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Commentary

Reclaiming the map: British geography and ambivalent cartographic practice

The location map printed on the back page of the RGS-IBG 2007 Annual International Conference programme prompted us to think again about the place of maps in the geography discipline in the UK. This mundane representation, simply showing the streets of the West End of London and the conference venues as oversized push-pins, was taken from Google Maps. (1) RGS-IBG is a 'world leading' geographical organisation with a long history of involvement in the state of the art of mapping. The Map Room in their headquarters in Kensington Gore gives readers access to one of the largest private map collections in the world and has recently benefited from a major cash injection to improve access to its collections. (2) And specialist cartographic skills still exist to create bespoke maps. The conference organisers could have designed a customised and appropriate location map, but the fact that they chose not to, reflects an interesting moment in the way our discipline deploys mapping which, we think, can be read as symptomatic of three wider issues: first, the ambivalent relations between mapping and the work of geographers in the UK over the last decade; second, a continuing disregard for professional cartographic practice; and third, British geography's disassociation from newly significant approaches to the visual representation of space, and spatial practices, that are blossoming in wider social contexts and particularly on the web.

Geographers don't map anymore do they?

A lack of map use has been well noted in the discipline over the last couple of decades (Martin, 2000; Wheeler, 1998). Across a range of geographical practices—be it research, publishing, or teaching—many, and perhaps the majority, of geographers do not see the need to map (Kain and Delano-Smith, 2003). Paradoxically, mapping is much easier to do, but in the geography discipline is best left to the technicians in drawing offices and to the GIS 'geeks'. Physical geographers may map their results on occasion, but most human geographers somehow feel that mapping is a pursuit beneath them, or somehow antithetical to progressive work. They may deconstruct the cultural significance of different media, but they only rarely make and use maps. The map as an artefact is apparently seen as tainted, embodying descriptive, naïve, and acritical values—part of an ocularcentric orthodoxy central to many positivist knowledge claims, and rejected by numerous researchers.

Evidence that many geographers do not feel at home *working* with the map can be found in significant disciplinary places. For example, in the period from 1990 there has been a marked and continual reduction in the number of maps illustrating articles published in *Transactions of the Institute of British Geographers*, the preeminent journal of British geography, a decline from an average of 2.5 maps per article in 1989 to under 0.5 maps per article by 2006.⁽³⁾ Mapping seems to have been squeezed out as a side effect of changing research priorities. Furthermore, there was only a single session at the RGS–IBG 2007 Annual International Conference that explicitly

⁽¹⁾ Currently available at http://www.rgs.org/NR/rdonlyres/CCAE653C-F7F8-45AE-B451-9C2280EDC812/0/GoogleMapBackcover.pdf. Technically, its effectiveness for orientation and navigation is weak, with a poor design aesthetic and a generic, web source.

⁽²⁾ A £7 million Heritage National Lottery Fund grant, http://www.unlockingthearchives.rgs.org/.

⁽³⁾ Source: authors' calculation.

considered mapping, and no specialist research group in RGS-IBG is concerned with visualisation, cartography, or mapping per se. Nor is mapping well represented in other indices of disciplinary practice. There are few PhDs that explicitly focus on mapping in the UK, and limited research funding. Geography as a discipline has also retreated from collecting mapping and increasingly no longer maintains distinct departmental map collections.⁽⁴⁾

It may be tempting to see the decline in mapping solely as a reflection of technological change: GIS in this view has 'replaced' the map; spatial analysis offers more powerful tools than cartographic representation (Fisher, 1998). However, the decline also parallels the rising significance of 'theory' in geographical discourse. Epistemological alternatives to empiricist and 'scientific' studies have gained ground, at the same time as geographers have begun to employ different visual media. The drastic decline in regional studies has exacerbated the retreat from maps.

The situation can be contrasted with the much richer diversity of mapping in North American geography where a different disciplinary politics operates. In the USA in the four decades after the Second World War an academic subdiscipline of cartography grew with its own graduate programmes, distinct paradigms, and literature, far in excess of developments in the UK (McMaster and McMaster, 2002). Today there are more postgraduate students doing mapping research in the USA, a better established institutional context, readily available cartographic data in the public domain, ongoing professional networks fostering active collaboration, and a much larger GI industry encouraging these trends. Cartography is still much better integrated with the geography mainstream in the USA: there are many sessions at every AAG Annual Meeting, and the active and diverse research sponsored by the Cartography Speciality Group, (5) which Sui (2004) reports has consistently been the third largest speciality group in the organisation. The rise of GIS has not seen such a severe retreat from cartographic representation as has taken place in the UK.

However, despite the decline in cartography use within geography at a university level in the UK, the map remains one of the few emblems of the discipline for those looking in from outside. On the street and in the pub, British geography is still about maps. This difference between our academic practice and everyday lay perceptions also reflects the gulf that has opened between school and university geography in the UK. 'Map skills' are still a central part of the National Curriculum, where pupils are taught spatial literacy, and where mapping is almost always assumed to be apolitical, neutral, and a scientific process (Winter, 2007).

Meanwhile it can be argued that geography as a discipline in the UK is facing challenging times. The subject is declining in popularity at A-level, in part because of administrative changes in the organisation of course selection, but also, it has been argued, because of the way it is being taught. The image of the school discipline is old fashioned and sometimes uninspiring, dominated by a "tired and content-heavy curriculum" (Winter, 2007, page 350). Learning mapping skills at school all too often emphasises training and technical abilities, at the expense of wider social concerns or emotional engagement. In universities the challenges are different: disciplinary identity is under threat, following recent administrative upscalings resulting in closures and mergers with other subjects, but the decline at A-level clearly also affects the viability of university programmes. Maps hardly feature in university geography in the UK,

⁽⁴⁾ In the period from 2004 to 2008 departmental map libraries shut in Bristol, Durham, Edinburgh, Exeter, Salford, Sheffield, Swansea, and the School of Oriental and African Studies. In Manchester, Portsmouth, Oxford, and Reading they were relocated into the main university library.

⁽⁵⁾ See http://www.csun.edu/~hfgeg003/csg/.

except as a subsidiary part of GIS in degree programmes and here too mapping is also only rarely used in imaginative or thought-provoking ways.

We believe, the Google Map used on the RGS-IBG 2007 Annual International Conference programme is symptomatic of the above and furthermore sends a powerful signal that geographers care little about cartographic quality. We contend this is short-sighted because the map offers geography one of its few 'unique selling points' that can distinguish us from other parts of the academy, at a difficult time for the discipline. Maps are visual, immensely appealing, and can be rhetorically powerful, and should, we believe, be at the heart of geography's identity. We can ill afford to turn our backs on popular perceptions of the discipline and the role of cartography!

Cartographers: who needs them anymore?

The skills of professional cartographers to fashion uniquely powerful and affective images of place are increasingly being disregarded, in the search for easier and more cost-effective solutions. This is part of a change in the political economy of cartography. A comparison with fast food illustrates this change powerfully. The 'McDonaldisation' of the food industry has led to cheap, superficially tasty, and globally uniform food products, able to generate large profits, but this convenience comes with significant social and cultural implications. 'Mc-Maps', made with easy-to-use technology, are also cheap to produce, and seductive at first glance, but can also leave a nasty taste in the mouth. Often, too, they lack lasting impact, have supplanted better alternatives, and are low quality. Cheaper production methods, widely accessible desktop mapping tools, and new distribution channels such as the web devalue real skills in surveying, compilation, categorisation, and cartographic design. The British Cartographic Society has recognised these damaging trends, launching a "better maps campaign" aimed at other graphical professions⁽⁶⁾ and in 2007 it completely reconfigured its annual conference into a training event, concerned with teaching map-design skills.

Publicly accessible cartography is increasingly in the domain of a handful of online publishers (dominated by global media corporations such as Google and Yahoo) that draw maps on demand from a few monopoly database suppliers. These portals are more concerned with attracting advertising revenue than with mapping quality. Superficially, mapping is more available to all, but just like the McDonald's in every district, so web-served mapping increasingly offers only a very limited diet, controlled by distant and unaccountable corporations who could withdraw or change mapping at will (Zook and Graham, 2007). Tasty organic alternatives exist on the web but are harder to find, more expensive, and cater for minority interests.

In the UK, cartography as a separate discipline has been in decline for nearly two decades (Forrest, 2003): delegate numbers at cartographic conferences peaked in late 1980s. Membership and participation in cartographic societies declined throughout the 1990s. Cartographic offices in British universities increasingly no longer simply design maps for geographers. Instead they fulfil different roles, such as web design, or marketing. Mapping often becomes a sideline. By 2007 it was no longer possible to study for an undergraduate degree in cartography at a British university (Forrest, 2007), and mapping research has been largely subsumed into the broader orbit of GI science and geomatic engineering.

Yet, the widespread disregard for professional cartography belies a significant growth in all kinds of mapping and a genuine creative flowering of alternative, collaborative and everyday map-making *outside* the academy and particularly on the web.

Mapping reinvigorated?

The fact that the RGS-IBG conference organisers sourced a 'Mc-Map' for the location map on the programme is, one might argue, merely a sign of taking the easiest path. But we argue on the contrary that this kind of mapping choice (quickly grabbing a map off the web) is perhaps symptomatic of the rise of new forces in the visual representation of space.

Methods of making and using information are changing. Whilst there is a continuing need for high-quality bespoke printed maps fashioned by professional cartographers, commissioned and sold by specialists, communities are now also able to make their own targeted maps, deploying collaborative mapping tools, with a 'mash-up' mode of production and a hacking ethos. The mash-up combines heterogeneous online sources, adding appropriate individual material and has the potential to deliver radical and empowering alternatives that have so far been largely absent in the rhetoric of participatory GIS. A well-designed map mash-up can meet local needs, instead of just being part of a commodified circulation of uniform cartographic images reinforcing the interests of the powerful. Map hacking is becoming common and arguably offers an increasingly effective way of meeting user needs, as well as opening up wholly new possibilities. Mapping becomes both easier, and we would argue, potentially better. It can be argued that these new collaborative strategies can reinvigorate mapping.

Beyond mashing together other people's data, a growing number of individuals and groups are active in subverting existing structures with 'wiki' mapping projects building 'bottom-up', open-source, cartographic databases that do not rely on corporations but exploit the voluntary effort of many 'amateurs' (cf Goodchild, 2007). Much energy is being expended in developing alternative community-owned collaborative cartographies, for example, unpaid 'amateurs' working on the OpenStreetMap project⁽⁷⁾ have mapped 66 000 km of roads in the last six months and their data and participatory approach are increasingly being taken seriously by major players in the geomatics industry.

These 'amateur mappers' are almost completely disassociated from British academic geography. Pressures in the academy in the UK push researchers towards narrowly defined outputs, reflecting the commodification and neoliberalisation of our work (Berg, 2006), which leave little time for significant DIY or community activism. 'Amateur mapping' is hard to justify on the Research Assessment Exercise return. It does not generate income. It does not hit the right internationally recognised journals nor signify as an esteem indicator. The ongoing and practical nature of this mapmaking is at odds with the short timescales and narrow research orientation of neoliberal agendas.

However, geographers have an intellectual tradition that allows us to help make these maps much more fit for purpose, and to offer significant explanations for these profound social trends. If a whole generation is growing up expecting to make and use these maps, shouldn't more geographers be speaking about these issues? We believe it is firmly in the interests of the discipline to be a part of this process, instead of regarding the map as an old-fashioned icon for a discredited kind of past practice.

Conclusions

It seems likely in the short term that geography in the UK will continue to have a strangely ambivalent relationship with mapping, but this need not be so. There is real scope to begin to reinvigorate our own mapping practice, starting with how we teach students about the nature of maps, and how they can use them creatively to tell uniquely spatial stories—a vital and distinctive skill that all geography students should

^{(7) &}quot;OpenStreetMap is a free editable map of the whole world. It is made by people like you" (http://wiki.openstreetmap.org).

take from their degree. The emerging field of critical cartography (Crampton and Krygier, 2006) needs to be enacted in the UK as well. We need to engage with these new kinds of mapping, acknowledge the iconic role of the medium for the discipline, and investigate the ambivalent relationships between geography and cartography. And, crucially, new maps need to be *constructed* as well as deconstructed. Maps in the next RGS-IBG Annual International Conference programme should show the potential of our discipline to innovate, instead of simply replicating a lowest-common-denominator cartographic product.

And there are some grounds for optimism, we believe. Mapping has been at the centre of research across the humanities and social sciences for the last decade (cf Abrams and Hall, 2005) and belatedly geographers are starting to change their practices. Many geographers still signal their disciplinary identity by displaying maps on their departmental and office walls, and still deploy the mapped image to exemplify in lectures. Maps are central in the recent "Give Geography Its Place" campaign, not least in the logo for the campaign, which features a global map image. (8) A range of research initiatives is beginning to bring maps back to the centre of geographical scholarship. A new Maps and Society Commission based in the UK was established in 2007 by the International Cartographic Association to foster social scientific research into mapping, and encourage a dialogue between the technical worlds of cartography and wider social groups engaged in everyday mapping. Monmonier's (2007) review of the field recently noted increasing trends towards humanistic mapping research in the published literature. Conference sessions and monographs increasingly emphasise contextual understandings of mapping (eg Dodge et al, 2008; Monmonier, 2006, Wood and Fels, 2008). Major recent British mapping research projects emphasise the innovative visual power of maps, from the striking Worldmapper cartograms being widely disseminated across schools by the University of Sheffield, to the innovative deployment of historical map sources in GIS and the more accessible use of high-quality cartographic data served from the EDINA Digimap service to higher education. (9) Populist thematic atlases continue to depict British identities and inequalities using mapping in innovative ways, relying on the visual power of mapped sociodemographic data, that increasingly plays an important role in the policy process (eg Dorling and Thomas, 2007). Nor are institutional structures always negative: at the University of Manchester a new map library is being established with a substantial financial investment to create purpose-designed reader space, and new staff appointments, resulting in the best facility in the north of England.

For this potential to be realised, however, a number of things will have to change. There needs to be an RGS-IBG research group to encourage and facilitate critical and creative research on mapping. Mapping skills may still appear in the geography benchmark statements, (10) but their deployment by geographers needs to reflect these words. More courses need to be taught, and more mapping incorporated into existing courses, instead of shut off in the somewhat marginalised GIS domain. More creative research needs to be carried out around the real world ways in which mapping is deployed. As geographers we need to use the power of maps once more. We should get out there and make our own maps!

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⁽⁸⁾ See http://www.ggip.co.uk.

⁽⁹⁾ See http://www.worldmapper.org/; http://www.visionofbritain.org.uk/maps; http://edina.ac.uk/digimap/. (10) "[P]reparing effective maps and diagrams using a range of appropriate technologies" (http://www.gaa.ac.uk/academicinfrastructure/benchmark/statements/Geography.asp).

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