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Beyond Difference: From Canonical Geography to Hybrid Geographies

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Geography as a discipline has evolved into a field of enormous breadth in the last century. While distinctive theoretical perspectives have emerged in different periods, the ebbs and flows of new approaches are often marked by vitriolic contestations. In response to articulations of new visions of what geography is or should be, debates often turned into antagonistic discourses that are surprisingly tenacious once being set in motion (Martin 1989). In the process, individual geographers are increasingly being identified in terms of distinctive geographical traditions or specialties that are often perceived as incompatible if not outright conflicting. Areas of geographic inquiry perceived to be incompatible gradually drifted farther and farther apart over time in the intellectual landscape of the discipline.

The twentieth century has witnessed at least two major rifts in geography with lasting effect on the discipline. One is the separation of physical geography from human geography, which stemmed from the ontological separation of nature and society in geographic discourses (FitzSimmons 1989; Hanson 1999; Massey 1999, 2001). The other is the separation of spatial-analytical geographies from social-cultural geographies through attempts to create a mode of disembodied geographical analysis that separate spatial patterns and relations from social, cultural, and political processes (Sack 1974; Soja 1980; Gregory 1981; Sayer 1985; Rose 1993; Brown 1995).[1] As a result of this separation and subsequent rounds of critiques through Marxist, humanist, feminist, poststructuralist, postcolonialist, queer, and other critical perspectives, social-cultural and spatial-analytical geographies are increasingly perceived or represented as irreconcilable spheres of geographical endeavors (e.g., Gould 1994, 1999). In the process, human geographers have become identified in binary and pejorative terms: social theorists and postmodernists on the one hand, and spatial analysts, quantifiers, or GISers on the other.

Despite several attempts to address this social-theory/spatial-analysis rift in geography and imagine alternatives (e.g., Pratt 1989; Lawson 1995; McLafferty 1995; Barnes and Hannah 2001; Plummer and Sheppard 2001; Sheppard 2001; Kwan 2002c; Schuurman 2002), the division seems deeply entrenched and remains a significant shaping force in contemporary American geography. Further, the rift seems to have magnified over time through rounds of polarizing debates and to have led to a situation of mutual indifference and absence of dialogue between these two groups of geographers—a predicament that is arguably more difficult to overcome than antagonism. Recent reflections by geographers, however, have started to raise serious concern about this disciplinary dynamics (Pratt 1996; Johnston 2000b; Hannah and Strohmayer 2001; Kwan 2002b; Wyly 2004). The centenary of the AAG seems an opportune moment to think about the possibility of breaching this internal divide in American geography and to ask: Might it be possible to open up a bit the relationship between social-cultural geographies and spatial-analytical geographies?

In this article I explore how the social-theory/spatial-analysis split in geography arose. I argue that it is important that this rift be addressed in a more explicit manner because it will likely have a significant effect on American geography in the twenty-first century. I consider some possibilities for reconnecting social-cultural and spatial-analytical geographies. I examine the notion of hybridity and its potential for redressing this polarizing tendency in the discipline. I reflect upon how hybridity may be a productive stance for negotiating difference among geographers and geographies. I suggest that the fluid identities it allows can be beneficial for creative geographical research.

The Social-Cultural/Spatial-Analytical Divide

In repeated attempts to represent geography as a coherent body of scholarship and to establish a respectable

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identity in the science-social science community in the twentieth century, individual geographers had sought to provide a singular and overriding vision for the discipline (e.g., Schaefer 1953)—often invoking the notion of "science" and an ensemble of characteristics associated with it.[2] Important events in the process include denouncing geographical work of the preceding phase as utterly worthless, declaring an attempt to create something better and more challenging, and asserting that there is only one right way to do geography (Hannah and Strohmayer 2001; Wyly 2004). Formative tenets of a new vision may be followed by ex post epistemological rationalization, which means that epistemological justifications are neither a necessary nor essential part of the new perspective—but they nonetheless play a pivotal role in the ascendance of the new vision and in the fission soon to emerge (Barnes 2000).

Several things tend to happen at the formative moment of new visions of geography. There is a purification process through which existing perspectives thought to be incompatible with the new vision are declared unacceptable or considered impurities to be purged from respectable geographical practices (Latour 1993; Sibley 1995).[3] In this process, the diversity in perspective in geography is lost and subsumed under the imperative to represent the discipline in ways that enhance its respectability and status in the wider science-social science community (Johnston 2000a). The successful mobilization of a powerful actor-network involving a group of key figures and objects like textbooks—such as David Harvey's (1969) *Explanation in Geography*—will then animate the formative move into a forceful movement that creates new categories or specialties in geography (Barnes 2001, 2002). Once in place, difference and boundaries between the new and old perspectives have a strong tendency to rigidify through institutional processes—such as the establishment of new journals and specialty groups in professional organizations—which also help constitute the identities of individual geographers in terms of "counterpositional, A/not-A binaries" over time (Massey 2001, 13).

In the struggle to canonize a particular perspective, more moderate views are often ignored (Kwan 2002b). Although these voices can play an important role in reconciling the differences between conflicting perspectives and in rendering rapprochement more possible in later phases of an ascending vision, difference and boundaries are instead firmly asserted as if they are impermeable—for example, through polarizing debating practices such as "repeated assertions of the old dichotomies" (Wyly 2004, 94). Once established, boundaries are often clear-cut and cannot be crossed easily. Through these processes of polarization and boundary enforcement, alternatives are less likely to emerge, and geographers tend to be conveniently identified in terms of rigidified, incompatible, stereotypical, and binarized identities. Characteristics associated with the newly emerged binarized categories are often imputed to anyone with the slightest sign of being associated with those categories. Through this process of imputation, essentializing characterizations are finally codified by derogatory terms like "social theorists" or "quantifiers," which, in turn, dominate the collective memory and discursive structure of much of contemporary American geography.[4]

Beyond Epistemological Determinism

From decades of antagonism and struggles, it is clear that attempts to create a unified identity for geography based on a singular and purified vision seem to be untenable projects. Purification has never been fully successful, and geographical practices are far more mixed than what is often acknowledged (Gober 2000; Hubbard et al. 2002; Blunt 2003; Johnston 2003). Describing the change of geographical perspectives and practices over time as "an evolution in which traditions merged, overlapped and persisted alongside later developments to create an ever more complex structure" seems to be more appropriate (Heffernan 2003, 19). Easy methodological distinctions between early work as quantitative and current work as qualitative and ethnographic are also found to be highly misleading (Silvey and Lawson 1999). In other words, geography as a discipline has been a mixture of science, social science, and humanities, and there is considerable diversity in geography and within each specialty area or subfield throughout its history (e.g., Gregory 1994; Fischer and Getis 1997; O'Kelly 1999; Moss 2002; Anderson et al. 2003; Poon 2003; Oberhauser et al. 2004; Warf 2004). Instead of insisting on a unitary identity for the discipline, forging productive relations between different traditions, specialties and subfields seems to be a more viable strategy for enhancing the status of geography because each may have its appeal in different segments of the academic community and funding sources and each may strengthen others in interdisciplinary initiatives.[5]

It is in this light appropriate to ask why social-cultural and spatial-analytical geographies cannot enrich each other in meaningful ways and to consider various possibilities to reconnect them. In fact, not long ago, scientific methods were typically conceived as a means for progressive social change rather than an instrument of oppression, and recent critiques of science "does not necessarily render irrelevant the positive uses to which

scientific research can be put" (Hannah and Strohmayer 2001, 396). Further, the feminist critique of science by Donna Haraway (1991) also emphasizes the idea of reclaiming the power of modern technoscience for emanicaptory purposes (Kwan 2002a, b). This suggests that the apparent technical/scientific characteristics of spatial-analytical geographies should not preclude the possibility of their integration with social-cultural geographies—albeit some fundamental differences between these two traditions may limit the extent to which such integration can be achieved (Sheppard 1995).

Revisiting the relations between epistemology and method in geography would also be an important task in the attempt to reconnect geography's social-cultural and spatial-analytical traditions. As many recollections indicate (e.g., Morrill 1993), an important but often ignored aspect of the quantitative revolution is that its epistemological justification came years after quantitative methods had been advocated and practiced (e.g., Billinge et al. 1984). As Trevor Barnes (2000) argues, when geographers like David Harvey (1969) turned to positivism, it was actually an ex post rationalization of quantification. Careful historical examination therefore reveals that epistemological justification of spatial-analytical geographies was subsequent to the intent to create a new kind of geographic practice and there is no necessary connection between positivism and the use of quantitative methods in geographic research.[6] Similarly, GIS has existed long before its articulation as a new basis of scientific geography (e.g., Openshaw 1991), and the use of GIS does not require any prior epistemological justification. The technology itself does not constrain its users to any particular epistemology (Goodchild 1995; Wright, Goodchild, and Proctor 1997; Kwan 2002a, b).

Given that the relationship between a particular epistemology and a particular type of methods is not a one-to-one relation (Bennett 1985), we cannot infer a geographer's epistemological or political stance based merely on the method(s) used. There can be nonpositivist use of quantitative/GIS-based spatial analysis, and there can be positivist use of qualitative methods (McDowell 1992; Suchan and Brewer 2000; Sheppard 2001). Once this is recognized, it becomes apparent that the choice between critical social theory and spatial analysis is false (Wyly 2004). Perhaps we have fallen into the trap of conflating method and epistemology (Lawson 1995), and our collective memory left by decades of contestations and binarized discourses has hampered our ability to imagine creative connections between social-cultural geographies and spatial-analytical geographies. Further, it is also important to recognize that the ex post nature of epistemological rationalization does not render these justifications entirely irrelevant. Instead they, as systematic reflections on the rationale underlying strands of research practice, can be drawn upon for developing new vocabularies and alternative rationalizations that help reconnect social-cultural and spatial-analytical geographies.

Hybrid Geographies and Boundary Projects

The notion of hybridity may be helpful for thinking about ways of transcending the social-cultural/spatial-analytical split in geography. Hybridity in cultural studies refers to the fluid and performative subjectivity that resists the rigidity of any fixed and static categories of identity such as gender, race, and nationality (e.g., Bhabha 1990; R. Young 1995; Mahtani 2002).

It has also been used to transcend the binary constructions that posit nature and culture, science and society, or economy and culture as two independent and impermeable spheres (e.g., Latour 1993, 1999; Haraway 1997; Murdoch 1997; Whatmore 2002; Wolch 2002; Forsyth 2003; Warf 2004; Barnes forthcoming).[7] Hybrids are humans and nonhuman entities (e.g., objects, projects) that "travel" between and connect existing divisions, and hybridization entails a movement that seeks to integrate elements that are thought to be incompatible or conflicting. Hybrids "transgress and displace boundaries between binary divisions and in so doing produce something ontologically new," and movements of hybrids will likely "render certain binary divisions harder to sustain" (Rose 2000, 364). Pertinent to my concern in this article, hybrid geographies are geographical practices (or "boundary projects") that challenge the boundary and forge creative connections between social-cultural and spatial-analytical geographies.[8]

Many geographers have already practiced some form of the hybrid geographies referred to here. An awareness of their existence may help avoid the tendency of thinking geographical practices in purified and binarized categories and perpetuating the social-cultural/spatial-analytical rift. The most common hybrid practices are those that use quantitative or GIS methods to address issues informed by critical geographies (e.g., McLafferty and Preston 1997; Wyly 1998). Another type of hybrid geographies seeks to cross the boundary between geospatial technologies (GIS and GPS) and a qualitative understanding of the lived experiences of individuals in various cultural contexts (e.g., Parks 2001; Pavlovskaya 2002; Cieri 2003; Jiang 2003; Nightingale 2003; Bell and Reed 2004). These studies often use mixed methods to explore the multiple realities and stories constituted through the complex interactions between knowledge,

power, and social and political change. A third kind of hybrid geographies attempts to integrate critical social theory and spatial analytical methods. For instance, I have been working at the intersection of poststructuralist-feminist theory and GIS-based geocomputation and geovisualization methods in recent years. My research involves the development of GIS methods that seek to capture the complexity of lived experiences of individuals as they perform activities and travel in their daily lives (e.g., Kwan and Weber 2003; Kwan and Lee 2004). I "traveled" between GIS and critical social theory—each has mutually informed and influenced other in my work—and this "travel" has made the development of a feminist theory for GIS and critical GIS practices possible.

Besides recognizing existing hybrid geographies, hybridity can be negotiated as a location (or positionality) "between" social-cultural and spatial-analytical geographies for decentering the binarized identities associated with them. The fluid identities it allows may also facilitate the creation of productive connections between these two geographical traditions. Further, it is important to develop alternative vocabularies and metaphors that facilitate the movement between purified binaries and allow the possibility for a geographer to be both a social theorist and a spatial analyst at the same time (e.g., "critical GIS" or "critical spatial analysis"; Schuurman 1999; Barnes forthcoming).

Toward a "Post-Social-Theory, Post-Spatial-Analysis" Future

To conclude, I would like to offer some thoughts on the possibility of a "post-social-theory, post-spatial-analysis" future for geography.[9] This means a future in which social-cultural geographies and spatial-analytical geographies are no longer represented as the conflicting poles of an oppositional, A/not-A binary, and a future that is not haunted by unnecessary divides or stereotypes such as "postmodernist," "quantifier," or "GISer."

A major challenge for geography as a discipline is cherishing the diversity and richness of perspectives while enhancing its status in the academic community and society. Establishing respectable identities for geography based on a singular vision is an untenable project. We need to find ways to make geography a respectable discipline and to enhance its status without erasing difference within the discipline. We need to accept the incompatibility of different perspectives and to allow them to enter into constructive dialogue at the same time (Cloke, Philo, and Sadler 1991). We should focus more on understanding their differences, identifying productive connections, and exploring how they may enrich each other, instead of perpetually representing them as conflicting perspectives. Overcoming the imagined and real divides in our collective memory is perhaps one of most daunting tasks in the future of American geography.

An important source of insight is the work of feminist theorists and geographers. A major theme in feminist geography is writing and speaking across cultures, spaces, and social locations.[10] This literature has enhanced our understanding of the negotiation of identities and difference across social and geographical boundaries (e.g., Valentine 2002). Through research on themes like transnational identities and hybrid cultures, feminist geography provides powerful insights about the complex issues involved in "talking across a variety of divides" (Staeheli and Nagar 2002, 169), which will be particularly relevant to the future of geography.

It is also important to reconsider the evolutionary dynamics of American geography. Perhaps a major source of the problem is the influence of Thomas Kuhn's (1962) model of scientific revolutions on the development of our discipline.[11] Since Kuhn was taken to conceive of disciplinary change as a succession of perspectives, each eclipsing the other, and to advocate a clean break with existing practices and the dominance of a singular vision (e.g., Chorley and Haggett 1967), difference and diversity in perspectives have no role in this interpretation of his model. Further, this understanding of Kuhn's work tends to intensify antagonism within geography because it suggests that the normal state of human geography involves one perspective being victorious over another and that there is something wrong with the persistence of an incompatible viewpoint. It is therefore important to recognize that the Kuhnian model (as we used it) is not suitable for a discipline, like geography, in which a variety of perspectives and methodologies coexist at the same time. Instead, evolution based on thematic networks may provide a better framework for the development of geography in the future. Thematic networks cut across several perspectives, specialties, or subfields based upon a common theme. They encourage collaboration across different interests and can be flexibly reorganized in response to external changes (e.g., social changes or funding opportunities). By bringing together people with different or even conflicting perspectives, evolution based on thematic networks may provide a better framework for ameliorating the polarizing tendency within the discipline.

The manner in which debates are conducted will continue to have a tremendous impact on the future of geography (Pratt 1996). How to foster solidarity out of the differences and diversity within geography is of

significant import. The notions of "cosmopolitan tolerance" (Cosgrove 2003, 866) and "differentiated solidarity" (I. M. Young 2000, 221) are particularly relevant in this connection. The former is identified by Denis Cosgrove in his reflections on Renaissance cosmography, while the latter is proposed by Iris Young as a normative ideal for overcoming the problem of residential segregation. Both concepts emphasize the need to accommodate difference, to ensure individual freedom, and to allow for distance between groups, while sustaining the collective through tolerance and mutual respect that is based on the imperatives of larger contexts than merely local interests. If ideas like these can be put into practice, the future of geography would be very different from the past.

Lastly, what is crucial is the proliferation of hybrids, or geographies and geographers of the third kind: those that cut across the divides between the social-cultural and the spatial-analytical, the qualitative and the quantitative, the critical and the technical, and the social-scientific and the arts-and-humanities. It is a future not of "either/or" but of "both-and" (Barnes and Hannah 2001, 383).

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Notes

1. This is an overgeneralization that lumps a considerable variety of geographical perspectives and practices into an oppositional binary. By "social-cultural geographies" I refer to critical and interpretative perspectives that emphasize the qualitative understanding of place, human experiences, and social life. I use "spatial-analytical geographies" to refer to those perspectives that seek to analyze spatial patterns and processes through quantitative and GIS methods. This scheme ignores the "internal" discord between different perspectives within a group (e.g., between humanism and historical materialism in social-cultural geographies; see Kobayashi and Mackenzie 1989). I am also aware of the problem of perpetuating a binary that I seek to undo through this article.
2. An example is Fred Schaefer's (1953, 228) statement that, "Spatial relations are the ones that matter in geography, and no others."
3. An example is Peter Gould's (1979) reference to the formative moment of the quantitative revolution as "the Augean Period," with clear connotations of a purification or clean-up process—in this case traditional regional geography of the early twentieth century.
4. The processes of purification, canonization, polarization, boundary enforcement, and imputation outlined here are processes through which identities are constructed or perceived within the discipline (see Sibley 1995 and Hess 1997 for helpful discussions of these processes). The binarized identities produced by these processes, however, often do not reflect the actual practices of many geographers who work at the intersection of several different traditions and try to keep the social-cultural and spatial-analytical together in their work (e.g., Sheppard 1995). The realties of research practice within the discipline tend to be less binary than is often conveyed in the conflictual rhetoric.
5. See Felix Driver (2001) and John Marino (2002) on the improving status of the arts and the humanities tradition in geography.
6. Geographers in the spatial-analytical tradition have different views about science and the relationship between quantitative methods and positivism (Taaffe 1993). For instance, considerable differences exist between the views of four previous editors of *Geographical Analysis*: Michael Goodchild (1995, 1999), Emilio Casetti (1999), William Clark (1999), and Reginald Golledge (1999). Particularly intriguing is Casetti's (1999, 337) remark that, "when many voices are speaking up against science, its claims, role, validity, and impact . . . [i]t is important to keep in mind . . . that these voices may raise issues and themes that need to be addressed to redefine science and to produce better science."
7. See Gillian Rose (1995) and Katharyne Mitchell (1997) for a critical assessment of the concept. It should also be noted that there are limits to hybridization in human geography since some fundamental differences or incompatibility may be difficult to eradicate entirely. In addition, there may be other promising strategies besides hybridity. For instance, Jennifer Wolch's (2003) notion of "radical openness" neither entails a grand synthesis nor advocates the dominance of a singular perspective or a succession of approaches.
8. This notion of hybridity is in some way similar to the concept of "the third culture" discussed in Daniel Sui (2004, 67), by which he refers to the "synergy and cross-fertilization of creative ideas from both arts and sciences." See also David Gilbert (1995) and David Woodward (2001) on crossing the boundary between science and arts.
9. I am aware of the issues associated with any attempt to provide a vision for the discipline (e.g., Sayer 1999; Gregson 2003). My view here should be taken as personal reflections rather than an attempt to provide another overriding vision for the future of geography.
10. See, for instance, Heidi Nast (1994); Melissa Gilbert (1994); Richa Nagar (2002); Alison Mountz (2002); Geraldine Pratt (2002); Saraswati Raju (2002); Rachel Silvey (2002); Lynn Staeheli and Richa Nagar (2002); and Gill Valentine (2002).

11. It should be emphasized that it was geographers' "interpretations and use" of Kuhn's work that had been influential in geography rather than Kuhn's work itself. See Andrew Mair (1986, 345) for a helpful discussion on how Kuhn's work was misread and misused in geography—especially Kuhn's theory on the subjective and persuasion-based nature of scientific change and Kuhnian paradigms as tacit, taken-for-granted "rules of conduct" rather than formal statements of philosophy and theory.

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