Chapter 1 Introduction

Your phone rings, you answer it, speak for a few minutes then hang up. What could be more commonplace? Yet the places in and of this phone call are subtle, complex, and intertwined. From the vantage point of a scholar interested in geographies of communication and media this communication event defines several distinctly different places and several different spaces, which can be simplified to four basic approaches.

First, we can consider the geographical layout of communication infrastructure relative to the earth's surface, sometimes referred to as the "footprint" of communication. The encoded voice signals travel along a particular set of links (wires and electromagnetic signals) between nodes (telephones, relays, and switches). The links and nodes could be shown on a map as points and lines: a cell (mobile) phone here, a landline telephone there, a linear flow of signals from phone to tower (mast) to switch to transceiver and switching device to wires to phone. While the set of locations making up the footprint of a single communication technology tells us interesting things, more can be learned by thinking of many digital signals following various paths to create a space defined by communication traffic, the kind of space that Manuel Castells (1996) has called a "space of flows." The ideas of (a) communication as infrastructure, (b) the footprints of such infrastructure, and (c) the space of flows created by signals moving through infrastructure are complementary parts of a spatial perspective we will capture throughout this book with the term **media in space**.

The second spatial perspective on communication is a bit trickier to envision. Imagine you are taking a trip across the country and when you arrive you call a friend with your cell phone. The footprint of your phone call will be nothing like the footprint that would have been created if you had called your friend from home. The call now goes to a different tower, a different transceiver and switch, and a different set of cables and wires. Since a list of names and numbers is pre-programmed into your phone and can be accessed no matter where you are, you do not need to

worry about the footprint or how it changes. Your interest is in what remains the same no matter where you are – your unique social space defined in terms of contacts. This social space is a kind of space every bit as real as the space of the footprint, but this space remains constant as you move. It is a space that defines what is connected to what, rather than the geographical alignment of these connections; it does not correspond to physical locations since some or all of the numbers on the list may belong to other mobile phones that also have no fixed location. It is a topology of the flow of information and ideas. This second spatial perspective on communication therefore considers a topology that remains stable despite the relocation of the nodes and links. In this topological social space you are separated by two links from your friend's doctor (whose number is in your friend's phone). You are likewise two links from your doctor's friend. Research has shown that you may be within six links of everyone on the planet, if we consider the topological space defined by acquaintances of all types – personal, professional, social, etc. So the second topic of interest to geographers can be called spaces in media, and it is best understood as a functional topological space. It is intangible and fluid space but it is real in its effects. Communication's footprint is therefore always complemented by communication's topology.

Both of these perspectives are fundamentally spatial, but we can add two more geographical views of communication by thinking in terms of place rather than space. Place is a center of meaning and attention; it is composed of social interactions occurring over time and their sedimented layers of meaning. In connection with our imaginary phone call, let us imagine that when we answer a voice says "Hey, guess where I am! I'm on a ski-lift looking out over the continental divide." What is conveyed is a *place image* brought to you through the phone by the words themselves and also by non-verbal signals. If the voice quavers, laughs, or shouts that is part of the *affective* dimension of communication, which perhaps elicits certain emotional responses in you. Place images run the gamut from extremely sparse and low in affect (like a street name on a sign) to extremely rich in affect (like a battle scene in a movie). These images include not just words, pictures, and moving pictures, but also hybrids of the above and other sensations, such as the songs "I Love Paris" and "Sweet Home Alabama." All such **places in media** constitute the third major intersection of communication and geography.

Finally, imagine you are in a lecture, sermon, or concert and a cell phone rings. The sound is experienced by people in the lecture hall as a disturbance. Why is this? A place is understood to include certain kinds of communication and exclude others, and the sound violates the explicit or implicit rules of the place. The owner of the phone may be subject to a withering look or a snide comment. These responses reassert the rules of the place; they demonstrate the informal but continual policing of the boundaries of place that reminds people what kinds of communication are "in place" and "out of place." Socially defined boundaries define various kinds of actors, roles, rules, and objects to be let in or kept out of a particular place. When they are let in, the communications become part of place, and the place would not

be the same without them. The fourth aspect of communication geography, **media in place**, embraces this complex sorting of communications, their insertion in places, and the boundary creation that is implied by all of this.

The Need for a General Introduction to Communication Geography

To sum up the points thus far, all four of these geographical aspects of communication are present at any given time and shape every communication situation: a single communication event moves through geographical space and also contributes to a topological space, while it represents place and is part of place. This book introduces these four contrasting and complementary dimensions of communication geography and it is this complexity and ambiguity that makes the study of media and communications an intriguing topic and merits a comprehensive overview. This book does not provide in-depth information about the history or institutional organization of the Internet, online business, or other specialized communication issues (which can be found, for example, in Zook 2005; McDowell et al. 2008; Couldry and McCarthy 2004). It is instead a survey of the major ways in which geographers have dealt with the idea of communication. It is interwoven with some hints, still rather vague but tantalizing, of pathways leading from geography to communication and vice versa.

One objective of the book is to meet "communication geographers" on their own terms, although that is perhaps overambitious, since the term "communication geography" is new and the ideas thus far only poorly integrated. Few if any of the authors cited here would call themselves communication geographers, but their works engage with a network of ideas, a topological communication space, that is indicated by the four perspectives: media in space, space in media, media in place, place in media. From Mark Monmonier's pragmatic advice about mapping to Marcus Doel's poststructuralist theories, from John Pickles's interest in visual representation to Gearoid Ó Tuathail's interest in "scripts," from Yi-Fu Tuan's delight in fictions and myths to Gillian Rose's efforts to expose and unsettle (somewhat different) fictions and myths, from the empirical study of the Internet "backbone" to the concept of virtuality – the scope of communication geography is broad and compelling. This work constantly points outside of the discipline, to Martin Heidegger, Hayden White, Antonio Gramsci, Louis Althusser, Henri Lefebvre, Michel Foucault, Roland Barthes, Jörgen Habermas, Gilles Deleuze, and Edward Said. It points as well to those whose influence arrives second, third, or fourth-hand and with little acknowledgment, such as George Gerbner, Harold Lasswell, Marshall McLuhan, and Norbert Wiener. The subject includes contributions from British and North American geographers, although these two traditions remain poorly connected and there is great potential for further cross-fertilization.

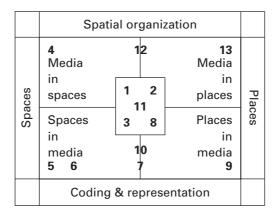


Figure 1.1 The quadrant diagram: schematic organization of the four major sections of *Geographies of Media and Communication*.

The Quadrant Diagram

The quadrant diagram (Figure 1.1) will be used throughout the book to help us maintain our bearings and recognize where we are, and what needs to be included at a particular point in the discussion. The conceptual space of the quadrant diagram is structured by two tensions: space versus place and geographical representation versus geographical organization. Space has been associated by geographers with freedom, vulnerability, potential, movement, distance, and abstraction, while place has been associated with confinement, protection/possession, stability, meaning, and the concrete (Tuan 1977). Communications of all kinds reflect this ideological polarity. The polarity also characterizes the organization of activities; some activities primarily define spaces and some activities primarily define places: there is placemaking and space-making, although it is quite common to do both at the same time. Space implies patterns, flows, and the ideals of public life, while place implies territory, personal identity, the routine of daily life, and the ideal of privacy. So by employing the quadrant diagram this polarity in geographical phenomena serves to reveal polarities in communication, and vice versa.

The diagram is not meant to pigeonhole the various findings and theories related to communication geography. Many of the researchers cited in this book cannot be clearly linked to any particular quadrant, and properly understood their insights speak to all four quadrants. But thinking of these tensions helps to clarify the connections between communication theories and geographical theories so they may be explored in systematic fashion. The quadrants also help to reveal the nature of commonalities among various geographical studies, which in turn suggest ways of building onto existing work.

While the diagram helps to set things in order it also plots a paradox. The ontology of *container* versus *contained* shifts depending on where one "stands" in the diagram. In the top half of the diagram, space and place appear as containers that bound, encompass, frame, and give shape to communications. In the bottom half of the diagram, they are produced by communications; that is, space and place are written, spoken, mapped, or depicted into existence as the social and experiential phenomena that are contained and transmitted by communication. The quadrant diagram welcomes this ambiguity as evidence of one of the key arguments in actor-network theory (ANT): "size is not an explanatory variable but is in need of explanation"; if we think of "Hierarchical trees, stylized maps, techniques for making links, measuring, or laying out grids, all of these are ways of creating representations in which the parts self-evidently come to be seen as smaller than their sum." However, the "parts" and the "whole" are not in a fixed relation to each other but reverse and fluctuate because "size and inclusion are effects" (Callon and Law 2004: 4-5). Stated more simply: A can be contained by B (place images are part of communication) but from another angle A contains B (communication is an element of place); in addition C can be contained by B (there is a topological social space one links to in the communication) but from another angle C contains B (a space of flows is created by the movements of countless communications through space). If the container and the contained are not fixed terms but change places depending on our perspective, we are dealing not with hierarchy and structure, in the conventional sense, but rather with what Dmitri Bondarenko (2005) calls "heterarchy."

Heterarchy comes with the terrain when we study communication geography. Inside and outside are not stable relations; they trade places when one changes viewpoints. If communication is something we construct in our world, it is equally true that the world is something we construct in our communication. Without space and place as the a priori frameworks for experience communication is meaningless, yet without communication we would not be able to conceive of space and place.

Four Paths of Discovery

Thus far we have established that it is possible to think of geographical engagements with communication-related topics in terms of our own special-purpose space: the quadrant diagram with its four separate areas of inquiry. The embryonic state of the subfield prevents us from moving beyond this simple diagram to a more complex mapping, because the "pieces" captured by the diagram have not previously been brought together in a single study. As early as 1985 Burgess and Gold declared: "The media have been on the periphery of geographical inquiry for too long" (1985b: 1) and thirteen years later Ken Hillis suggested geographers overcome the "invisibility of communications in geography" (Hillis 1998). In the interim, one of geography's most respected voices argued that geography is always in one way or another *about* communication (Gould 1991: 3). But such calls have gone unheeded; communication geography is not yet a coherent subfield, even one with the loose cohesion of political geography, economic geography, or urban geography.

Nonetheless, the proliferation of writings in and around the quadrants suggests that the time is ripe to attempt such an overview. The rest of this chapter surveys the

contributions that make this project both possible and productive.

The focus of the first section of the book, the idea of media in space, is a path laid out by the writings of Ron Abler, Donald Janelle, Peter Gould, and John Adams. Building on the spatial analytic tradition of the 1960s and 1970s these geographers indicated not only that communication infrastructure binds together various locations by forming links through space, but also that such links transform space. The idea of relational space - space that can be adjusted, transformed, stretched, or compressed depending on what people do and make in that space - was a key insight of this tradition deriving originally from studies of transportation and later from communication studies. Effects of "space-adjusting technologies" are presented by Janelle and Abler in several articles, and by the various participants of edited volumes such as Human Geography in a Shrinking World (Abler et al. 1975) and Collapsing Space and Time (Brunn and Leinbach 1991a). Central as well to this early phase were the writings of Jean Gottmann (1977), who linked the use of the telephone to the evolving form of the city, and Melvin Webber's (1964) discussion of the "nonplace urban realm," which was incredible in its prescience. These early writings have been brought up to date with works such as Janelle and Hodge's Information, Place, and Cyberspace: Issues in Accessibility (2000a), O'Kelly and Grubesic's studies of the Internet (Grubesic and O'Kelly 2002; O'Kelly and Grubesic 2002), Dodge and Kitchin's online Atlas of Cyberspaces (2002) and Barney Warf's attention to the diverse "corners" of the Internet (1995, 2001, 2003, 2006, 2007a, b).

Helen Couclelis indicates a key insight of this line of inquiry when she argues: "Although news of the demise of distance may be premature, unquestionably its role in structuring spatial interaction is increasingly a different one from what traditional geographical thinking had assumed. . . . Considering that all definitions and measures of accessibility involve some notion of distance, one wonders what happens to accessibility in a world where many critical distances appear to vanish" (Couclelis 2000: 345). While long-term "shrinking" or "collapsing" effects garner most of the attention in these studies, short-term fluctuations of space are also examined (Gould 1991). We see in these relational spaces a bounding or containing function that is not reducible simply to determination. Spatial dimensions take on a rhythmic quality in these accounts as they fluctuate cyclically in response to daily, weekly, and yearly cycles of activity. Drawing on this research regarding flows through space and time is a related body of work that addresses somewhat different questions relating to commerce and trade via information and communication technologies (ICTs) (e.g. Moss 1987, 1988; Batty 1997; Leinbach and Brunn 2001; Aoyama 2003; Murphy 2003).

With regard to the second quadrant, spaces in media, geographers are most familiar with this issue in the writings of Manuel Castells and Arjun Appadurai. Castells's (1989) concept of the "space of flows" is complemented by the concepts of "mediascapes," "technoscapes," and "ideoscapes" (Appadurai 1996), simultaneously engaging geographers in fundamental debates of sociology and anthropology. The

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idea of spaces in media finds its way into geography not only from these academic sources, but also from a wide range of alternative routes such as the science fiction classics of Neal Stephenson and William Gibson. Cyberspace was less novel than it seemed when the term gained currency in the 1990s, because for centuries communication systems have created nonphysical (virtual) spaces for (real) social interaction. Approaching this topic philosophically and critically, Ken Hillis's Digital Sensations (1999) and Rob Shields's The Virtual (2002) argued in unison that virtual reality has a complicated relationship to physical reality, and its cultural roots reach back to the pre-telecommunication era. Crang, Crang and May's Virtual Geographies: Bodies, Space and Relations (1999a) demonstrated a range of approaches to the geographical study of the virtual, and the editors identified four elements that dominate discussions of virtual geographies: simulation, complexity, mediazation, and spatiality (Crang et al. 1999b: 5-13). My own work (Adams 1992, 1995, 1997, 2005) also pointed out that virtuality has both a history and a geography, while considering how place is experienced through distanciated interactions in paradoxical relations to embodied presence. Martin Dodge and Rob Kitchin (2000, 2002) contributed to this debate, as well as *media in spaces*, with their consideration of how cyberspace has been represented as "topology" maps, "information space maps," and "information landscapes." Aside from these engagements, space in media remains less fully explored by geographers than media in space.

The study of place images, the primary focus of the third section of the book, has a solid foundation in geography reaching back to seminal works by J. K. Wright and David Lowenthal. Wright's famous article "Terrae Incognitae" (1947), and Lowenthal's rearticulation of this interest in "Geography, Experience and the Imagination" (1972 [1961]) gestured towards an area of study originally referred to as geosophy, the "nature and expression of geographical ideas both past and present... the geographical ideas, both true and false, of all manner of people – not only geographers, but farmers and fishermen, business executives and poets, novelists and painters, Bedouins and Hottentots" (Wright 1947: xx). Lowenthal carried this interest forward by studying the relationship between landscape as a perception and landscape as a set of objects that produce that perception, and also by expanding the scope of interest from pictorial place images to worldviews and cosmologies. Yi-Fu Tuan, Douglas Pocock, Anne Buttimer, and David Seamon explored place images in literature while also reflecting on the place image as a source of geographical insight (Tuan 1978; Buttimer and Seamon 1980; Pocock 1981). The roots of this approach to communication are evident in the 1978 collection Humanistic Geography, edited by David Ley and Marwyn Samuels.

By the late 1980s, a more critical engagement with the place image began as scholars worked through the argument that representations are never innocent – their partiality, incompleteness, and bias make them instrumental in social struggles. Out of these lineages of humanistic and critical studies emerged a "new cultural geography" (Cosgrove and Jackson 1987; Gregory and Ley 1988; Cosgrove and Domosh 1993; Duncan and Ley 1993b: 11). While the hermeneutic circle between text and context, representation and socio-spatial configuration, dominated early

work, a few employed other methods such as discourse analysis (Ley 1993; Mills 1993) or philosophical reflection (Olsson 1991, 1992). The "new cultural geography" was a critical humanist perspective (Adams et al. 2001) defined by the collapse in confidence regarding the possibility of representing places. This included questioning of (a) the mode of realism, (b) the principle of mimesis, and (c) the possibility of capturing any aspect of the world in a text (dubbed a "crisis of representation" or a "crisis of the sign": Barnes and Duncan 1992b; Olsson 1992: 93; Duncan and Ley 1993b), while questions about (d) the authority of the author and (e) the integrity of the subject led to announcements of the death of both author and subject. A set of coherent and interrelated insights emanating from postmodernism, poststructuralism, feminism, semiotics, and postcolonial theory indicated that communication is central to power relations or structures and it frequently limits people's capacities to act as agents of social change.

A broad-based assessment of this troubled and politicized terrain of communication was first demonstrated in Geography, The Media and Popular Culture (Burgess and Gold 1985a) and soon by various articles and edited volumes under the direction of James Duncan, Trevor Barnes, David Ley, Leo Zonn, Stuart Aitken, Alison Blunt, Gillian Rose, and John Pickles. The interest in place images and representation diffused broadly throughout the discipline, with impacts in both the USA and the UK, but deeper and more wide-ranging impacts in the latter. The discussion of place images acquired new vocabularies during the 1990s but the central concerns remained constant and pervaded areas as diverse as critical geopolitics, transnationalism and migration studies, political geography, development theory, political ecology, postcolonial geography, and feminist geography, while the original focus on problematizing landscape perceptions continued to attract attention. One of the dominant elements of this shift is the commitment to "local knowledge," which not only joins many of the social sciences and humanities in rejecting universal models and grand theories, but also gives geography a privileged role in the emerging discourses about discourse itself (Mills 1993: 165; Curry 1998; Dixon and Jones 2005). Geography's special place in the debate about meaning and representation is bestowed by place itself, since geographers perceive place (the local/the environment) as a facet of every communication situation rather than something to be written out of the story or penetrated by an epistemological "god trick" or a bird's eye view of the world. Shaped by translocal flows and large-scale commitments, yet grounded in the particular, the contingent, and the idiographic, "the place image" has become a significant concern in a broad spectrum of geographical studies.

The fourth concern, media in place, is in contrast relatively unexplored. Here geographers venture into territory that has not been charted to any great degree, questioning the nature of the rich and complex relationship between the place of communication and its associated communication technologies. This quadrant's freshness arises from looking at communications not simply as texts, discourses, or metaphors (place images), nor simply as flows (communications in space), but as practices, which is to say in the words of Erving Goffman that communications are "expressions given off," and hence they should be seen as a separate layer or dimension

of place, not merely as being *about* place or *in* place. Erving Goffman argues that there are "two kinds of communication – expressions given and expressions given off" – with the latter "primarily concerned with . . . the more theatrical and contextual kind [of communication], the non-verbal, presumably unintentional kind, whether this communication be purposely engineered or not" (Goffman 1973: 4).

The implication is that we must see communications not simply as collections of objects (books, pictures, television programs) or even as a social framework that embraces "particular combinations of narratives, concepts, ideologies and signifying practices" (Barnes and Duncan 1992b: 8), nor in the abstract language of a "space of flows" (Castells 1989). Communication is a way of life – the only one we will ever know. Feminist geographers have led the way in this inquiry by raising questions about the nexus of communication, subjectivity, power, emotion/affect, space, place, and time. The workplace, for example, can no longer be conceived simply as a place of power; it is also a place in and of communication. "Questions about the discursive construction of identities, about workplace culture, symbols and representations of work and workers, and about sexuality and power in the production and reproduction of workplace inequalities increasingly are the focus of feminist analyses" (McDowell 1999: 146).

Communication in place implies a set of survival tactics embedded in particular forms of mobility, working, and dwelling. This approach attempts to capture the affective, emotive qualities of communication, the feel of being in place with others. Place-based practices serve as a lens through which one sees identities emerge through contestation, as practices reflect particular performances of power, but also "experiences which are not so quickly labeled 'power', such as desire and anger, capacity and ability, happiness and fear, dreaming and forgetting" (Pile 1997: 3). Emotions are shared and they circulate through space and time to create the affective side of communication, a flow moving through heterogeneous networks consisting of people, media, objects, organizations, texts, discourses, non-human organisms, and various other elements (Thrift 2000; Adams 2005). Actor-network theory lends this insight, which intersects with postcolonial theory, feminist theory, and semiotics, to reveal communication as something that cannot ultimately be tied down to either place images or spatial trajectories. Nigel Thrift has been a major innovator of this new direction, but Steve Pile, Hayden Lorimer, Tim Cresswell, Martin Phillips, Mike Crang, and Gunnar Olsson have made significant contributions to a "nonrepresentational" or "more than representational" type of geography (Thrift 2000; Lorimer 2005).

Between the Quadrants

Of course, many geographical studies of media and communication are not situated neatly in any of the four quadrants. So Alan Lester (2002) weaves together a single account of "impersonal colonial discourses," "multidirectional flows of knowledge

and representation," and individual agency "constructing the networks along which [flows] moved." This approach brings together three of the four quadrants. Likewise, David Ley (1993: 145) crosses the axes of the diagram with his project of defining "an oppositional postmodernism in the built environment in terms of an ontology of difference, a multi-vocal epistemology and a politics of participation." Geographers addressing futuristic visions of globalization and technological dependency (e.g. Castells 1989, 1996; Graham and Marvin 1996; Graham 1998, 2004) also address ideas about simultaneous centralization and decentralization, drawing on the theme of media in space, while at the same time discussing media as immersive, place-simulating forces and drawing on the theme of place images in the media. Certain questions and topics in the geography of media and communication are therefore inherently quadrant-crossing, and while the distinctions in the quadrant diagram are useful, we must be careful not to pigeonhole particular studies within the diagram but instead to see it as a kind of space or place in its own right, subject to varying trajectories and mobilities.

Power clearly operates in and through various spaces and places of the quadrant. Peter Jackson's influential Maps of Meaning (1989) initiated a geographical project of exposing communication's political side, drawing on Anthony Giddens and exposing the politics of language, the social hierarchies embedded in novels, and the ties between the acts of naming and claiming. Subsequent geographical engagements with texts, metaphors, and discourses drew on the writings of French social theorists including most notably Foucault, Bourdieu, de Certeau, Lefebvre, and Barthes, all of whom conceived of communication in terms of power expressed in such moments as domination, contestation, mutual exclusion, and judgment. To this were added Gramscian and Althusserian concepts of hegemony and ideology, which were again based on the idea that communication is an expression and means of power, control, and resistance. These internal and external prompts to conflate communication and power set the tone for various geographical explorations of the 1990s in which communication was seen to indicate and facilitate the production of economic, political, and discursive power. In structuration theory as developed by Thrift (1983, 1985), Pred (1984), Gregory (1982), and others, and in such concepts as "Thirdspace" and the "socio-spatial dialectic" (Soja 1980, 1996), as well as in Mitchell's "culture wars" (2000), communication was interpreted as a deeply politicized process. However, some geographers are beginning to look for something more complicated and multivalent in communication while still maintaining a commitment to exposing power relations (Crang et al. 1999a; Adams et al. 2001; Adams 2005; Thrift 2008).

The Communicational Turn

Throughout the various discussions introduced above communication has entered debates under the guise of propaganda, ideology, discourse, text, voice, trope,

metaphor, representation, iconography, symbol, sign, meaning, mapping, knowledge, information, surveillance, panopticism, and, most recently, performance and translation. A "cultural turn" identified some time ago across various geographical specializations (Barnett 1998) is in large part an engagement with communication. Early discussions of communication in geography were in the context of cultural geography (Hartshorne 1949: 310, 334; Sauer 1963). But "culture" is a very tricky term and invites radical critiques (D. Mitchell 1995, 2000). Communication, in contrast, is a humbler concept, a process rather than an object, an ongoing endeavor rather than an achievement. As such it is less subject to the slippage that leads to ethnocentric and exclusive concepts of high versus low, ours versus theirs. Geography's "cultural turn" is therefore best understood as a sensitization to communication – not simply a linguistic turn, but more generally a turn towards all communication-oriented terms and concepts as elements of geographic processes, patterns, and portrayals. Nonetheless, from the beginning the "cultural turn" took communication to mean different things: individual and collective production of meaning (Zonn 1990a), everyday discourses as a source of data (Ley 1993), place images as expressions of power (Duncan 1993), or the working out of a particular metaphor or philosophy (Buttimer 1982; Olsson 1992). Despite the dominance of communication in all elements of the "cultural turn" the concept of communication remains rather diffuse within geography.

Sensitivity to communication begins as discomfort with all ways of "writing worlds" (Barnes and Duncan 1992a) or "geo-graphing" (Ó Tuathail 1996). If geography's role was at one time to be the tether that brought metaphors down to earth, reminding other scholars of the literal meanings of space and place and grounding abstract concepts in material relations (Smith and Katz 1993), now communication is seen to form the constantly shifting surface on which geographical observations are made whole, given the coherence that once was thought to be provided by the "earth surface" or place. The subject of geography may be the totality of phenomena on earth, but "the recognition of a totality requires a master narrative within which all can be understood and framed within a logic of equivalence" (Dixon and Zonn 2005: 292). In a slightly more specific context, John Agnew encapsulates the shift that has occurred between states: "Once it was 'forces' and 'functions' that constituted the moments of cross-pressure, whereas it is now 'discourses' and 'practices'" (Agnew 2007: 399).

The Format of the Book

The book's twelve main chapters move throughout the quadrant diagram, exploring each of its corners, beginning with the intersection of the four quadrants in Chapters 2 and 3, and returning to the intersection in Chapters 8 and 11. The chapters not situated at the intersection are arranged in a sequence that carries them around the diagram counter-clockwise, beginning with media in spaces, Chapter 4, and

ending with media in places, Chapters 12 and 13. The middle chapters, 5 through 10, deal with media as bounding conditions, first focusing on the spaces created by media then on the places created by media.

This organization moves the reader from theoretically well established positions, such as a historical perspective and the empirical mapping of infrastructure, to some of the new frontiers in geographical theory, such as actor-network theory, non-representational theory, ideas of embodied discourse, and subjectivity. Most of the chapters are explorations of geographical writings, and are wide-ranging though far from comprehensive, within the body of work that could be called communication geography. Chapters 2 and 3 are somewhat different from the rest, as their primary source material is of a transdisciplinary nature, little of which is written by geographers.

There are foreshadowings throughout the book of the new approaches and theories. No effort has been made to rigidly separate traditions that are normally isolated for epistemological or methodological reasons. So in Chapter 5, for example, Christaller encounters Castells, and in Chapter 9 Harvey and Tuan may be surprised to cross paths. The purpose of raising the banner of "communication geography" is to facilitate such meetings and to create an opening for geographical engagements with any or all of the topics that fit under the very broad umbrella of geographies of media and communication. While it is possible to pick and choose from among the chapters, reading all of the chapters in sequence will probably be most rewarding. Certain concepts used in later chapters are introduced in earlier chapters so there is something to be gained by reading the book from cover to cover, if the linear mode of reading still exists in the age of the Internet.