



Understanding Social Change

Maps, money and the military

David Goldblatt

The Ordnance Survey started off in England as predominantly a military affair early on in the 19th century, panicked by the thought of the invading Napoleonic forces from across the English Channel. The Parliament ordered that the Royal Ordnance at the time surveyed the south coast in preparation for the fighting of battles all along should there be an invasion. Was that the same kind of motivation at work in Ireland, was it a military affair providing maps for the army to put down the rebellious and independently minded Irish at the time?

Pat Jess

That's a very plausible suggestion and I think one probably one that many people would expect to be the case, but if you look at the commissions that were sitting in Ireland in the early part of the 19th century the big problem was the other great evil which was taxation. Now the survey that commenced in England beyond the fear of Napoleon was carried out at one inch to one mile, but in Ireland the smallest land denomination which was used for taxation purposes is something which you don't have in England – it's called the town land, and it's smaller often than a parish. Parishes are fine at one inch to a mile in England, Wales and an inch to a mile was pursued in Scotland, but it just wasn't going to work for the purposes of taxation, for making quite sure that everybody paid up in terms of local tax against local area.

David Goldblatt

So you made a much more detailed map given the small size of Irish landholdings?

Pat Jess

Yes, yes.

David Goldblatt

The detail is actually pretty extraordinary on this map and by comparison to the other ones we've looked at I mean it's kind of just an almost conceivable technical leap to produce a map like this compared to Blaeu's map, for example, of West Africa. How exactly do you go about making a map like this, and what does it actually involve to do this?

Pat Jess

It involved a huge logistical exercise and to some extent that was why the Royal Engineers was appropriate. There were surveyors working in Ireland who were perfectly capable of measuring distances and direction using theodolites, using measuring chains, and so on, but in order to organise the whole thing, as you say, over the whole country, it needed more administration, it needed more organisation, but the other thing that it required was a baseline, the so-called measured mile, because surveys at that time were done on a basis of what's termed triangulation.

David Goldblatt

Triangulation, now take me through triangulation.

Pat Jess

You need a baseline and that meant building towers on a flat area which, in fact, is in the north of the country at McGilligan Strand, County Londonderry, and based on that line you then look for other points on the landscape which you can fix and you build up triangles over the whole country, and in that way you're able to measure to site for direction and distance.

David Goldblatt

OK, and presumably those points that make up the triangles have to be on the tops of hills so you can actually see them, is that right?

Pat Jess

Right now, what you do is you – remember this is before the widespread modern road system, before railways and that sort of thing – you have to haul all this equipment up mountains and then you have to sit there presumably until you can see your next mountain and, interestingly, this was the source of the invention of limelight. You may associate being in the limelight, or out of it, as a sort of theatrical thing, but the Irish atmosphere, as they termed it, was notoriously

David Goldblatt

Foggy?

Pat Jess

Foggy, yes, they didn't see too well, so they developed limelight as a way of being able to see greater distances, often at night. Distances of over fifty miles were suddenly within their scope and this made it a lot easier.

David Goldblatt

Now for 19th century technology fifty miles sounds like a pretty long distance to be, you know, to be measuring over, I mean today we could do that kind of thing with satellites and pretty sophisticated technologies, just how accurately did Victorian engineers manage to map the distances and the topography of Ireland?

Pat Jess

The first edition of the Ordnance Survey which was being published in the 1830's and '40's was the basis of all the Ordnance Survey maps published in Ireland right up until electronic revisions were being made, and global positioning systems and so on brought in. When they re-measured the baseline which had been set up in the 1830's they found that it was accurate to within one inch in eight miles, so that was the level of accuracy which those 19th century surveyors managed to get hold of.

David Goldblatt

So it's extraordinary – something that in some ways looks so kind of handwritten with its very kind of particular types of lettering and it looks like it's kind of hand etched in some ways, contains really the most extraordinary technological sophistication and accuracy. There's a strange contrast in the map between those two elements to it.

Pat Jess

There are and the employment of the Royal Engineers meant, of course, the employment of ordinary soldiers, so to speak, not only were they disciplined and organised but they were also cheap, they were paid a shilling a day. The head of the Ordnance Survey in Ireland, an officer called Colby, was concerned that they should read their Bibles, educate their children and not look ridiculous by wearing moustaches and beards, but interestingly also they were not to be used in quelling riots or civil disturbances, so it's a, it was a massive undertaking, massive undertaking. They also collected a tremendous amount of written information which Colby intended should be published as what were termed memoirs. They collected all the place names and wrote them down and of course the naming and claiming of places is often quite a debatable, quite a contentious issue. Should they name the places in Irish? Should they name the places in English?

David Goldblatt

And what did they opt for?

Pat Jess

Well it depends which side of the debate you probably fall upon. All the place names reputedly were collected and what was said to have been done was to publish on the maps the common form of place name, sometimes more Irish, sometimes more English.