

Quantitative Human Geography: Are We Turning Full Circle?

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The application of quantitative approaches remains a strong component within the portfolio of geographical practices. Sadly, however, it appears that many within human geography think otherwise, presenting it to students (notably in textbooks; Johnston 2006) as neither strong nor vital—if they think it worth mentioning at all. A range of rationales is presented for the exclusion, and many university departments no longer provide either (compulsory) introductory courses as parts of their core methods programs or substantive courses that draw heavily on their application.

This situation provides a context within which reflections about the achievements of “quantitative geographers”—especially human geographers—have to be placed. While we celebrate achievements, we have to consider what is necessary to ensure that this set of geographical practices does not simply fade away—at least in the short term, perhaps to be revived (or reinvented, we are very good at forgetting our history) at some future date. It may be some consolation that we are not alone in this—similar situations can be observed in other social sciences (apart from economics)—which might help provide collective strength to our fight-back. Complacency is not an option.

Many participants in the meeting on which this set of articles is based (as well as those unable to attend) had the benefit of coming to quantification through formal routes as part of their educational experience—undergraduate in some cases (mainly U.K.), postgraduate in others (mainly U.S.). This was certainly the experience of most of those trained in the 1970s/1980s. However, some of the original pioneers either lacked any training (I was one) or—like the Washington space cadets—learned about the approach with and alongside rather than from their mentors (Bill Garrison in their case).

As an undergraduate, I had a brief experience of statistics when Percy Crowe told us about correlation and regression through the example of rainfall totals at Mangalore and Bangalore: we got confused! As a postgraduate, doing an MA on central places in part of Yorkshire—having been stimulated, as Peter Haggett

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recalls, by Howard Bracey's nonquantitative work on social provision in rural Wiltshire, and then by the Lund volume from the famous 1960 symposium which my supervisor Walter Freeman lent me—I realised the need for statistical analysis, and found help in Stan Gregory's text. I headed off to Australia to study residential patterns in cities there; more statistical procedures were self-taught (I had no colleagues from whom I could seek advice; indeed, I had been employed to teach this material!). So was writing computer programs in Sirius Autocode (and punching them and the data onto paper tapes; I was prepunchcard!) for the work on classification with which I made my first appearances in the quantitative literature. (This got me an invitation to the original 1969 IGU Commission conference in Ann Arbor/London, where I made my first contacts with the luminaries who until then had been just names to me.) By then I had moved to New Zealand and discovered more approaches—such as factorial ecology which, with the help of Horst's (1965) book, I learned to program in FORTRAN. (For a while I had the only program in New Zealand that calculated factor/component scores, and was very popular!) And there I had colleagues with whom I could not only discuss such methods and their application, but learn the practical applications. (I recall with Chris Kissling and Doug Johnston booking the university computer for hour-long sessions in the middle of the night, when we had the building and machine to ourselves as we tried to make our programs work.)

From the outset I was self-taught, therefore—and so it has continued. But I have been lucky in that for much of the time from the years in New Zealand on my learning experiences have been undertaken among knowledgeable colleagues, without whose advice I would either have made lots more mistakes or, more likely, come to major blocks in moving my work forward. For most of my eighteen years at Sheffield, I was working alongside Stan Gregory, Bob Haining, Alan Hay, and David Knighton, for example; Alan, in particular, was instrumental in helping me develop the entropy-maximizing procedure (Johnston and Hay 1982) that I have since used—and developed (Johnston and Pattie 2000; Elff, Gschwend, and Johnston 2008)—with great returns, and was helpful in a range of other work. A similar symbiosis has occurred at Bristol, where I initially worked alongside Danny Dorling, Peter Haggett, Les Hepple, and Paul Longley. Between 2001 and 2007, the Spatial Modelling group involving Rich Harris, Les Hepple, Tony Hoare, Kelvyn Jones, Paul Plummer, and myself met weekly and generated some of the most stimulating informal discussions of my entire career; our substantive interests were disparate but we had a shared belief in the value of a quantitative approach. Sadly, Les is no longer with us (Harris et al. 2007) and Paul has returned to North America; hence, we face the task of rebuilding both numerically and as a symbiotic group.

Alongside those colleagues were the postgraduates, beginning with Dave Rossiter who did not go into an academic career but stayed in contact and was instrumental in our reviving and developing the Brookes methodology for evaluating electoral bias (e.g., Johnston et al. 2001). He was followed by Charles Pattie, who has remained a close collaborator for more than 20 years, successfully

exporting a geographical perspective into electoral studies (Johnston and Pattie 2006)—and then Ed Fieldhouse, Andrew Russell, Andrew Schuman, and Dave Cutts.

So, from a loner at the start, I have been privileged to work for much of my career in departments that valued the approach I favored, alongside colleagues who shared my interests—not least in training and encouraging other students to join us—and provided stimulating intellectual environments. I could also expect to find like-minded people at conferences, with some of whom collaborations have developed. Now, that still happens at meetings within the (relatively) small community of political scientists interested in elections but rarely, I fear, where geographers congregate.

The current situation within human geography is not only that quantitative methods are not valued in many places so that the supportive milieux for successful working are rare but also that they are denigrated by some of our colleagues. Training programs in many departments neither introduce the methods we routinely deploy (certainly at anything more than the most basic of levels) nor, more importantly, teach the orientation to research practices which characterize our work. We, like many other quantitative social scientists, have let ourselves be elbowed out of curricula and staff positions that “quantifiers” might once have occupied. Furthermore, those remaining active have retreated into their own fastnesses, publishing in specialist journals and avoiding the more general outlets, reducing our visibility. Thus, many students do not encounter our sort of work—except serendipitously—and if they do, is self-teaching now feasible given how far we have advanced in our technical sophistication? To some extent, we are participating in our own marginalization.

So, while celebrating the past we must also worry about the future. Are enough “quantifiers” left in enough places for optimism that the changes initiated by a few in the 1940s–1950s and followed up by more in the 1960s–1970s will remain as a core component of the geographical (especially the human geographical) portfolio? And if not what can/must we do? How do we convince our colleagues and, perhaps even more, students of the validity of our approaches and their relevance to understanding much of the contemporary world?

The session on which these contributions were based focused on revolutionary “legends.” The first definition of that term in the OED is “the story of the life of a saint,” and other definitions include “an unauthentic or nonhistorical story” and “a person of such fame or distinction as to become the subject of popularly repeated (true or fictitious) stories.” I doubt that any of our pioneers justifies canonization, despite their major contributions, but as geographers continue to remake their discipline quantitative approaches will hopefully not become what Wikipedia defines as legendary—narratives of “human actions that are perceived by both teller and listeners to take place within human history and to possess certain qualities that give the tale verisimilitude.” We must certainly celebrate the past, but not be consigned to it!

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