The change was based in science. . . . There was a continuing interplay between speculation and empirical investigation. . . . The research was broadly based and multidisciplinary. . . . There was a continuing concern to keep one foot in theory and the other in practice. . . . These are qualities that I still value, despite the ascendency of armchair socialism in the 1980s and its replacement by a combination of environmental activism and dreamtime postmodernism in the 1990s as the reds became green and the dialecticians switched from Marx to Foucault.

— Berry 2001, 561

To comment upon the sacred is never easy, and the charge of sacrilege is always imminent. . . . The tendency and temptation to look politely the other way is strong. But Reflections always require a mirror, and to ignore the mirror is the equivalent of clapping with one hand to produce wind but no sound.

— Gould 1991, 328

Brain J. L. Berry has been called geography’s “master weaver,” and he remained one of the field’s most heavily cited authorities well into the 1980s. “The Geography of the United States in the Year 2000” (Berry 1970; hereafter “The Geography”) was penned when he was the single most frequently cited geographer. The article presented a valuable synthesis of the processes creating twentieth-century regional economic and urban geographies and sketched a prescient mental map of today’s American landscapes. “The Geography” is a classic in human geography, in every sense of the word. But authors are not always the best ambassadors for their own work. After rereading Berry’s “Geography,” a magisterial essay I first savored as an undergraduate in the 1980s, I am saddened by the tone of his recent editorials on the state of the field (e.g., Berry 2001). Once in the vanguard of a revolution, Berry seems to have forgotten that revolutionaries must live with the dialectical processes they set in motion. A new generation is working hard toward the conditions of possibility seen by Berry in “The Geography,” but the work of these new scholars is too often ignored amidst the ongoing wave of Reflections on the Nature of quantitative revolution geography.

Berry’s Contribution

“The Geography” offered a panoramic view of midcentury patterns and processes in the nation’s economic and spatial structure, and it marshaled Berry’s (1964) “cities as systems within systems of cities” framework to anticipate a radically new spatial structure, as telecommunications technologies accelerated time-space compression to alter the raison d’être of regional economies. A reader in 2004 is taken on a fascinating tour of Toffleresque anticipations: “We are on the verge of yet another fundamental transformation of American society”; “Television, I think, is the first of a series of revolutionary electronic innovations that will affect America in the years to come”; “The revolutionary aspect of electronic environments is not that they reduce the frictions in moving goods and people, but that they move the experience itself to the human nervous system” (Berry 1970, 43, 46, 49). Berry sought new ideas to chart the emergence of a new geography, and

I am deeply grateful to Brian Berry for the opportunity to engage with his work, and to Daniel Sui for organizing this valuable forum. I also wish to thank John Adams, Cheryl Gowar, Dan Hammel, Bob Lake, Robin Leichenko, the editor, and four anonymous reviewers for valuable comments and feedback on earlier versions. I am to blame for all deficiencies. This is a shortened version of comments delivered at the 2002 AAG meeting, and space limitations required the omission of several sections and nearly all the references. Please send a note to ewyly@geog.ubc.ca if you would like to see the extended version.
found them in the metaphors of inversion and telemobility. Berry predicted the reversal of prevailing midcentury spatial divisions—center/edge, core/periphery, Snow Belt/Sun Belt—and the emergence of an intricate, dispersed society of telemobility, no longer constrained by the mechanical geographical concepts of distance-decay, gravity models, and heartland-hinterland.

Doing Geography in 2004

Three decades have been kind to many of these predictions. But looking back at prior predictions, interesting as it may be, tells us little about our craft today and how it might help us understand future geographies. Can we replicate “The Geography” today? I do not think so. Epistemological consensus is not what it used to be, and even if we were to find a ground for common search, problems remain. Inversion and telemobility have turned out to be relatively simple metaphors, unsuited to the complexities of social, spatial, and temporal change. Clear-cut dichotomies of core/periphery and physical/virtual environments were never anything more than simplifications of the processes of uneven development and the social production of space, place, and scale. And these processes have changed in important ways.

The first shift is now all too familiar. The uneven geographical developments of globalization have swept aside many of the economic and spatial arrangements of the middle decades of the twentieth century. Oil-shock recessions and the collapse of the Bretton Woods exchange-rate regime in the 1970s hammered the final nails into the coffin of the postwar golden age, a period now properly understood as an historical aberration rather than the normal state of affairs. The comparatively simple spatial organization of the golden age, assuming it was not also an illusion, disappeared as well. Berry wrote “The Geography” during one of the rare interludes when it was actually possible to describe the geography of the United States by analyzing the place itself. Globalized uneven development has accelerated the production of new scales of political-economic relations, and the implications span the range from the broadly theoretical to the day-to-day details of empirical analysis. Euclidian geography fails us now, regardless of which indicator is chosen. Mapping regional demographic patterns is hazardous when divorced from the context of accelerated immigration, seasonal migratory labor circuits, and transnational identities among the jet-set capitalist elite, as well as the downgraded working classes. Mapping firms or sectors overlooks the spatial, temporal, and cost complexities of commodity chains spread across dozens of production sites, and in any event it is becoming quite difficult to understand precisely where certain types of services are produced and consumed. Mapping daily urban systems with standard commuting data misses the small cadre of global-city elite who spend a good portion of their week aloft in a first-class seat hopping between New York and London, or Tokyo and Los Angeles, and the much larger portion of the workforce who spend their days on the road, working at home, or shuttling among constantly-shifting work sites.

A second shift has altered the data systems used to measure and monitor the geography of the United States. This change involves elements of policy and ideology as well as the technical details of databases. Repeated rounds of government devolution, beginning with Nixon’s “New Federalism” in 1969 and picked up again by Reagan and Clinton, meshed with aggressive attempts to privatize a broad array of public-sector functions. Anyone concerned with the fate of cities must surely feel wistful when reading that “One of the most pressing public debates in the United States today concerns the development of a national urban growth policy” (Berry 1970, 22). For years, “national urban policy” has simply meant an enforced axiom that the market decides, and this commitment has gone hand-in-hand with changes in the politics of information. Bipartisan commitments to deregulation and devolution in successive Congresses and presidential administrations has led to a localization and privatization of regulatory tasks. At the same time, public information has become increasingly privatized through active and passive means.

Perhaps none of this is genuinely new; the Census Bureau, after all, has been part of the Department of Commerce for good reason. Yet some things do seem different now, casting Berry’s maps and data analyses in a very different light when viewed from the vantage point of 2004. It is significant, I think, that Berry introduced the telemobility metaphor with a
quote from a Kaiser Company brochure, rather than, say, a passage from Marshal McLuhan. Underneath Berry’s (1970) deceptively clean maps of color-television market penetration, behind today’s maps of Internet activity, is a landscape bloodied by battles over data, privacy, copyright, patents, and trademarks. The maps are structured by local, national, and international wars over intellectual property. Even plant life is up for grabs in property-rights claims, giving an entirely new meaning to simple maps such as those showing county-level agricultural land uses. The growth of private information dossiers with credit records and consumption behavior, along with new means of linking public and private sources in enormous relational databases, has spawned a geodemographic marketing industry devoted to the profitable harvesting of prospects from each of Berry’s (1970) daily urban systems. Telemobility and similar metaphors offer the illusion of free exchange of information and the annihilation of space by bandwidth. But the geometric advance of data and telecommunications technology simply provides new and (publicly) unregulated arenas for social, political, and institutional relations. There is no consensus on whether the virtual places of telemobility are conducive to more oppressive or more emancipatory social relations, but the dangers are clear. Thus, although we can produce maps here similar to those Berry (1970) compiled, our analysis and interpretations would involve a far more intricate and uncertain reckoning with the notions of inversion and telemobility. Globalized telemobility means a rich world of information, data analysis, and communications. But it also means a world of dot-com commodified irrational exuberance and infectious greed, pump-and-dump daytraders, Long Term Capital Management, Enron, WorldCom, Napster, spamming, thousands of computer viruses and the resulting emergence of a sophisticated computer security industry, and difficult legal questions regarding public and private surveillance, data-mining, informational profiling, and digital objectification.

A third change is apparent in the role and conceptualization of space. Monitoring and intervening in geographical change is now understood in dialectical terms, as space is used alternately to reinforce or challenge prevailing social and political relations. The central pillars of America’s daily urban systems—the automobile and the detached single-family home—constantly remake urban space in ways that lubricate capitalist accumulation and shape the genre de vie of workers and families. Privatization and devolution of social welfare functions of the state, alongside a simultaneous elevation and centralization of investment decisions, reshape regional spaces in ways that discipline locally tied workers and institutions. And the local state has stepped in with policing practices, antihomeless ordinances, and intensified surveillance to discipline those left out of the material benefits of corporate globalization. Again, we are certainly able to replicate some of the valuable maps Berry compiled for “The Geography,” but doing so confronts us with a more vicious use of space, as the state has retreated from most of its responsibilities to cushion the effects of market inequality. Contemporary versions of Berry’s maps are being drawn by Mike Davis, James DeFilippis, Kim England, Melissa Gilbert, Jason Hackworth, Steve Holloway, John Paul Jones, Mei-Po Kwan, Robin Leichenko, Don Mitchell, Paul Plummer, Laura Pulido, Paul Robbins, and many others.

A Living Revolution

Berry overlooks these new geographies. Rather than celebrating the ongoing intellectual resolution of binary oppositions that is the mark of a living tradition, or leading the search for common ground and the ground for common search by remaking, reconsidering, or representing his own approach, Berry concludes that we have gone astray. He reminds us that he is the only social scientist on the Council of the National Academy of Sciences, and in his efforts to educate other councilors about geography, he finds “nothing more persuasive than examples of quality science and no greater turnoff than what one council member described to me as the ‘fluffy thinking and congenital argumentativeness’ of many social scientists, as well as the ‘lack of reproducibility of their results’” (Berry 2000, 192). It is tempting indeed to give in to a congenital argumentativeness over the assertion of One Right Way to Do Scientific Geography, and the implication that we should jettison all parts of our field that are not granted prior approval by the so-called hard scientists on the
council. But that is not really necessary. Even if we accept Berry’s plea for a geography “firmly committed to individual rights, to the pursuit of generalizable understanding, to metaphysical realism, and therefore to science” (Berry 1993, 316), we see a new generation of geographers, engaging in “a continuing interplay between speculation and empirical investigation,” undertaking work that is “broadly based and multidisciplinary,” with “a continuing concern to keep one foot in theory and the other in practice” (Berry 2001, 561).

These are qualities I value, and I am hardly alone. Why not celebrate the vibrant research being done to understand geographies of the United States today? The infusion of critical social theory opens exciting and important new possibilities for scientific geography. Theories of context and contingency illuminate the inherently geographical expression and constitution of necessary social and economic relations, and modeling advances such as the expansion method, spatial econometrics, and ecological inference offer means of empirical analysis of contingency. Valuable critical perspectives on the social construction of “race” alert us to the risks of reified categorizations that ignore the specificities of time and place, while sophisticated multilevel modeling techniques yield precise estimates of the consequences—if not the processes—of persistent discrimination. Feminist perspectives on the geographical construction of difference reveal the fundamentally gendered nature of the daily urban system for women and for men, and some of these relations can be analyzed empirically with causal path analysis, partial decomposition analysis, covariance structure models, or innovative fusions of Hagerstrandian time-geography and cutting-edge geographic information systems and visualization techniques. Regional political economy offers a valuable path away from the dangerous dichotomy between a quantitative new neoclassical economic geography and a qualitative cultural economic geography, while regional applications of econometric estimators and spatial equilibrium models provide a compelling challenge to long-held, flawed assumptions about “free” trade and firm behavior. Poststructuralist and feminist critiques of political economy offer genuinely new ways of understanding the realm of the economic, and contemporary class heterogeneity in today's daily urban systems can be mapped with innovative manipulations of familiar public data systems.

This wave of new research is a vibrant, exciting spatial analysis that fuses the very best of the quantitative revolution with rigorous, challenging social theory. It is serious scholarship and serious science. Its practitioners—including delegates from the baby-boom generation as well as newly-minted twenty-something Ph.D.s—are busy doing geography while vast swaths of their own discipline are dismissed as “armchair socialism” or “dreamtime postmodernism” or social-science versions of “cold fusion” (Berry 2001, 561). They are working hard to understand geographies of the United States in the year 2004 and to use science, ethics, policy, and politics to make them better. I am not convinced that their work is made any easier by repeated assertions of the old dichotomies, which only risk continued intellectual violence. Presented with heroic narratives of the quantitative revolution as an Augean period (Gould 1979), many younger geographers conclude that the stables need to be cleaned out once again. Others, entranced with the possibilities of an automated geography, cheer on Quantifactus as he wades across the Fluvial Calculus once again to kidnap Geographia (Gould 1985). Such choices are unnecessary and dangerous. Berry’s important work, as exemplified in “The Geography,” helped launch a revolution. It lives today by changing, as a new generation of master weavers moves beyond the old binaries to create a tapestry of social theory and quantitative analysis that helps us understand geographies of the United States and the world.

**Literature Cited**


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