *spatialities* and *lived geographies* of a group of high-school middle-adolescents. An attempt was made to provide a portrait of the everyday *spatialities* of the participants--their *inner landscapes*-depicted by data obtained from three phases of design and data-collection: Questionnaire Instrument, Writing Protocol, and Interview Schedule. Analyses accompanied the data presentation in a hermeneutic-like fashion, toggling between part (the data) and whole (the literature of *spacings and place*).

In the spatial orientations of many of the research participants, their *geographic imagination* has been "re-wired" to reflect not simply media connectivity, but also *connectivity* through "topological digital spacings" (i.e., not tied to physical places)--to dispersed places that are experienced as rhizomatic (similar to subterranean, horizontal parts of fungi) "Anywheres," no matter how distant or proximal. From the participant who texts a friend within the same classroom, to the participant who emails a friend in Germany; from the participant whose family has local, ancestral roots and others who have strongly developed *senses of place*, to the several participants who feel thoroughly spatially alienated from the study-site city--these are widely varied experiences of spacings, places, and the world. And, there were others.

Commonalities include the adolescent *bedroom culture* and home as a renewed site of privacy and security. But the home and adolescent bedroom function also as media centers; and as media centers they become a primary site of connection to the world. The most private place of one's home and/or bedroom is *tethered* to the public places of the wider world, or to other people in their homogenized private/public places. To the

adolescent participants in the present research and most likely to nearly all American adolescents, this activity is deeply momentous and constitutes an important aspect of identity formation.

But, further, unrelenting technological developments of the new media have equipped the human body itself as media center that connects to spacings and places. The Internet-connected, text-messaging-capable, GPS-tracking cell phone makes this device, and the human body which carries it, perhaps the most pertinent physical and cyberspatial "address" of the early twenty-first-century individual. One's cell-phone number is "where" the person is "located," and most readily can be found. The body, then, becomes the primary site of *connectivity* with the world. The cell phone-equipped human is constituted as a mobile "location" with two *space-ballet* movements: The embodied circulation through physical places, and the electronic/digital cognitive cyber-tunneling through *electronic/digital spacings*. This mobile, human body/media node fashions a personal "activity space"--an active, idiosyncratic, communicating/circulating "nodal region"--on two interconnecting planes: the physical and the digital. The planes of the "activity space" intersect through the human body.

Throughout this dissertation the meanings of *place* have been the underlying theme of the research (as it is in much of academic geography). In addition, the meanings of *place* to the research participants have been a central focus, in that it has been assumed that the *place experience* of the participants is not only critical to understanding their lifeworlds, but also that they themselves are actively, critically concerned with their own experiences of *place*, as well. Thus, among the many possible meanings of "place," the present research has employed the construct of *place as personal experience*. As such, people still must live someplace, in real locations, even though an increasing amount of time is spent in *virtual spacings* (now inordinately large in most young people). As Clifford Geertz comments (Chapter IV): "For it is still the case that no one lives in the world in general" (1996, 262). For instance, if adolescents are spending more time at home, particularly in their bedrooms, this site is still an actual location and real place imbued with personal meanings. This is true even if all the sites of *place* in the lifeworld--the body, cell phone, computer, TV, bedroom, school, or teen hangout--are places that are used, in part, to connect to *other* places. In fact, as the present research has demonstrated, connectivity itself is an integral part of lifeworlds as now lived in the contemporary *mediatized* hypermodernity.

Places, then, still matter, as the present researcher discovered simply by asking. As revealed by Participant #7 (who had transnational connections, was quite cosmopolitan, and spent three to four hours per day on the Internet): "*There are still some things that I consider local in my life*." Yet her "local things" are not traditional places; they now also include her media-center bedroom (or whole house as media center), her *always-on/always-on-you* personal communication/media devices, and as the most local of places: her *tethered-to-Anyplace* embodied self.

Concluding Comments

In conclusion, the *self-emplacements* of these adolescent research participants were informed by their negotiations between the two ever-more-tightly interweaving realms of the physical world and the spacings of media. The spatial *self-emplacement* increasingly has a double valence: The *there*/here-and-now of the "places" of media connections; and the here-and-now of wherever the breathing and mobile body (with its communication/media devices) is located at any one moment, be it bedroom or school or shopping mall. From review of the literature in Chapter IV, **the** *geographic imagination* **was conceptualized as the active interface between embodiment and place-world, manifesting as a nodal, topological**, *person-region*. After examining the participant data presented in the present chapter, the new personal media must be added as both a powerful source of, and influence on, *spatiality*. Thus, with this addition, the *geographic imaginations* of the research participants, then, are better viewed as constructed out of the knowledge of both the physical world--emanating nodally outward from the body--and of their electronic/digital rhizomatic (similar to interthreading roots) *connectivity* to the *mediascape*.

Historian Toby Lester concludes his book about the saga of the "Age of Exploration" with this thought: "[T]he contours of the human experience itself... [include] the never-ending attempt to *imagine a place for ourselves* in the world" (2009, 398; emphasis added). The vital place that the adolescent participants of the present research imagined for themselves was in the roiling, evolving, personal-nodal (material and virtual) geographic midst of it all. Their electronically/digitally connected *space ballet* of bodily routines spirals around them in a whirl of fleeting, space-altering three-screen images at the physical-virtual vortex...centered "hyperspatially" on them. The manifestation of this hypermodern *spatiality*, however, does not engender close relational connection to place and environment. This trend towards a context-free *spatiality* is addressed in the next chapter.

CHAPTER VIII

CONCLUSIONS AND RECOMMENDATIONS

For geography education, the rapidly changing social and personal, contemporary experience of spacings and place is somewhat analogous to that of the early European cartographers who were constructing partial maps of the world simultaneously as new information arrived about newly discovered lands. Similarly, many scholars today, including geography educators, are attempting to understand the evolving *geographic imaginations* of people--their inner experiences of spacings and place--at the same time that the spatial basis of the lifeworld is rapidly evolving in "ways that are deep, sweeping, and momentous" (Norwine and Smith 2000, xiii), as the result of social change, globalization, and the rapidly developing technologies of information and communication. The present state of social flux has engendered new ways of being in the world, new ways of thinking about the world, that, themselves, engender yet newer ways of thinking and being in the world (ibid.). This is the considerable challenge of geography education.

In the face of these potent sociospatial forces of global interconnections, integration, and interdependency that modify how people relate to spacings and place and which numerous observers see as resulting in loss of a personal *sense of place* (*placelessness* or *cognitive deterritorialization*), this research investigated the *geographic imaginations* of high-school-age middle adolescents. Topics of the research concerned

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multi-scalar perceptions, experiences, and conceptions of *home*, *sense of place*, and *globality* or awareness of global space. The present study falls within the purview of the subdiscipline of humanistic geography, which "treats the person as an individual constantly interacting with the environment and with a range of communities, thereby continually changing both self and milieu" (Johnston and Sidaway 2004, 217). A great deal of scholarly attention has been devoted to these rapidly mutating milieus--social (including the sociospatial) and psychosocial--which have altered the terrain of the lived realities, including the place-worlds, of most everyone today. This sociospatial flux was the focus of the present research.

The overall research area dealt with in this research has addressed the lacunae in the literature concerning the *mental geographies* of middle adolescents: their subjective, comprehensive (multi-scalar) *lived geographies*. The problem area investigated was the *inner geographic* orientations of young people: How and why middle adolescents *cognitively spatialize* their lifeworlds, and what this emerging spatial orientation might mean for education.

This chapter revisits each of the Research Questions and Research Propositions to briefly summarize the empirical data and address their topical concerns. Each Research Question is given a concluding comment. For the three Research Propositions, the empirical findings are used to assess the validity of the propositions as hypothesized cognitions of spacings and place. In addition, general conclusions are provided. This is followed by discussion of the findings. Then, general recommendations are advanced, including a summary critique of a philosophy of a "planetary world" and a turn (back) toward "re-worlding" the planet. This provides a way to view the world at the largest scale. Then, briefly, a return to *place* and *locality*, or as Lucy Lippard (1997) terms it, the "lure of the local," is described as a way to anchor lived geography at the local level. Along with discussions of these two scalar vistas of world space--planetary and local-attention turns to education. To supplement the more usual pedagogy of a "global perspectives approach" (Standish 2009), the place-conscious and "learning as dwelling" approaches to education are offered as more holistic and meaningful strategies for teaching high-school geography. A person-centered revision of the long-traditional "Five Themes of Geography" is developed as a more useful way--as a "geography from below"--to channel the two approaches within the pedagogy of geography. Recommendations are suggested for further research. The dissertation ends with a few concluding comments.

The four main Research Questions (Chapter II) were formulated to investigate (1) *sense of place*, in the form of *place attachment* and *place identification*; (2) *globality*, in its supposed opposition to *locality*--the manner and extent middle adolescents consciously relate to and *emplace* themselves in a globalized world; (3) the relationship of gender with sense of place; and, (4) media and *personal spatiality*--the manner that information and communication technologies, including emergent, personal-media technologies (e.g., cell-phone texting), shape personal experiences of *spatiality* and *embodiment*. In Chapter VII the results of the data presentation were compared and contrasted to existing social-science theories (in a hermeneutic fashion throughout the chapter) of how people, particularly young people, experience and understand their geographic realities. In the present chapter, the empirical data are summarized and presented as findings; conclusions are reached.

As was explained Chapter I, the term "spacings" is used to indicate how spaces are always subject to change. John Horton (2012, 11 n. 43) borrows from the propositions of Doreen Massey (2005, 9) to contend that space is interrelational, multiple, and always under construction. The empirical data of the present research appear to confirm this view.

Findings: Research Questions

The general purpose of this dissertation was to gain insight into how middle adolescents perceive, experience, and conceive of spacings and place, inclusive of all levels of spatial scale. To accomplish this task, the research methodology endeavored to provide deep, rich data exploration employing mixed methods that called for three phases of quantitative and qualitative research: the former being a Questionnaire Instrument, and the latter approach including a Writing Protocol and an Interview Schedule used to conduct semi-structured in-depth interviews. Both the quantitative and qualitative data (the latter collected from participants who were a subset of those who took the Questionnaire Instrument) were used to reach these findings.

The notion of the *geographic imagination* as a cognitive construct of the individual--a concept often used today in many areas of analysis in the humanities and social sciences (Chapter IV)--is the descriptive spatial term unifying the several areas of the present research. The *geographic imagination* was investigated by breaking it into two spatial categories: *sense of place* and *globality* (global awareness). *Sense of place* affords some insight of *lived geography* at the smallest, local-level, scale. Following the literature, *sense of place* was divided into two components of affect: *place attachment* and *identification with place*. *Globality* gives some indication of *spatiality* at the largest,

global-level, scale. *Globality* was separated into three components relating to attitude: *world citizenship*, *globalized outlook*, and *awareness of global influences*. The selection and investigation of *sense of place* and *globality* set the parameters for an analytical "scale frame" from local to global within which the participant data afforded insights into the *self-emplacement* of middle adolescents (the main topic of this research).

The findings and conclusions (proceeding from both the quantitative and qualitative data) addressing the four main Research Questions are presented below (Chapter VII presented more detailed data). Following these, the same is done for the four Research Propositions.

Research Question 1: Sense of Place

Eight questions in the Questionnaire Instrument (Appendix A) were designed to answer Research Question 1: To what extent do middle adolescents exhibit *sense of place*? In terms of *place attachment* (items #11, #12, #14, and #16), the participants seemed to demonstrate a contradiction: Most participants indicated they would move permanently away from the study-site city, and few contemplated returning; yet, at the same time, most participants felt both *belongingness* and *attachment* to their home city.

The data collected for this research indicated some of the complexities of contemporary *spatiality* and specifically *sense of place* (and sense of "home"). To take one example: Participant #7, a first-generation Pakistani-American female, and perhaps the most cosmopolitan of the participants, paradoxically "much belonged" to the study-site city and scored moderate to high on the other questions concerning *place identity* and *place attachment*. Yet she probably would move permanently away from the study-site city (true for many of the other participants, so not out of the ordinary). Additionally,

perhaps paradoxically, even though she and her family communicated daily with farflung family (through Skype, Facebook, and email), and her TV is tuned to foreign channels, she rarely kept up with foreign news (even though she was in the International Baccalaureate program and expressed quite cosmopolitan views). Part of the complexity came when she talked about the meaning in her life of the *paraspace* of the Internet (Bukatman 1993). She stated, "I feel the greatest amount of comfort sitting at home on the Internet... I feel real comfort." Small wonder then (as the present research has concluded) that this participant apperceived of herself *emplaced* in a nested scalar hierarchy: "First, I think of myself as local...then the Gulf Coast, then the U.S., then global." Her experiential spatiality centered on her embodiment at "home," interfaced with the computer screen (and perhaps with cell phone and nearby TV), in *connectivity* with a *paraspace* of all spatial scales from local to global. The scalar spacings are represented not only as potential connections on the screen, but are in "actuality" (or cybernetically) centered on her *tethered embodiment* as the locus for communication vectors moving outward in topological, scalar space. Her ontological and apperceptive cognitive experience is as an embodied electronic/digital *Omphalos* with *connectivity* in local-to-global spacings.

Conclusions--Research Question 1: These findings, indicating a mixed, perhaps even muddled, *sense of place*, are generalizations of the collected data, and include a fairly wide diversity of views: A few research participants seemed quite attached to place, a few others indicated vigorous dislocation, and others were in the middle. Overall, they might reflect the cultural dissonance vis-à-vis place extant in American society at-large for much of its history (Chapter IV); or they might be an indication of something emergent of this contemporary "Net Generation"; viz., that *sense of place* is fairly shallow, if these participants in fact are so lacking, as they seem to be, in commitment to *place*.

Research Question 2: Globality

Seven questions in the Questionnaire Instrument were designed to answer Research Question 2: Do middle adolescents exhibit greater global awareness than local awareness? The seven questions (items #18, #19 and #22 to #26) were divided into three categories: *world citizenship*, global outlook (*globality*), and *awareness of globalization*.

More than a third of the research participants (36 percent) either "disagreed" or "strongly disagreed" with their self-perception as a *world citizen* (item #18). The same percentage (36 percent) assessed themselves in the exact center. The four participants (16 percent) who "agreed"/"strongly agreed" with *world citizenship* had one or both parents born overseas, or had lived and traveled extensively overseas, or were soon to be matriculated into an international studies program at a state university. Thus, these four pro-*world citizenship* participants each had a special international background that perhaps led them to this globally oriented position.

The second question (item #19) that queried cosmopolitan views ("Is it better to be a world citizen than a citizen of a single country?") displayed responses that were shifted somewhat toward the two extremes: 36 percent "disagreed"/"strongly disagreed," and 40 percent "agreed"/"strongly agreed." Similar to the responses to the two questions concerning *sense of place* (above), there seemed to be an inconsistency in the participants' views: Only 20 percent "agreed"/"strongly agreed" that they self-identified as a *world citizen*, yet twice that number (40 percent) "agreed"/"strongly agreed" it was a good idea to be a *world citizen*. The fact that those who think it was a good idea to be a *world citizen* doubled the number who actually self-identified with the role of *world citizen* is due, perhaps, to an idealistic view of the value of world citizenship, and possibly to influence of the data collection instrument itself. In any case, there has been a great deal of skepticism, especially among American observers, about the actuality of a *cosmopolitan attitude*. One example, by legal historian Lawrence Friedman:

despite all the loose talk about a global village, nothing remotely resembling a global identity has emerged. It would be hard to find anybody whose primary identity was to everybody, all humanity, the whole earth, rather than to some single country (or institution). ... no worldwide consciousness of common humanity, based on *any* ideology, has come into being. (Friedman 1999, 115; emphasis in original)

Two questions (items #22 and #23) provided indication of *globality* (awareness of global spacings). Question #22 measured global impact on personal life. Forty percent of the participants indicated a medium global impact on their personal lifeworlds, while there was a balance at the extremes: 32 percent assessed "little"/"some" global impact, and 28 percent saw "much"/"large" global impact. Question #23 assessed the degree the participants tuned in to global events and culture. The responses indicated a fairly balanced spread among "little"/"some" (36 percent of the participants), "middle" (28 percent), and "much"/"large" (36 percent).

Three questions (items #24 to #26) assessed the *awareness of globalization* (or increasing "transplanetary connectivity"). The responses to Question #24 indicated that most participants believed that globalization was occurring (76 percent indicated "much"/"large"). Seventy-two percent of the participants believed the world was "growing smaller" (item #25). While for Question #26, which queried awareness of

spatial interaction among places due to globalization, 40 percent indicated "medium," and 56 percent marked "much"/"large."

Summary of the findings about *Globality*: The participants were divided on *world citizenship* (item #18) into three fairly even groups: In terms of degree of agreement with *world citizenship*, they divided into did ("agree"/"strongly agree"), did not ("disagree"/"strongly disagree") and those in the middle. As Question #19 indicated, a significant number did not think it advisable to be a *world citizen*, but the views were spread fairly balanced from "no" to "middle" to "yes." The same balance was generally true for awareness of global impact on the participants' lifeworlds. All these responses indicated a general balance of views. Only the last set of questions indicated a clearer single position: Most participants acknowledged the reality of globalization.

Conclusions--Research Question 2: It was difficult to find common denominators among these data since the responses indicated a wide diversity of views. But there was one overriding view of global space: Although in sharply varying degrees, the participants exhibited fairly high awareness of *globality* (awareness of the world as a single entity). This is generally true as shown by the seven questions that were designed to answer Research Question 2 about *globality*. Whether or not the participants selfidentified as *world citizens* (56 percent); whether or not they thought *world citizenship* a good idea (60 percent); whether or not they recognized global impact on their personal lifeworlds (68 percent); and whether or not they believed in an increased global spatial interaction among places (96 percent)--they overwhelmingly recognized the world as increasingly becoming a "single place" (which is one definition of globalization; e.g., Scholte 2005). In terms of their *geographic imaginations*, this group of middle adolescents, whether or not they related closely to and identified with their home city (as some did), viewed the "global macrospace" as a spatial frame with which they must cognize overall world space, smaller-scale places, and their own *self-emplacement*. They may or may not valorize *world citizenship*, but they seemed to understand that they lived in a "macrospaced" world.

Research Question 3: Gender and Sense of Spacings and Place

This research question investigated the relationship between gender and *awareness of global space* and *sense of local place*. The data presented in Chapter VII indicated that, in general, the males in this research viewed themselves as more mentally involved in "macrospatial" issues, leading to greater global awareness. This finding is supported by research in the 1980s and 1990s that showed that men and boys tend to know more than females about world geography (Beatty 1989; Dabbs et al. 1998; Liben 1995). The difference is that the present research assessed self-reported self-interest in global issues, not global knowledge per se. As to whether the participants felt they "belonged" to the study-site city, the data indicate that, in general, females feel they belong to the local place more than the males. In terms of the importance of the study-site city to the participants, the data indicated that, in general, the females, more than the males, felt more concern for what happens to their home city. About the emotional attachment of the participants to the study-site city, the data indicated that, in general, the females exhibited greater *place attachment* than the males.

Conclusions--Research Question 3: The five questions that yielded statistical significance in terms of the *spatiality* of *sense of spacing/ place* pointed toward the males

exhibiting greater interest in global affairs; while the females showed greater *sense of place*, i.e., more affect toward their locale. These results border on the stereotypical (but supported by earlier empirical research; mentioned above)--that females are more interested in matters closer to home, and males further afield. Nevertheless, these are the empirical findings of the present research that answered Research Question 3: Middle-adolescent females, in general, exhibited less interest in affairs beyond the local; young males, in general, exhibited more interest (than the females) in the global.

Research Question 4: Media and Individual Spatiality

This research question investigated the *lived geographies* of the use of personal electronic/digital media. As a reminder of the importance of these technologies to the *human experience of spatiality*, here is one statement among many: "If there is a consensus among those who reflect upon the social impact of digital media, it is that these technologies--despite whatever else they do--*operate on our experience of space and time*" (Barney 2004, 51; emphasis added). As advanced in Chapter III, human *spatiality* is now deeply *mediatized*. The data collected in this research (Chapter VII) confirmed not only that "American youth are awash in media" (Roberts and Foehr 2008, 11), but also that contemporary *spatiality* cannot be analyzed adequately in separation from media use, especially the *spatiality* of young people. The present research attempted to uncover some of the adolescent spatialities that result from personal-media use.

Conclusions--Research Question 4: Several media-use habits, widely acknowledged in studies of youth, were confirmed in the present research (although the media-use habits of the participants showed significant variation): saturated media exposure, now with "three-screen" media connectivity (TV, computer, and Internetconnected cell phone); intense media multitasking; and the *always-on/always-on-you* communication/media connectivity. The findings also confirmed the personal-media practice of the *telecocoon* (or personal *electronic-media bubble*), home-as-media-center, and the highly personalized media-center bedroom culture of adolescents. (Each of these findings was confirmed by data presented in Chapter VII.)

A few conclusions that relate to *spatiality* can be drawn from the findings of adolescent media-use in this research. They include the general conclusion that the *geographic imaginations* of adolescents are now significantly informed by their viewing the world through the lens of "three-screen connectivity." The participants in this research recounted their "three-screen connectivity" to family and friends locally (sometimes in the same building), regionally, and globally. One participant stated, "*The world is really as big or as small as I choose for it to be.*" Another revealed, "*I feel alive when I have a room full of electronics.*" A third disclosed that in his lifeworld his Internet-connected phone is "*more a sense of place than the house, definitely.*"

The participants in this research interface literally and bodily, to a great degree, with the world via a close interaction with TV, computer, and cell phone. This close interaction--their "media life," now typical for their age group in the U. S.--has become a symbiosis in which the user and the technology are "growing into interconnected systems" (Sparrow, Liu, and Wegner 2011, 778). In the contemporary era, according to ecocritic scholar Ursula Heise (2008, 54), more than simply changes to places has occurred, "For it is not just that local places have changed through increased connectivity but also the structures of perception, cognition, and social expectations associated with them." The present researched confirmed this view.

Therefore, a central conclusion of the present research is that the *geographic imagination* is now largely constructed, not only by the **content** of media, by also by the very **use** of communication and media technology, in which much of it is now attached bodily to the person, with potential worldwide connectivity.

More importantly, the meanings of "home" and the self also seem to have changed for the personal-media connected adolescent. Not only is the media-center bedroom culture the locus of the most secure feelings of home, it is even more specifically and micro-spatially the electronic/digital technology itself, with its connectivity, that is requisite of where "home" as an existential construct (and the experience of self) is located for many of the research participants. This is "home-asconnectivity" to the wider world (the world of friends and family and information). "Home-as-connectivity" is centered on the body which is *tethered* electronically/digitally to the communication/media devices which themselves are tethered to world space at all scales. As psychologist of human-technology interaction Sherry Turkle believes (2008) (mentioned in Chapter VII), the nearly constant tethering to communication/media devices has engendered a new sense and *placement of the self* that now couples the devices with the senses of embodiment and *self-emplacement* in a liminal space between the physical and the electronic/digital. To include the connected *nodal-self* in the formulation, this conclusion can be posited as *self-as-connectivity* to geographical spacings. As one of the research participants expressed it, he lives in that liminal space "in between cell phone and town."

The present research did not assess the degree of ontological insecurity that this new state of disembedded and *reterritorialized self* currently is engendering. But with a

reasonable assumption based on the qualitative evidence presented in this research that it results in some degree of existential uncertainty, a "Personal Poetics of Place" and a "Five Themes of Relational Geography" are offered below as pedagogical effort to realign (and literally re-emplace) the lifeworlds of adolescents back into "real" places centered on themselves and their physical place-worlds.

Findings: Research Propositions

In the middle stages of the research process--before data collection--the present researcher developed three Research Propositions (Chapter II) from discussions with high-school students and extensive readings of the literature on spacings and place. These are the three propositions: *geographic hyperopia* (greater cognitive valorization of the global over the local), *cognitive deterritorialization* (affective, experiential dislocation from place), and a return to a *mental valorizing of locality*. Each of the propositions was a separate, preliminary, tentative "answer" to the overriding question of the present research (and interrogation of its main construct--the *geographic imagination*): In an era of profound social change, how do middle adolescents experience and view the spacings and places of their lifeworlds? Each proposition is presented below with conclusions (using both the quantitative and qualitative data) about its validity as an answer to the overriding question about contemporary cognition of spacings and place.

Research Proposition 1: Geographic Hyperopia

That people today are more aware of global space than their own localities seemed a safe proposition to hypothesize, in keeping with the prodigious literature on globalization, cosmopolitanism, world (cosmopolitan, global) citizenship; and international news coverage and public discourse about global affairs; and the push in education (including school geography) for greater international knowledge. For example, sociologist Manuel Castells (1996) observes that mega-cities are globally connected but disconnected locally. The *geographic-hyperopia* proposition was more directly developed from the notion, by environmental psychologist David Uzzell (2000), of *environmental hyperopia*, in which people generally are more aware of global environmental problems, such as global climate change, than environmental problems closer to home.

Yet, the research findings of the present research do not unambiguously support the validity of this hypothesis. The quantitative data indicated that in terms of awareness of global impact on individual participants (item #22), the greatest number (40 percent) assessed a "medium" global impact on their lifeworlds, with a balance at the ends of the scale ("little"/"some" and "much"/"large"). In terms of the degree that participants tune into global news (item #23), there was a fairly even spread across the scale, from little to large. The research participants (with clear exceptions) generally seemed to exhibit only some greater awareness of and orientation to global space over their local place. Significantly, the opposing proposition (Proposition 3) did not appear to be significantly validated either; viz., the research participants, in general, seemed to not exhibit greater awareness of and orientation to their own local place (with some clear exceptions among the participants). Thus, these findings--that the research participants were neither very global nor very local--might appear contradictory (and not positive for those educators who advocate and teach a more global outlook), but the obvious conclusion is that there was a balanced spatial orientation exhibited by these participants. A more negative conclusion would be that these adolescents exhibited a lack of awareness and weak

spatial orientation to spacings at any scale. The latter conclusion places greater import on the next proposition.

Research Proposition 2: Cognitive Deterritorialization

This hypothesis about "dislocation" (similar to, e.g., Giddens' [1990] time-space distanciation), discussed by numerous observers (Chapter IV, Contemporary Spatiality section), entails that individuals increasingly experience an attenuated *sense of place* that structures "unanchored lifeworlds" as lived scattered across various spacings and places. An example of an "unanchored lifeworld" is exemplified in a study by education researcher Katie Davis (2011), who "portraitured" (in-depth study of a single participant) a college student whose "wired way of life" using electronic/digital media gives her a "sense of fragmentation" (ibid., 1977-1978). The young co-ed stated, "Sometimes I feel at the end of the day like I've been *everywhere and nowhere* at the same time" (ibid., 1974; emphasis added). Her statement reflects others the present researcher heard from several of his participants. The spatial dispersal (the co-ed's experience of "everywhere") and cognitive and existential spatial disconnection (her experience of "nowhere") that reportedly comes with *always-on/always-on-you* electronic/digital media communication (experienced often as simultaneous connectivity to disparate people and places) can engender not only a lack of coherent identity (Turkle 1995), but also a paradoxically homogenized, hybridized, and fragmented sense of self-location. Heidegger (1962) saw this, in 1927, when he wrote that modernity was leading to a "fragmented, dispersed, and disconnected" human experience of the world. David Harvey expressed similar sentiments about the pace of change when he warned of a crisis in "how we represent the world to ourselves" (1989, 240). With the *deterritorialized* location of self comes a

spatiality of tenuous, dispersed, and fragmented *sense of place*. The hypothesis of a fragmented and *deterritorialized*, largely lost-in-space, spatial cognition seemed to be supported by the empirical data of the present research.

Research Proposition 3: Return to Locality

This "localist" hypothesis is perhaps the reverse of Research Proposition 1: It is a return to the local, rather than a mentally expansive spatial orientation toward the global. It was mentioned above that the empirical data of the present research are somewhat ambiguous in regard to Proposition 1. This research presented evidence of a diversity of views by the research participants; several expressed what seemed to be a deep *sense of place* and commitment to the study-site city. Several others, including some who had spent their entire lives locally, exhibited little *place attachment* (even though there was a paradoxical tendency toward *place identification*). Most of the research participants (with notable exceptions) seemed all too willing to shed whatever *local identity* they possessed. For Question #11, the most marked number on the scale was the highest: 40 percent indicated "probably" they would permanently move; and 40 percent marked they would "not" or a "small chance" they would move back after college. Overall, the empirical data of the present research tended to not support this research proposition of a *return to locality*.

Research Propositions: Conclusions

These findings, using the present research data, showed a wide diversity of views and generally mixed results. However, these are the (general) conclusions (keeping in mind the mixed results and diversity of views):

• Research Proposition 1 (geographic hyperopia: a global orientation) was

generally, but weakly, supported by the empirical data.

- Research Proposition 2 (*cognitive deterritorialization*) was generally supported.
- Research Proposition 3 (a return to a local orientation) was mixed, but generally not supported.

The research participants were aware generally of at least some global spatial processes (e.g., trade, media, and cultural movements), but generally refrained from a cosmopolitan self-identity. They seemed to exhibit a degree of "person-to-world spatiality" (i.e., *globality*) without much "sense of planet" (Heise 2008). There were wide variations, but the present research also found that the participants did not exhibit much of a sense of place toward their locale. Thus, they generally lacked both a sense of place and a "sense of planet," i.e., their *ontological deterritorialization* occurred at all scales. Overall, the research participants were not so global, not so local, and tended toward deterritorialization: some kind of "floating-world" ukiyo, an "everywhere-and-nowhere" personal experience of their geographic lifeworlds. It seemed warranted to conclude that this group of middle adolescents cognized their geographic imaginations with a generalized global spatial frame; but within the borders of this global frame they were generally anchored in their own embodiment in a somewhat amorphous local/global space, except as their embodiment was *tethered* to and interthreaded with rhizomatic electronic/digital connections.

General Interpretations

Lucy Lippard (1997, 7) explains the "lure of the local" as "the geographical component of the psychological need to belong somewhere, one antidote to a prevailing alienation." Similarly, geographer Wilbur Zelinsky (2001, 141) sees "refugees" from the

contemporary, endemic, postmodern identity crisis as "yearning for rootedness in place, for a shred of geographic identity" to be found in the particularity of regions or localities. His prognostic conclusion is that this search (he labels an "identity quest") is ultimately ineffective (ibid., 146). The problem, though, for perhaps a significant number of people today, notably including some of the present research participants, is that they are searching for that existential quality of "locatedness," their own, personal "local" place, in places other than the physical locality of where they presently and physically live. Their displaced spatial lives are described by writer Margaret Atwood:

A person who is 'here' but would rather be somewhere else is an exile or a prisoner; a person who is 'here' but *thinks* he is somewhere else is insane. ... But when you are here but don't know where you are because you've misplaced your landmarks or bearings, then you need not be an exile or a madman: you are simply lost. (Atwood 2004, 26; emphasis in the original)

In context of the above, a general conclusion is that the participants in this research seemed to have "misplaced their landmarks" and "lost their bearings" in that their psychological need to belong somewhere was increasingly fulfilled by spending many hours roaming electronic/digital spacings. The geographic "lure of the local" attracted them to the most localized of all places: **their own self-constructed**, **networked**, **nodal**, **embodied-spatial self as hub of media/communications**. Their *lived geographies* exhibited multilayered spatialities that substituted rich (and multiple) electronic/digital media experiences for the "thick experience" of place that was traditionally rooted and embodied in material local places (although, as discussed in Chapter IV, there have been two tendencies in American culture: rootedness in place, and the more dominant mobile, on-the-road way of life). Not only are contemporary material places "thinned out" (Sack 1997) due to the disembedding forces of modernization and

globalization (Giddens 1990), but as these research participants revealed in their diverse geographic orientations, their experiences of place were continuing to be thinned out further as they became virtualized. According to geographer Stanley Brunn, the Internet is re-defining the geography of the planet:

The Internet is a whole new way of looking at places--because we can be here, there, everywhere all at the same time. ... When you're on the Internet, you're in multiple places at the same time. And that's a whole new way to travel. (University of Kentucky 2003/2004, 4)

It might also indicate the instantiation of an emerging ontology. Electronic/digital media, including the Internet, arguably, are re-defining and *reterritorializing* the individual's situated experience of the geography of the planet in deeply personal ways. This means that, in conjunction with individual experience of planetary macrospace, the individual's experience of his or her own personal, lived *inner geography* is being redefined and *reterritorialized*. A critical supposition is that individuals find themselves in psychological need to reconstruct their own new senses of spacings/place in order to counter increasing cultural disembeddedness, in which previous encounters with the physical landscapes of real places are increasingly mediated away into an abstract and tenuous experience of the physical world. Instructive here is the signature statement of the nonfiction book *Last child in the woods* (Louv 2008, 10), in which a fourth-grader discloses, "I like to play indoors better 'cause that's where all the electrical outlets are" (and that was in San Diego which has pleasant weather nearly year-round). Richard Louv, researcher and designer of natural environments for children, goes on to argue (citing Robin Moore 1997, 203), that the "primary experience" of nature (the first-hand use of all the modes of the human sensorium) is losing out to "the secondary, vicarious,

often distorted, dual sensory (vision and sound only), one-way experience of television and other electronic media" (Louv 2008, 66).

Along these lines, the contemporary self appears in psychic need of re-enacting a new personal *inner geography* by cognitive acts of bricolage, drawing from that part of everyday life in which it already is deeply involved: electronic/digital media that mediate much of the experience of reality and self. Therein lies a self-perpetuating loop: New media virtualize, thin out, and abstract the experience of increasing segments of life today (certainly including experiences of spacings and place), thus creating the psychic need and search to (re)enact more meaningful "in-place" life experiences. But the most handy and irresistible extensions of the contemporary, hypermodern person are these very same media/communication technologies that create the new (virtual) experiences and meanings of spacings and place. Space-altering media thus function as both the etiology of place alienation and its (handily available) searched-for remedy.

Discussion

Scholars would not be entertaining a discourse of "reworlding" the planet and advocating a "dwelling perspective" (below)--and, we would not be concerned with the geographic orientations and imaginations of young Americans and, indeed, of people world-around--if it were not for the historically produced individualism of Western civilization. There is an "exquisite fit," so expounds cultural historian-psychologist Philip Cushman (1995, 10-11), "between a cultural artifact and the cultural frame of reference in which it is embedded." Chapter IV submitted the notion of a traditional, American *spatiality* that tends toward a dualistic (and problematic) relation to place: The subdominant position of *attachment to place*, and its more common obverse, a kind of "restless-place syndrome" (the cultural artifact that "fits," in this case), in which for long periods of time as many as one-fifth of the American population moved residence each year. The traditional migratory proclivities of American society would not have been possible without the historical development of American "self-contained individualism" (the cultural frame of reference, in this case); i.e., an individualism that valorizes the individual over its social matrix. Writer and critic of the American way of settlement on the land, Wendell Berry, remarks that the American, as a "vagrant sovereign," is imbued with an abstract, "generalized sense of his worldly whereabouts," which, according to Berry, affords him an "artificial geography"---"he could be anywhere, and he usually is" (1977, 53).

The contemporary historical era in which the cultural artifact of the *geographical imagination* must fit goes by diverse names: "McWorld" (Barber 1995), "supermodernity" (Auge 1995), the "Global Age" (Albrow 1997), "cosmological hypermodernity" (Turnbull 2006), and, of course, "postmodernity" (Harvey 1989), and others. But, prior to and concomitant with these periodizations has occurred one of the "vast happenings" and "immense sociohistorical movements" over the last several centuries: The development of "self-contained individualism" (Cushman 1995, 11). The *geographic imagination* undoubtedly comes about as social product as well as particular characteristic of the individual. But the individual receives the greatest attention in Western society, as well as in schooling. It is the individual's own *inner landscape*, not that of society as a whole (which, in any case, might be beyond the ken of the individual), that is of paramount concern to the person. It is also the defining interest of this research.

The principal conceptual perspective developed in this research (chapters II and

III), using the social-science notions of *embodiment*, *emplaced body*, the *dwelling perspective* and others is that, as the world continuously comes into relational being around the individual (and the individual comes into being isomorphically with his/her world), the *geographic imagination* is perhaps best conceived (from a phenomenological and philosophy/social-science-of-embodiment viewpoint) as the **cognitive schema structured by the deeply personal, holistic, cognitive/experiential/embodied interactivity of a person's un-bifurcated lifeworld with the spacings and places of that world**. As discussed in Chapter II, several strands of thinking--including the existential phenomenology of Maurice Merleau-Ponty (1968), the spatial philosophy of Edward Casey (1993, 1996, 1998), and the social-science of embodiment--posit the individual as co-constitutive with his/her place-world. It then follows that the *geographic imagination* is not so much the person's cognitive representation *of* the world, as it is that which occurs at the **embodied interface of the person intermeshing** *with* **the world**.

Christopher Apap writes that for those who have followed in the wake of Henri Lefebvre (1991) (whose thesis is that space is socially produced), "space has come to be seen as paradoxically veiling the interactive human conditions of its own formation" (Apap 2008, 12). While space is socially constructed and continually negotiated (according to Lefebvre), it is nevertheless hidden from much of everyday awareness.

From the above, if we take as given the human need to connect to place, but the spacings of place are actively occluded, then it follows that people today are searching and finding novel ways of existentially and experientially (re)connecting to the world. This seems to be instantiated, as shown by the participant data in Chapter VII, increasingly by *embodied connectivity tethered* to the world through means of

electronic/digital media (Turkle 2011). As humans lose touch with the erstwhile "real" world due to "digitalization of reality" (Quartiroli 2011), electronic/digital interfacings increasingly mediate both the virtual *and* the "real" (Nusselder 2009). People evidently are using electronic interfaces to sustain their affective, *existential sense of connection* to the world. As communications theorist Joshua Meyrowitz (citing Aufderheide 1987) argues, "Today, many members of society are searching for a sense of place, but also want to retain experiential mutability, informational mobility, and behavioral fluidity" (Meyrowitz 1990, 132). This search for some semblance of *sense of place* increasingly is strived for beyond the confines of traditional geographic space, that is, in the wide-open spacings of electronic/digital virtuality (Chapter VII).

This research strove to investigate contemporary *spatiality*, including that informed by macrospatial, "whole-planet" notions of *globality* (Robertson 1992). This macrospatial orientation also has been termed the "overview effect" (White 1987), the "worldpicture" (Heidegger 2000), and "satellite geography" (Redfield 1996), and described by Tim Ingold (2000, 217) as the "geological image of the world as a globe." This global orientation might have been inflected, for example, by exposure to photos of Earth from space (Chapter IV), on the one hand, and by the experience of the lifeworld in some degree as *deterritorialized* and *placeless*, on the other. It seems that millions of ordinary people, not necessarily thinking philosophically, and usually without declaration or even thoughts of *world citizenship* as part of their personal *spatiality* (as the present research has shown), nonetheless are **experiencing their lifeworlds as impersonal** ("geological"), disconnected, dispersal of multi-scalar, local-to-global spacings.

General Recommendations

This section provides, first, a philosophical view of a "deworlded" modernity in which humanity has lost its spatial bearings--a conclusion reached using the empirical data collected in this research. Second, this section turns to discussion of the *spatiality* of geography education (returning to the draft revised National Geography Standards 2011), based on the findings of the empirical data that young people, in general, are experiencing a crisis of their personal *spatiality*.

Re-Worlding the Planetary World

Philosopher Neil Turnbull (2006) believes that in the contemporary Global Age (Chapter III) a new philosophy is required. The scientific cosmology of Copernicanism and Darwinism begets a "frightening placelessness" in modern life, according to Turnbull, by undermining traditional conceptions of the earth: viz., that there is an ultimate "ground" of the universe (ibid.). According to Friedrich Nietzsche (1977), Copernicus and Darwin plunged humanity, or at least Western culture, into a "degrounded" abyss, a spatially nihilistic condition as a result of the "new cosmology" (Turnbull 2006, citing Nietzsche 1977). Traditional metaphysics, back to the Greeks, was "cast into the void" as the Earth has been reduced to "mere planetary matter" (ibid.). For Martin Heidegger (1962), Nietzsche's philosophical heir, the Earth in Copernican cosmology becomes "deworlded," a devitalized object, "an absurd and inhuman cosmic accident devoid of any ultimate sense or significance" (Turnbull 2006, 126). Nietzsche has his bewildered madman ask the crowd: "Whither are we moving now? Backward, forward, sideward in all directions? Is there any up or down left? Are we not straying as if through an infinite nothing?" (ibid., 125). According to Margaret Atwood (quoted

above), a person, to be lost, does not have to be a madman to be straying through a deworlded, abstract world, he needs only, psychically, to have "lost" his topographical bearings and misplaced his earthly landmarks (2004, 26).

Not only is the Earth an isolated object in "a much wider cosmological causal order" in the "age of the worldpicture," in Heidegger's view (Turnbull 2006, 129, citing Heidegger 2000, 188), it is also diminished to a subjectivized visual representation, a "spectral Earth" (Turnbull 2008, 126), a virtualized symbol, as seen from placeless space, an Earth that is now interplanetary, thus engendering "the astronautic condition of modernity," free-falling without meaning (ibid., 127, citing Romanyshyn 1989, 200). Frank White (1987) labels it the *Overview Effect*: The space-flight experience and literal "world view" of the planet as seen by the astronaut, and also, significantly, today of the non-astronaut (ibid., 9), in which "your identity is with the whole thing [the Earth]" (ibid., 12). This "free-floating placeless experience" of the "spectral Earth" experienced by the astronaut, and people generally, conveys a "satellite geography" (ibid., citing Redfield 1996), but not a "human geography." In this view, the sphere of the Earth is mentally pictured literally from space (Chapter IV, Global Awareness section), but not felt as intimate home, except in its diffuse, rather abstract entirety.

From this, for Neil Turnbull (2006, 136) the Earth must be "reworlded." He asserts that the philosophical meaning of the planet must include a "cosmopolitan planetariness" appropriate for the "global cosmopolitan age." In the project of revising the Nietzschean-Heideggerian critique of what he calls "cosmological hypermodernity" that views the spectral Earth as a heliocentric, groundless, rootless, "nowhere planet," "under a vanished sky" (ibid., citing Virilio 2000, 63), he wants Western philosophy to

begin the task of conceiving new meaning for the world, moving the Earth back to center stage of consciousness, and for humanity to reinhabit the planet, to make it home, "regrounded," *terra firma* again. (See recommendations for geography education below.)

Spacings and Places of Geography Education

Geographer Rickie Sanders brings the pedagogical discussion back to Earth, resituates the individual in "geographic space" (*contra* "global space") and charges educators to thoughtful action: "After surfing in the infinite, boundless, limitless virtual world, [the act of] re-locating ourselves in geographical spaces that are raced, gendered, classed, familiar, unfamiliar, mental, emotional and visceral requires more deliberativeness" (2008, 181). Besides careful consideration and discussion of how to *reinhabit our geographies--*"re-locating ourselves in geographical spaces"--geography educators must also commit to deliberateness of purpose. But first, the old question of what to teach rears up.

As the empirical data of this research have shown, the personal experiences of spacings/place and the wider world of middle adolescents (and, according to the literature, generally of nearly everyone) are occurring increasingly indoors and online. The physical world often is viewed from an automobile, in public buildings (such as school), or at home, perhaps in the bedroom-cum-media center. This experience, even when outdoors, often is shared with the personal media of cell phones, cameras, and electronic music. In short, place is increasingly experienced inside enclosures, inside personal "electronic cocoons," and vicariously through media. This means that the reality of young people's spatial orientations--their "experience of the self in place" (Cannatella 2007, 626)--and what they and society generally may lack in these spatialities must figure

into thinking about education.

In these terms, Howard Cannatella challenges the education establishment:

Is the world of education too preoccupied with other things to concern itself with the *experience of the self in place*, the idea of reaching to a place, sustaining a place that is mine, to become part of a place as a place that is intimately felt, a place that changes as a consequence of the self being there? (Cannatella 2007, 626; emphasis added)

The draft revised National Geography Standards (2011) contains wording along these lines that can be readily construed as pointing to the positive role for the selfreflective, situated experience of the student. Excerpting from several places in the document (and from the more complete quotes in Chapter III of this dissertation), the perception of places and the *self-emplacement* in spatial context of the individual student shows some of the same area of concern as the present research. Here are the apposite phrasings:

understanding our place in the world ... put ourselves, and our

world, into context ... understand where we are, literally and figuratively ... understand the role that perception plays ...the way we perceive places ... Perceptions are the basis for understanding a place's location ... Culture and experience shape our worldview ... understand the factors that influence their own perceptions ... reflect on their own perceptions of places. (Geography for Life: National Geography Standards Content Committee 2011, 2-3, 36, 54; emphases added)

Applicable to the above, Heidegger used the figure of the cabinet-maker's

apprentice to explain dwelling (as a central concept of Being-in-the-world). The

apprentice's learning

is not mere practice, to gain facility in the use of tools. Nor does he merely gather knowledge about the customary forms of the things he is to build. If he is to become a true cabinet-maker, he makes himself respond above all to the different kinds of wood and to the shapes slumbering within wood--to wood as it enters into man's dwelling with all the hidden riches of its nature. In fact, this relatedness to wood is what maintains the whole craft. *Without that relatedness*, the craft will never be anything *but empty busywork*. (Heidegger 1968, 14-15)

Heidegger here posits that the craft and task of education is to elicit "relatedness" to life, otherwise it is merely "empty busywork," a "business concern" (ibid.). Of interest to geography education is that "relatedness to life" is inherently relatedness to both place and one's *self-emplacement* in the world. As one reason to study geography, the first edition of the National Geography Standards (Geography Education Standards Project 1994) mentions the issue of "relatedness to life," giving what it labels the "existential reason" (ibid., 23, in the section titled "Why Geography?"). The National Standards proclaims, "Humans want to understand the intrinsic nature of their home. Geography enables them to understand where they are, literally and figuratively" (ibid.). If existentialism applied to geography is viewed as locating the starting point of geographic experience in the individual and the experiences of the individual (as the passage above

implies), and emphasizes "inner experience, knowledge by participation rather than by observation, and its celebration of subjectivity over objectivity" (Peet 1998, 36-37), then the National Standards (both the first and draft second editions) is unsuccessful in addressing the experiential issue. None of the 18 Standards, or the illustrative "activities" and "learning opportunities," addresses individual experience (as inner experience of geographic spacings). In the passage above, "home" is not addressed in the 18 Standards: and its "intrinsic nature" apparently is meant merely in the intellectual, abstract sense of "home" as "the environment" and "the world," outside of and largely removed from subjective experience. Despite the "existential reason" to study geography, the National Geography Standards do not directly foster a subjective, existential, relational, personal *inner geography.* There is no direct relatedness to personal geographic spacings. In the Heideggerian sense, without the relatedness to *inner geography*, the study of geography is abstract (even as it is about real-world places), intellectual busywork, and empty. To counter the increasingly indoors, online, spatially alienated physical and mental geographies of young people, as found in the present research, the recommendations below are offered as one way to address this issue.

Recommendations for Geography Pedagogy

Comprehension of the subjective spatial worlds of young people--necessary for constructing courses of study, academic texts, and content lessons--arguably would make geography education more effective and meaningful. This project would help insure appropriate spatial perspectives, environmental stewardship, as well as acquisition of geographic knowledge by young people. But more than this, it would go a long way to capture the self-interest of students who, after all, are vitally interested in their own lives (which includes their personal spatialities). To accomplish this, education developers must first build upon the young person's subjective cognitive scaffolding of their own spatial perspectives, concerns, and realities.

Whether the education agenda focuses on *globality* or *locality* (as both have been advocated), or promotes a triune balance of local, national, and global perspectives (including *global citizenship*), educators must understand the *mental spatialities* of young people, e.g., the question of the proper balance of the four levels of *spatiality--*body, local, national, global. Otherwise, the education programs themselves will float rather meaninglessly in a spatial void "unanchored" to the spatial realities of their school-age participants (who themselves float "unanchored"). Therefore, it should be of more than passing interest to understand how young people cognize and comprehend their own *subjective geographies* and spatial relations encompassing body, home, locale and their *sense of place* of those locales, and their sense of the global and how their bodies, homes and locales fit within global spacings--in short, their *geographic imaginations*.

Spatiality of the Education Agenda

But, first, the purposes of education must be interrogated. If the purpose of education is as existentialist Catholic monastic-scholar Thomas Merton (1979, 3) believed, "to show us how to define ourselves authentically and spontaneously in relation to our world"--or similarly as two geographers stated, to "reveal people to themselves" (Johnston and Sidaway 2004, 218)--this will look pedagogically different from scholastic endeavors that purport to teach a mass of facts (or even skills) about a supposed objective world. To commence with the pedagogical goal that "learning must revolve around meaning and the relation of that meaning to individual lives, [and that] finding that

meaning should be the central task of those currently working in education" (Jordan 1996, 46; cited in Shelley 1999, 594), leads, in the pedagogy of geography, to understanding the already *lived spatialities* of those individuals (the students--and, in fact, the instructors). As Yi-Fu Tuan asserts, "Knowledge of the earth elucidates the world of man...*to know the world is to know oneself*" (1971, 181; emphasis added). It follows, then, **that to know oneself (and to know at least a portion of the world) is to cognitively, knowingly,** *emplace* **oneself in the spatial context of the world.**

Otherwise, the pedagogical environment has similarities with the perceived psychologism of much of the research on spatial cognition. This manner of psychologistic research has been criticized by geographer Denis Wood (2004, 22), as the study of experimental subjects who "never live anywhere in particular," with no personal histories nor personal spatialities, such that, "they might as well be rats." A similar predicament holds in schools for much pedagogical effort in most subject areas: The students' spatial orientations and *lived geographies*, as far as they are considered by educators, might as well take place on a theoretical plane--like von Thunen's general model for the spatial arrangement of crops, in which site and *human factors* are not considered (Rubenstein 2008, 350-351; emphasis added). In this analogy, the students' own "site factors" (their local geographies) and human factors (their spatial orientations and *lived geographies*) are treated as theoretically uniform. From this, a "human-centered pedagogy of geography" is needed to complexify and humanize the *inner landscape* of students' actually *lived geographies*.

Lived Geographies

For geography education, the lack of emphasis on centering the teaching on (or at

least beginning from) the *lived geographies* of the students is particularly (and literally) misplaced. More than three decades ago a similar recommendation was propounded by Neil McEwen:

the starting point for secondary-school geography should be those areas of the man-environment relationship which are most taken for granted by the students [and their teachers]--*their perception* of the local environment, their aesthetic and functional appreciation of that environment and the ways in which the environment impinges on the conduct of *their everyday activities*. (McEwen 1980, 327; emphases added)

National Geography Standard 2 makes a slight gesture toward this cardinal point of pedagogy and concludes with a statement that could promote the spatial experience of the self-knowing subject: "Students must understand the role that perception plays in the creation and development of their understandings of the world" (Geography for Life 2011, 36). However, the Standards most likely are not meant to relate to the students' sense of their own personal place--those personal "site factors" of their own lived geographies (alluded to above). A recommendation by a panel of educators for K-12 education in the country of Bhutan could apply in other countries as well, including in the U. S.: "Practices that teach us to *pause and reflect* are a critical component of education, and these come in a variety of forms, including the arts, contemplation, journaling, and critical thinking" (Bicknell 2012, 59; emphasis added). Here, we can add the contemplation of and the critical self-reflexive thinking about the role of place in the lives of students, a pedagogy that could take place intrinsically and rather seamlessly in a geography classroom. As anthropologist of place Keith Basso notes (1996b, 55; emphasis added), "When places are actively sensed, the physical landscape becomes wedded to the landscape of the mind."

The teaching of geography--physical and cultural--wedded to the *inner landscape* of the minds of students (if this is the goal) must start from their perceived *lived geographies* and, as such, begin from and focus on place as actively sensed. This pedagogical approach would help counteract the prevalent vicarious, "secondary experience" of the environment mentioned above (Louv 2008; Moore 1997). The active sensing of place would also directly counter the secondary experience of spacings and place recounted above (e.g., the experience of "everywhere and nowhere") and in the voices of participants in Chapter VII (e.g., "*I feel I live in the non-place of the world*").

Place-Conscious Education

The return to a fully locally lived lifeworld (i.e., a *place-world* as defined in Chapter III) has been advocated by numerous scholars (e.g., Leach 1999; Lippard 1997; Louv 2008; Opie 2008; Tall 1993; Thomashow 2002). In education, a *pedagogy of place* ("placed-based education" or "place-conscious education") has been explored by some (e.g., Gruenewald 2003a and 2003b; Gruenewald and Smith 2008; Nabhan and Trimble 1994; Nespor 2008; Sobel 2004; Standish 2008). Even if geography education shifts in future years to a greater emphasis on local matters, on "situated pedagogy" (Kitchens 2009) and place-conscious education, the education community still must endeavor to comprehend the worldviews and spatial realities of adolescents. Place-conscious education promotes greater emphasis on community, local knowledge, environmental education, resource use, sustainable lifestyles, and development. All this entails understanding *existing* person-place relationships. The understanding of the placesensibilities of young people is critical to this endeavor.

Why the urgent advocacy by numerous educators for place-conscious education

as an antidote to a locally-disconnected curriculum? As mentioned in Chapter VII, children, now generally thought to be experiencing severe "nature-deficit disorder" (Louv 2008), would rather play indoors "where all the electrical outlets are" (ibid., 10). In addition, environmental educator David Sobel (1999, 1) points out that children in the U. S. are likely to develop *ecophobia*--fear of environmental problems and of the natural world itself--because they are "disconnected from the world outside their doors and [re]connected with endangered animals and ecosystems around the globe through electronic media." This view by Sobel is similar to that of David Uzzell (2000), who looked at the "psycho-spatial dimensions of environmental problems." The latter shaped the formulation of the concept of *geographic hyperopia* presented as Research Proposition 1 in this research (of which the research data generally did not fully support).

A weakened spatial orientation might also be influenced and exacerbated by the "global perspectives approach" now widespread in schooling (alluded to by Sobel, above), especially in the pedagogy of geography (Standish 2009). The typical world regional geography course for high school (if it is textbook-led) most likely would have students read about economic problems of Azerbaijan, or learn that central Africa is a "region built by movement," or look at a page of text and photo about interpreting a remote-sensing image of southern Oman (examples chosen nearly at random from Baerwald and Fraser 2007)--before they learn about their own hometowns (if ever). How much more effective if students learn of the economic problems (and opportunities) of their local area, the historical geography of its transportation systems, and study remotesensing images of their own area?

Additionally, any truly meaningful pedagogy of geography would need to counter

the *deterritorialized cognitive spatiality* of the Digital Age that is exemplified by some of the participants in this research (Chapter VII). One participant remarked, "It seems to me that I live in many places at once." This exhibited a kind of cognitive spatial promiscuousness. A second participant referred to her online, virtual life: "I feel I live in the non-place of the world." Another participant described some of her spatial connectivity: "I also have the feeling that wherever I am, I am not very far from anywhere else." Heidegger (1971; cited in Malpas 2006, 297) refers to this experience of the world as a "uniform distancelessness" that also constitutes a loss of place. The college co-ed, mentioned previously, observed that at the end of the day she sometimes feels, "like I've been *everywhere and nowhere* at the same time" (Davis 2011, 1974; emphasis added). These four statements indicate that these young people probably do not live quite fully in any one place; and where there is experience of spatial ambiguity, most likely there follows identity ambiguity (a "crisis of identity," according to Harvey [1989]). Again, these spatial orientations are summed up by the proclamation of the bank-branch advertisement: "There's no place better than everywhere." For ordinary people, "everywhere" is no place.

All the above presents a fundamental question for geography education, one that only a few have cared to address: the literal spatial remoteness of the subject matter. As geography and social-studies literacy scholar Malcolm Douglass explains,

The problem for geographic literacy is, therefore, uncovering how understandings can be elicited when the 'subject matter' of concern cannot be experienced directly. ... its construction depends on the learner's ability to make the linkage by calling on the only resource available: the *personal experience base*. ... one of the reasons why geographic ideas find little purchase is that students have, despite good intentions of their teachers, been asked to deal with realities that they perceive as abstractions. (Douglass 1998, 125; emphasis added)

In thinking about the problem of vicarious abstractions, theorist of cartography Denis Wood has argued that "the *cartography of reality* reside[s] in the cognitive and affective realms of individual experience" (1973; cited in Woodward 1992, 52; emphasis in the original). The "cartography of reality" closely resembles the *geographic imagination*, as the latter also arises out of cognitive/affective spatial experience. One's own embodied/emplaced experience is not an abstraction; it takes place in a real body in an actual place. It also "brings forth its world" (Maturana and Varela 1987).

Pedagogy of the Subjective Landscape

In light of the proceeding discussions, the pedagogy of geography would do well to examine the "pure geography" of Finnish geographer Johannes Gabriel Granö (1997), whose monograph was first published (in German) in 1929. In the conceptualization of Granö, geography is the "theory of human perceived environments and of regions on the surface of the earth which are uniform in this respect" (ibid., 31), i.e., regions as product of human perception. Granö differed from the *Landschaft* school of geography, then dominant in Germany, by his principle that "the subjective landscape in the mind of human agents should be the starting point of geographical practice" (Unwin 1999, 310). For Granö, the subjective landscape is sensed using all the human sensorium, including the two senses that interact with what might be termed the *audioscape* and *aromascape*. Granö's subjectively sensed landscapes proceed outward from the body in expanding horizons. Most proximal to the observer is the *vicinity*; further out, still within sight, and corresponding to that which Anglo-American geography labels as "landscape," Granö terms a *locality* (ibid., 27).

The purpose of this discussion of the geography of the human-perceived environment of Granö is to illustrate how the pedagogy of geography could proceed from the most proximal of the *lived geographies* of students (Granö's "vicinity"), and advance on to the sensible landscape, and further to the locale (the city, town or rural area-wherever students live) and on outward to the region, country and world. This is similar to the "Expanding Horizons Model" (until recently the prevailing curriculum framework in social-studies education), an inherently spatial framework that is "compatible with the geographic perspective," in which curricula and lesson plans are formulated so that students cognitively move outward from personal spacings to the locale and community, and on to the country and world (Hume and Boehm 2001, 16-17; Hurren 2000). It has an even earlier pedigree with the "home geography" of Arnold Guyot (1868), as taught from his widely used post-Civil War *Elementary Geography* textbook. His pedagogical hierarchy began in the very backyards of students and expanded outward, applying the relationships and principles of the proximal spacings to the wider world (Schulten 2001). But, in many cases today, if "home" no longer is experientially situated at the microscale end of the lifeworld spatial continuum, due to the effective homogenization, hybridization, and scale ambiguity of spatial experience (as related by some of the research participants, in Chapter VII)--where does this leave the Expanding Horizons Model or most any other curriculum framework for teaching primary social studies and secondary geography?

This research attempted to uncover the subjective, sometimes ambiguous, partitioning of spacings by middle adolescents. Educators must know in which spatial reality young people conduct their lives. Thus, it should prove valuable for curriculum planning and pedagogy.

Personal Poetics of Place

This research has laid out some of the processes of *cognitive deterritorialization* and subsequent *reterritorialization*: To a greater or lesser extent, the person experiences local disembeddedness from place and is re-embedded (cognitively and affectively) in an "unanchored *spatiality*" by mass media and electronic/digital communications. This widespread experience of "uncertainty of identity" (Hermans and Dimaggio 2007)-including the spatial uncertainty identified in the present research--calls for a rationale for including, if not emphasizing, not only the teaching about the objective and subjectively experienced localities of students (and a rationale for students to learn **about themselves** in their own places), but also what might be called a *personal poetics of place* (my term, fashioned from Heidegger's "Poetically Man Dwells" [1971] and Gaston Bachelard's The poetics of space [1994]). This perspective of "poetic dwelling"--more than a bare pedagogy of place--would help counter existential placelessness and make more meaningful the school subject of world regional geography. A Personal Poetics of Place-as a phenomenology of the geographic imagination (interfacing with place, home, sense of place, identity, belonging, globality, and all scales of the environment)--is a "geography from below," beginning from the micro-scale of the individual. It would use the "dwelling perspective" (Ingold 2000) and "learning as dwelling" approach (Plumb 2008) to delve deeper into the *lived geographies* of students.

The groundwork, though, was laid nearly a century ago by philosopher of education John Dewey whose ideas still are widely influential today. According to Dewey, learning is always a personal, developmental, internal process of reconstructing or reorganizing experience that "adds to the meaning of experience and increases the ability to [self-]direct the course of subsequent experience" (1916, 82). Learning, then, arises from and adds to the store of life experiences and to the understandings and meanings of the experiential world. In the Deweyan developmental formula: Experience begets learning begets more experience and adds to authentic understanding. For geography education the developmental formula for learning might take this construction:

• Spatial experience begets geographic learning begets more spatial experience which adds to authentic geographic understanding.

The key for Deweyan education theory (and the two formulas presented here) is that learning is a personal process that arises from personal experience. From this, the key for geography education might conform to this theorem:

• Spatial learning is a personal, embodied process that arises from personal spatial/geographic experiential interaction with and dwelling in the world.

To achieve the Deweyan goal of the primacy of personal experience, the "learning as dwelling" approach discussed by education theorist Donovan Plumb (2008) seems to offer a basis of effective pedagogical operations. It derives largely from cognitiveenvironmental anthropologist Tim Ingold (2000) and his conceptualization of the "dwelling perspective" (introduced in Chapter IV) that he in turn derives from the concept of "dwelling" (and "being-in-the-world") of philosopher Martin Heidegger (1962 and 1971). "Dwelling" is a complex existential conceptualization of "the manner in which we humans are on the earth" (Heidegger 1971, 147); and the "essential quality of humanness" as the orchestration of such phenomena as *spacings and place* and *home* (Buttimer 1996, 844). It takes an ecological view of *being-in-the-world* in which the person is inseparable from the world (Jones 2009). Tim Ingold specifies that the *dwelling perspective* means that

the forms people build, whether *in the imagination* or on the ground, arise within the current of their involved activity, in the specific *relational contexts* of their practical engagement with their surroundings. (Ingold 2000, 186; emphases added)

Motivated by Heidegger, several phenomenological-humanistic geographers prefigured the *dwelling perspective* (e.g., Buttimer 1976; Relph 1970; Seamon and Mugerauer 1989; Tuan 1971). Owain Jones signals that the *dwelling perspective* within academic geography has achieved a "renewed momentum." He calls for geography to "develop methods appropriate to a scripting and interrogation of embodied experiences" (2009, 271, citing Wylie 2003). In response to this desideratum, the present researcher offers the "Five Themes of Relational Geography" as a heuristic for teaching and learning geography, and one's place in the world.

Five Themes of Relational Geography

A pedagogy designed specifically for geography that uses a Personal Poetics of Place perspective (and a "geography from below") and the *learning-as-dwelling* approach could gainfully return to the widely used (and easily understood but frequently misused) "Five Themes of Geography" (Joint Committee on Geographic Education 1984). The original Five Themes were promulgated as "a structure that can accommodate virtually all conceptual frameworks currently in use by teachers of geography" (Boehm and Petersen 1994, 212). In the formulation devised here, each Theme focuses on the individual learner as the living, embodied, emplaced site of geographic experience (Figure 8.1). It seeks to reinstate a relational, two-way process of communication with place.

Five Themes of Geography	Five Themes of Relational Geography
Location	Absolute and relative always-mobile locations of the individual's <i>activity spacings</i> : body, home, locale, electronic/digital spacings, and the hybrid mixing of physical and electronic/digital spacings; activity spacings are <i>personal regions</i> ; (Location is a necessary factor of the other four themes)
Place	Physical and human characteristics of the spacings/places of the individual's <i>lived geography</i> , including use of all senses to experience the "vicinity" (Granö's near-body space), and moving outward in Expanding Horizons to the landscape, locale, region, country, world; incorporates the definition of "place-as-personal-experience" (i.e., <i>sense of place</i>); (Place is part of each of the other four themes)
Human-Environment Interaction	The individual's relation to the environment at all scales; from the <i>dwelling perspective</i> , humans enmesh in mutual involvement with the environment; (Human-Environment Interaction co- occurs in the other four themes)
Movement	The individual's <i>space ballet</i> (interaction in space), including daily commutes, physical travel, and electronic/digital connectivity at all scales; e.g., texting, phone calls, and the "co-presence" of depicted places in TV, movies, Internet; also includes "travel" in "inner geography" (mental experience of places); (Movement is an inherent factor in the other four themes)
Regions	The individual's mobile physical and mental regions of lived geography at all scales, including the concept of <i>self-space</i> as a <i>personal region</i> (a functional region with the individual as nodal point) of physical, mental, electronic/digital spacings/places; (Regions is incorporated in the other four themes)

FIGURE 8.1. Five Themes of Relational	Geography in the	Digital Age
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The use of the Five Themes of Relational Geography (Figure 8.1) as a conceptual framework could help realize a "dwelling perspective of learning" that seems necessary today to fashion a school curriculum of geography pertaining to the "three-screen," always connected, and liminally place-disaffected adolescents of the Digital Age. According to Donovan Plumb, *learning as dwelling*

is a particularly powerful way of characterizing human learning processes. Rather than positing humans as isolated subjects who can conceive of the world prior to acting upon it, the dwelling perspective suggests that, from the outset, humans are inextricably entwined in the processes of reality. Learning for dwellers is not a process of incorporating external knowledge into their minds. Rather, learning is best conceived as a process through which *learners forever weave themselves into the fabric of their natural, social and cultural worlds*. (Plumb 2008, 62; emphasis added)

For geography education, the *dwelling perspective of learning* would foster the practice in which learners could consciously weave themselves into the living fabric of spacings/places of their lifeworlds. From this perspective and that of the Personal Poetics of Place, students using the Five Themes of Relational Geography could imaginatively (and poetically) *emplace* and weave themselves into their spacings/places--their localities, the environment, and their personal movements and regions.

The draft revised National Geography Standards (2011) identifies "iterative selfreflection" as a developmental goal (Geography for Life 2011, 37). The practice of iterative self-reflection about everyday experience could be realized by using the Five Themes of Relational Geography as a frame for the process of engaging with, and reinhabiting, the ideas of *place*, *home*, *identity*, and *belonging*. Otherwise, young people today, prone to a demonstrated place-alienation, seem as lost as the people in the story by Jorge Luis Borges (1962), who imagined an infinitely large library (the Library of Babel) that contained all possible books (including nonsensical ones), arranged at random and with no method of retrieving the needed book. With engagement with something like the Five Relational Themes, young people could further develop their *interior landscapes* and the "bringing forth their worlds" in which to self-create the cognitive scaffolding, or mental guides, to retrieve the needed "books" of their spatial worlds. Furthermore, the engagement with thinking more deeply about the concepts of *embodiment* and *dwelling* (as promoted here) could enliven the pedagogy of geography and subsequently form the platform for expanded study of geographic and social issues beyond the immediate, to make greater sense of the rest of the world.

Fortunately, many teachers might be better equipped to teach a Personal Poetics of Place than the traditional world regional geography (although it, too, must be taught), because much of the teacher corps, as is true of most of the wider labor market, prefers to find work close to home (Boyd et al. 2005). In their empirical study, Boyd and colleagues found that, in the state of New York, 61 percent of teachers began teaching within 15 miles, and 85 percent within 40 miles, of their hometown of record (i.e., their home when still in high school). This research on teachers' proximity of job location in relation to residential location during adolescence points toward the native knowledge of place, including some historical geography, that geography teachers likely have that can be drawn on to guide students' investigations of their *lived geographies*, *self-regions*, and *senses of place*. Teachers and students could join together in investigating and learning about that which is literally closest to them: their own locale, as individually experienced.

The Five Themes of Relational Geography framework is offered as a pedagogical enrichment (out of many that have been developed) for mitigation of substantial *place*

alienation that has been demonstrated in this research. The focus of the framework is on *place-as-personal-experience*, and on the *dwelling perspective of learning*, as practical, lived-in engagement with the world. As child psychiatrist Robert Coles notes, "The 'geography' boys and girls ultimately want to explore and comprehend is that of *life itself*" (1994, xxiii; emphasis added). This subjective, relational rendition of the Five Themes of Geography addresses some of the existential facets of "life itself," and promotes the development of the "geographic person" dwelling deeply connected in place. More specifically, each of these Themes is a person-centered cognitive construct that addresses the subjective, *dwelling experience of place* and the experience of "self-in-place" that together might help revivify the pedagogy of, and learning about, the *lived geographies* of the students. It would afford school-time opportunities for students to do the vital, and geographic, embodied project of "bringing forth" their worlds (Maturana and Varela 1987), as they develop the psychological deep-structures of *self-emplacement*.

Theorist of space Henri Lefebvre stated, "all 'subjects' are situated in a space in which they must either *recognize themselves* or lose themselves" (1991, 35; emphasis added). The Five Themes of Relational Geography addresses this critical area of *place-alienation* (in which young people, and perhaps others, seem to be "losing themselves") by helping students recognize themselves in the new hybridized, homogenized, and fragmented spatialities that have been produced by globalization and the new media. This issue can be aphorized as a cognitive geographic principle: *To know one's self-emplacement in the world is to know the place of the world in oneself.*

A crucial part of the methodological strategy for this research was to investigate the spatialities of the research participants, their relations to spacings and place. Each of the data collection instruments included important questions about *self-emplacement*. This research strategy was predicated on what Keith Basso argued about attention to one's place: "When individuals step back from the flow of everyday experience and attend self-consciously to places--when, we may say, they pause to actively sense them-that their relationships to geographical space are most richly lived and felt" (1996b, 56). What this research asked of its research participants could mirror and be asked of students in geography classes; viz., to reflect upon their *spacings and places* in their own lived-in worlds. A highly beneficial educational goal would be attained in geography pedagogy (and others) when there is a return to the primacy of "place-as-home." As philosopher of place Edward Casey (1993, 314) contends, "Getting back into place [is] the homecoming that matters most." That is, if it is a *self-emplacement* constituted of "dwelling poetically."

Recommendations for Further Research

The varied and rapidly mutating spatial contexts of the lifeworld (more specifically, the place-world) of adolescents need more in-depth examination. In particular, there should be more detailed study of the myriad, emergent spatialities flowing through the individual, with attention to the *cognitive deterritorialization*, social disembeddedness, and other forms of current identity transformations that have been delineated in the present research. What are the always emerging *senses of spacings/place*? How are identities affected and effected spatially?

What is the action of the imagination on processes of spatial learning? And, the obverse: What is the action of spatial learning on the conduct of the imagination? These two questions bring up the question about the extent of the importance of the *geographic*

imagination to the pedagogy of geography.

Similar to the recommendations for anthropology by Tim Ingold (2000, 153), would geography, or at least academic geography education, gain more insight into the place-perspective of teaching/learning from an alliance with ecological psychology than with cognitive psychology? The former generally situates humans as integral part of the environment; the latter generally views the "environment as container" and the world from the outside. Situating humans as "enwebbed" **in** their environment (the "dwelling perspective" outlined above), instead of the ordinary worldview of the environment (and the world) as object, with humans gazing in from the outside, would necessitate a change in worldview and a relational pedagogy of *reterritorialization*, a *re-emplacement*, into the physical and cognitive place-world.

If an individual is conceptualized as a "person-region," as does this research, then how might traditional academic studies in regional geography (and the critiques of regional geography) apply to *person-as-region*? Are there perceptual and fuzzy "borders" of a person-region? How valid is person-as-region; is it merely reification?

Much work remains in the study of the space-altering effects of the new personalmedia. Art and literature historian Didier Maleuve believes, "We stand at the threshold of an age when systems of information will partly or fully supersede space-based reality" (2011, 321). A critical question, then--one the present research attempted to partially answer by including the *spatiality* of the use of cell phones--is what will be the effects of the fast-approaching embedded, "ubiquitous computing" on the experience of spacings and place?

Obviously, research would have to be instituted to confirm the validity,

effectiveness, and classroom appropriateness of the approach sketched above of a "Personal Poetics of Place" and use of the "Five Themes of Relational Geography." How would place-conscious education fit into this approach?

Summation of the Research Findings

Based on the empirical data presented in Chapter VII and the literature of spacings and place (located throughout several chapters), this section restates and summarizes the geographic themes, fundamental geographic constructs, and geographic principles formulated in the present research. Summary statements of general conclusions are presented on *self-emplacement* and the *geographic imagination*.

Geographic Themes

Eight geographic themes, or meaning units, were distilled from the eight

research participants who participated in the in-depth interviews (Chapter VII).

• Theme 1: The individual withdraws to private spacings in order to tether and

(re)connect to the wider world. As legal historian Lawrence Friedman has observed,

the world has been turned upside down. Today, millions of people want *isolation and distance*, not from the outside world but from the world immediately around them. They want a room of their own, space of their own, some sort of psychic barrier... Men and women in this society want their *window on the world*, but they also want to keep their fingers on the buttons of the remote control. (Friedman 1999, 48, 49; emphases added)

• Theme 2: The individual cognizes himself/herself as a spatial node in a scalar

hierarchy living as an embodied, electronic Omphalos at the center of the experiential

world. As media geographer Paul Adams has noted,

We can envision the self in a new way, as the psychological equivalent of the Internet: a mind that is constantly 'online,' attached to diverse social situations professional and personal, and simultaneously involved in a number of different social 'spaces.' *Self becomes a node*. (Adams 2002, 313; emphasis added)

Postmodernist philosopher Jean-Francois Lyotard argued for the relationality and

nodality of the individual:

Each self exists in a fabric of relations that is now more complex and mobile than ever before. Young or old, man or woman, rich or poor, a person is always located at *nodal points* of specific communication circuits, however tiny these may be. (Lyotard 1984, 15; emphasis added)

And, Yi-Fu Tuan:

People everywhere tend to structure space--geographical and cosmological--with themselves at the center and with concentric zones (more or less well defined) of decreasing value beyond. (Tuan 1974, 27)

• Theme 3: The networked, digital individual tethers to electronic/digital spacings

while physically and cognitively traveling scalar spacings partly insulated in a "telecocoon" or private digital bubble. This "intersection of technology and performance...allows its practitioners to carry a miniature version of the world with them even to the point of ignoring the world through which they pass" (Wood 2009, 175). The physical world (the "geographic field"), then, is increasingly more tenuously experienced.

• **Theme 4**: The individual experiences *time-space compression*, and the experience of retaining a sense of "home," reterritorialized and embodied always as "here," wherever one currently is "located" (physically, digitally, and cognitively), while networked to others wherever they currently are located physically, digitally, and cognitively. Physicist Joel Primack and science writer Nancy Abrams portray the middle-scale of human (self-)positioning in the Cosmos that now seems to apply also to the point of view of the material/digital spatial hybridity of the contemporary

Digital Age: "This is humanity's native region of the universe [the middle-scale], our true homeland. ... *It's not a geographical location: it's a point of view*." 2006, 161; emphases added). The existential spatial experience of individuals manifests as if they were centrally located in all-space. This experiential ontology is their "native region," "homeland," the "location" of their *self-space*.

٠ **Theme 5**: The individual--with a *lived geography* of hybridity of physical/digital spacings, and experiences of "distant proximities" (Rosenau 2003), and evident globality (both global awareness and geographic hyperopia)--struggles to achieve a semblance of experiential spatial balance, negotiating between being attached locally and aware globally. This is less a geographic theme and more a lifeworld selfpositioning. This spatial orientation has to be accomplished in the face of pressures of contemporary sociospatial disembedment and *cognitive deterritorialization*. Due to processes of globalization, the first part of Waldo Tobler's "First Law of Geography" (Tobler 1970, 234)--whereby, "Everything is related to everything else"--is widely acknowledged as intensifying in the present era due to globalization and mediatization. But any experiential spatial balance in the lifeworld must be achieved in spite of the apparent overthrow of the second part of the Law, which states, "near things are more related than distant things." With the onslaughts of hypermodernity and globalization, things indeed are increasingly interconnected (the first part of the Law), but as Judith Squires (1994, 387) notes, "Where there was distance we [now] witness time-space compression." Further, political scientist James Rosenau points out that, incongruously, "what seems remote in the present era also seems close-athand, thereby compelling individuals and collectivities alike to cope with the

challenge of *distant proximities*" (2003, 3; emphasis added). Thus, *no longer are people necessarily more connected to near space than to distant space*. Achieving spatial balance in the lifeworld, then, when many people are "lost within a labyrinth of impersonal spaces" (Iyer 2000, 36), is a continuing challenge to the contemporary individual and to an effective pedagogy of geography.

• Theme 6: The individual, congruent with the "mediatization of modern culture" (Thompson 1995), is so thoroughly *mediatized* that *the geographic imagination is to some degree a product of personal enmeshment with media*. For young people, their involvement with the "media torrent" (Gitlin 2002) has become a "form of life itself" (Morimoto and Friedland 2011), and a "symbiosis" in which the media user and the technology are "growing into interconnected systems" (Sparrow, Liu, and Wegner 2011, 778).

• Theme 7: The individual is centered and embodied at the controls of distancedefying electronic/media technology, migrating through physical spacings and cognitively digital-tunneling through topological hyperspacings to Anyplace/Everywhere. The person, using personal electronic/digital communication media, experiences himself/herself as a communication node (Theme 2) at the center of a hybridity of topological and physical spacings (Theme 4), and connects/interfaces rhizomatically (interthreadingly) with other people and places that are also nodal centers of topological/physical spacings.

• **Theme 8**: The individual experiences *hybridization of online spacings/offline places*. While the individual connects to electronic digital spacings, placed-based relational webs still rely on proximity. The lifeworld is experienced as a relational,

hybridized betweenness of liminal spacings "between cell phone and town."

Fundamental Constructs

Two **fundamental constructs of the relation of self and place** have underlain this research:

- Place as relational experience;
- Place as a cognitive organizational process of the self.

Geographic Theorems

Based on these two constructs and the empirical data collected in the research,

three **geographic theorems** were developed in this chapter:

- Spatial experience begets geographic learning begets further spatial experience which adds to geographic understanding;
- Spatial learning is an embodied, relational process that arises from personal spatial/geographic experiential interaction with and dwelling in the world;
- To know one's self-emplacement in the world is to know the place of the world in oneself.

General Conclusions

This research developed this **general conclusion** about the *self-emplacements* of the research participants (Chapter VII): **Their** *self-emplacements* were informed by **negotiations among the ever-more-tightly interweaving trialetical spacings of the physical, cognitive, and virtual**. Statements by three research participants seemed to be generally true for, and express much about, the *self-emplacements* of all the middle adolescents of this research: 1) "*There are still some things that I consider local in my life*"; 2) "*I live between cell phone and town*"; and, 3) "*I feel I live in the non-place of the*

world? [the Internet]. The vital physical-cognitive-virtual spacings that the adolescent participants of this research imagine for themselves are centered in the emergent living and evolving, personal and virtual geographic midst of it all.

This research developed this **general conclusion** about the *geographic imaginations* of the research participants (Chapter VII): Their *geographic imaginations* **are constructed out of embodied practical engagement with both the physical world** (albeit, in many cases weak), and of their rhizomatic (interthreading),

electronic/digital connectivity to the *mediascape*--both emanating nodally outward in space. The two spacings--physical and digital--are dialectical and hybridized into a rather seamless single online/offline lifeworld, in some cases with greater attachment to distant places via media than with the participants' own locales. Even when they exhibit local attachment and identity, this still instantiates as a "localness" as negotiated by significant online connectivity to local friends, family, and local places.

Concluding Comments

Uncovering the person-to-spacings/place relationships of middle adolescents was the general goal of this research. This area of interest required entrance into some of the unmapped terrains of the "interior landscape." There, the research imagination (of the present researcher) met up with the *geographic imaginations* (of the research participants). The results afforded insights into the subjective mental geographies of young people's embodied relations to local place and global space. This research posits that both the *self-emplacements* and *geographic imaginations* of the middle-adolescent participants could be capsulized as a spatial cognition consisting of an embodied but fuzzy "local/betweenness/global," and largely virtual, *spatiality*. In the education agenda of creating a "geographically informed person" (and possibly an intended, normative *world citizen*) educators must comprehend how it is that young people view the world spatially, whether it is understood as a comprehended, Gestalt whole, or more as a noncontiguous series of disparate, fragmented, and largely mediated, places, regions, and countries. At the other, local end of education ideology and practice, in the push for place-conscious education, educators must understand young people's "sense of locality" in the contemporary, postmodern era in which individuals are thought to live disembedded, fragmented, placeless lives. Whether as "local citizen" or as *world citizen*, the way young people "see" the world will be fundamental in constructing educational programs to meet future societal challenges.

Answers to questions about the *spatiality* of the lifeworlds of young people are urgently needed. Are young people opting to emplace themselves solidly in their localities? On the other hand, are they choosing to become world citizens? Or, is their reality somewhere in the middle--in a spatial betweenness--in which young people are to some small extent attached locally, yet (somewhat) aware globally? (This is a main finding of this research.) Alternatively, are they instead becoming to some degree *cognitively deterritorialized* and placeless, with a weak *sense of place*, unattached and uncommitted, with a *geographic imagination* of "nowhere," living lives vaguely and "ageographically" cosmopolitan? (This research also found this to be true.) The discipline of geography education, the general education establishment, and civic and governmental leaders will need to understand which of these spatial cognitive schemata (or others) to build upon. This dissertation provided some answers to these crucial questions.

To conclude, human geographer David Lowenthal more than a half century ago

believed that "the vision of the world [that] geographers construct must be created anew each generation" (1961, 245). Not only professional geographers, but also ordinary people (and as demonstrated here, the middle adolescents in this research) reflect within their *inner landscapes* these continuing changes in the world, many of which are spatial. For geography education, the rapidly changing situation is analogous to that of the early European cartographers who were hurriedly constructing maps of the known world simultaneously as new lands were being discovered. As this dissertation has demonstrated, the *geographic imaginations* of young people have evolved in hurried step with contemporary social, spatial, and technological changes. The widespread hybridized and ambiguous experience of spacings and place now extant in the contemporary world may well be at least partially summarized as that of the advertisement that reads, "There's no place like everywhere." Its reverse logic: The spatial logics of Everywhere/No-place are emerging to nullify context-sensitive spatial experiences of place. If so, then geography educators are faced with the rapidly evolving, ambiguous and "thinned-out," alienating spatial "betweenness" that is Everywhere-cum-nowhere that generally informs the lifeworlds of young people today. This would seem to call urgently for programs of geography education to implement rational and responsible initiatives, from-the-bottom-up, to help guide young people, who now live in an electronically immersed, fragmented "macrospaced" world, into re-emplacing themselves into a personally poetic, thickly meaningful, richly relational *place-as-coming-home*.

APPENDIX A

QUESTIONNAIRE INSTRUMENT

This survey is a university class project. You will remain anonymous; the results will not be published.

The purpose of the questionnaire is to find out how you see the world.

For the results to be valid, you must answer the questions as **you** think of the world, not how you think most people see things.

1. Male	Fema	ale			
2. Your age.	14	15	16	17	18

3. Were you born here or near here? Yes No

4. How many years have you lived here or near here?

5. In how many different cities (including foreign cities or military bases) have you lived?

6. Number of countries, besides the U.S., in which you have lived.

7. Number of foreign countries in which you have traveled.

8. Did your parents grow up here or near here? One Both Neither parent

9. Estimate and add together how many years your parents have lived here.

10. Were your parents born in another country? One Both Neither parent

11. Likelihood you will move permanently from here sometime.NoneSmall chancePossiblyProbablyUndecided

12. If you move away, to go to college, military, etc., would you move back here to live? No Small chance Possibly Probably Definitely Undecided

13. I identify with the local landso Moderate Much	cape here. Neutral	None Undecideo	Little Some
14. I feel belong here in this plac Moderate Much	e. None Neutral	Little Undecid	Some ed
15. What happens to my town is Moderate Much Neut	-		Little Some
16. I have emotional attachment None Little Some Undecided	to this town; it ha Moderate	-	ning for me. Neutral
SCALE: 1 = strongly disagree; 5 = strongly agree	2 = disagree ;	3 = medium ;	4 = agree ;
17. To what degree do you identif Undecided	fy with your loca	l area? 1	2 3 4 5
18. To what degree do you see yo Undecided	urself as a "worl	d citizen?" 1	2 3 4 5
19. It would be better to be a citizcountry.Little12		ather than a citiz 5 muc	
21. The degree of impact of the lo Undecided	ocal area on your	life. Little 1	2 3 4 5 large
22. The degree of global impact of Undecided	on your life. L	ittle 1 2 3	4 5 large
23. Degree you tune into global e Undecided	vents and culture	. Little 1 2	3 4 5 much
24. The world is increasingly glo Undecided	balized. 1	2 3	4 5
25. The "world is becoming small Undecided	ller." 1	2 3	4 5
26. What happens one place influ Undecided	ences what happe	ens other places	? 1 2 3 4 5
27. How many hours per day , ave	erage, do you spe	end on the Interr	net? 0 1-2 3-4 5-6 7+

28. Approximately how many text messages do you send/read per day?

29. Do you participate in any online social networks, such as MySpace or Facebook? If so, how many hours per day?

30. Describe your interaction with people through communication technology (e.g., texting, email, telephone, etc.): a) locally b) regionally c) internationally

31. Assess how much you are involved in **global** (beyond the U.S.) communication and travel (TV, Internet, email, news, study, reading, travel, purchases, friends, acquaintances, colleagues, etc.).

32. In what ways and degree are you involved with the local community?

33. What outdoor activities are you involved? How many hours per week?

34. Describe your feelings about the local landscape.

- 35. Would you rather live in a place with a different landscape? Explain.
- 36. Please, comment on any of the above (give the #) or on the survey itself.

APPENDIX B

WRITING PROTOCOL

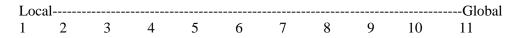
You are sitting on the beach with a breeze blowing over the Gulf from the direction of Cuba. When you exited your mom's car, she was playing music from the era of the British Invasion. You are sitting and talking with your friend Vina whose parents emigrated here from Vietnam. (Your parents moved here from Kentucky.) As you talk, you are texting your boyfriend who is shopping in a neighboring city for clothes. Vina must be home in a couple hours because her family is expecting the regular telephone call from her dad who is stationed in Iraq with the U. S. military. Neither you nor Vina particularly likes to talk on the phone. You would much rather text (you send hundreds each month) and communicate on Facebook with your friends and entertain yourself with looking at profiles and downloading and listening to music (you sometimes sit for hours in front of your computer doing this). You talk with Vina about your church mission trip later in the summer to Honduras to help build a school. Vina asks about your new anime haircut style that you found photos of on the Internet and took to your hair stylist so she could use it as a model. So far this summer, you are bored with too much television watching. Your parents like to keep the big TV tuned to the news. Something is happening about an earthquake in China. You did, though, think the newest Indiana Jones movie was cool, with its depictions of Peruvian jungle.

A. The following is an open-ended question for which there are no correct (or wrong) answers. Write as much as you can about **your** personal life, comparing and contrasting it to the scenario above.

Prompts:

- 1. Where is it you live your life; i.e., what is your personal "sense of place" of the world (spaces and places) in which you live?
- 2. Where and what is the space/place in which you feel you live? Where does it fit into the world?
- 3. Describe this space/place (where and what it is), keeping in mind your travels, use of media technologies (e.g., TV, radio, movies, telephone, Internet, texting, Internet, IMing) and any thinking, learning, and concepts you have about the world where you live.

B. On a continuum from local (your home) to global (the entire world), consider carefully and mark the place where you feel you live.



3. Explain thoroughly why you marked the way you did.

APPENDIX C

INTERVIEW SCHEDULE

1. The term "sense of place" includes emotional attachment and identification to a place. Evaluate your attachment to and identification with this town and other places.

2. In what ways are you now connected to--including travel, seeing or hearing through media, and communication with friends and family--any places outside your hometown, including places outside the U.S.?

3. In what ways can you recall seeing globes and maps used in images, e.g., in media? Explain the meanings/messages of those images?

4. The term "globality" means "intense awareness of the world as a whole." What can you tell me about your own sense of awareness of the whole world?

5. Do you think of yourself as a "world citizen," in other words, with global responsibilities and belongingness?

6. Where is it--in what spaces and places--do you live? From your computer, bedroom, house, cell phone, TV, town, State, country, to the whole world--where do you see yourself living? How do they all connect and fit together?

7. Taking into consideration your use of cell phone, texting, Internet, IMing, email, TV, and travel--on a continuum from local (your home) to global (the entire world), consider carefully and mark the place where you feel you "live."

LocalGlobal							lobal			
1	2	3	4	5	6	7	8	9	10	11

Explain why you marked as you did.

8. Discussion about the coffee shop:

• As site of connectivity to the outside world (globally-traded coffees and teas, TV, Internet);

• As example of the meanings of local spaces and participants' use of space from home to cyberspace.

9. What other ideas do you have about these concepts: *home, space, place, sense of place, world citizenship, connectivity* and anything else about these subjects?

APPENDIX D

PARENTAL CONSENT/PARTICIPANT ASSENT FORM

Dear Parent:

I am a social studies teacher at Ocean Springs High School (now in my 15th year at OSHS) and doctoral student (PhD) at Texas State University. I am presently involved in research for my doctoral dissertation about the "geographic imagination"--how young people relate to places and the geographic spaces of the world.

I would like to have your permission to conduct surveys with your child related to his/her "sense of place" and how he or she understands geographic space. Your child, along with others, was chosen because he or she is enrolled in my A. P. Human Geography class. Information collection can take three forms: a 30-item questionnaire, short essay writing, and an interview expected to last less than an hour. Participation is voluntary. Participants may choose to not answer any question for any reason and may withdraw from the study at any time. Possible benefit to the participant might include greater knowledge and self-awareness of sense of place and the geographic imagination.

Data will be published in a doctoral dissertation, but your child's name will be kept strictly confidential throughout the process of analysis and reporting of the research. Survey data and data records will be maintained securely at my residence until awarding of the degree. Summary of the research findings will be available upon request.

If you agree to allow your child to take part in the research as outlined above, please fill in the information below and sign your name and have your child sign his/her name.

Child's name:	Child's signature:	Date:	

Parent's name: _____ Parent's signature _____ Date: ____

Signature of Lee Durham Stone, Researcher _____ Date: _____

For further information or clarification contact Lee Stone, at the high school (875-0333), or email <u>lstone@ossdms.org</u>

This research study has been reviewed and approved by the Institutional Review Board (IRB) in Human Research, Texas State University--IRB approval number: 2010C8250. Pertinent questions about the research or research participants' rights should be directed to the IRB chair, Dr. Jon Lasser (512-245-3413; <u>lasser@txstate.edu</u>), or to Ms. Becky Northcut, Compliance Specialist (512-245-2102).

APPENDIX E

INSTITUTIONAL PERMISSION FORM

To Dr. Robert Hirsch, Superintendent of Schools

From Lee Durham Stone, teacher, Ocean Springs High School

Date 11 August 2010

Re Permission to conduct research

I hereby request permission from Ocean Springs School District to conduct research at Ocean Springs High School. The purpose of the research is to fulfill requirements of a Doctor of Philosophy (PhD) degree in Geography (Geography Education program) at Texas State University-San Marcos.

The study--titled *Self-Emplacement in the Lifeworld: The Geographic Imagination of American Middle Adolescents*--is designed to determine the characteristics of young peoples' "sense of place" and space from local to global. It falls under a concept known as the "geographic imagination." My A. P. Human Geography students will be requested to fill out a survey about their use of information and communication technologies such as computers and texting, how the students relate to the town of Ocean Springs in terms of sense of belongingness, and their beliefs of how global events, etc., affect their lives. A writing prompt asks for information along the same lines. I have already used these two tasks as part of the subject matter in my Human Geography classes in order to teach these important human-geography themes, so no extra class time will be needed. In addition, a few of the students will be requested to be interviewed for the same general information.

All collected information will remain confidential. No reference will be made to any specific student in the study. Data collection procedures will be in strict adherence to the guidelines of the Institutional Review Board (IRB) in Human Research, Texas State University, which has reviewed and approved the study (IRB approval number: 2010C8250). Questions about the research or research participants' rights should be directed to the IRB chair, Dr. Jon Lasser (<u>512-245-3413; lasser@txstate.edu</u>), or Ms. Becky Northcut, Compliance Specialist (512-245-2102).

Enclosed is a copy of the Consent/Assent Form for parents and students, as well as the datacollection instruments: questionnaire, writing prompt, and interview.

If this meets with your approval, please sign and date below, and return to me. Please feel free to contact me should you have any questions or concerns. Thank you for your consideration of this matter.

Signature:	Date:	
Dr. Robert Hirsch		
Superintendent of Ocean Springs Schools		

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Lee Durham Stone grew up in Muhlenberg County, Kentucky, son of a smalltown newspaper editor on one side of his family and fourth-generation teacher by way of the other. He graduated Central City [KY] High School, where he was captain of his basketball team and pitched and played short-stop and centerfield on the baseball team. After graduating the University of Kentucky, he worked as a strip-mine inspector for the Kentucky Dept. of Natural Resources, out of the Hazard Area Office (in Appalachia). From there, he went to Jamaica as a Peace Corps Volunteer and traveled to Andean South America, and through the West Indies. Upon returning stateside, he earned Master's degrees from Ohio University; California Polytechnic State University, San Luis Obispo; and University of Southern Mississippi. He spent 4.5 months in the rainforest of Talamanca, Costa Rica, studied archeology in Yucatan, Mexico, and worked on archeology digs in Belize and England (Roman Fort on Tyne, South Shields). Teaching stints included at Feng Chia University, Taichung, Taiwan; a private school in Malibu, California; and public schools in Kentucky, rural Mississippi, and the Mississippi Gulf Coast.

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