John Davies and Alexander J Kent

The Red Atlas: how the Soviet Union Secretly Mapped the World

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When, during the Second World War, it became apparent that the Soviet Union’s future role would be as a world power with global influence and ambition, Stalin commissioned what the authors describe as ‘the world’s largest mapping endeavour’. The Military Topographic Directorate of the General Staff of the Soviet Army, known as the VTU, was ordered to produce a set of comprehensive maps of the whole world, on a number of different scales and using a standard symbology. The project continued until the demise of the Soviet Union in 1991, producing and updating as many as a million different sheets and thousands of detailed city plans. The products of the Soviet global mapping project are very detailed maps of familiar places rendered in unfamiliar colours and symbols and, crucially, with all the place names in the Cyrillic script. The effect is to create a frisson, a call to our imagination of the cold war, something redolent of Le Carré, or of a genre of ‘what if the Russians had won’ novels.

The Red Atlas reconstructs the story of this endeavour through detailed analysis of such maps as have been available to the authors, from which they propose hypotheses about the methods of the VTU and the likely uses which were envisaged for the maps. The challenge for Davies and Kent is that the VTU’s work, and indeed the maps themselves, are still classified in Russia and there are few oral sources (and none in evidence in this book), even
though many of the thousands who worked on the project must still be alive. The maps which are known in the west, and hence to the authors, are derived from the material which survived the collapse of the Soviet Union, either in the official collections of the Baltic States or through entrepreneurial encounters between Soviet military personnel and western map dealers.

The czarist state used maps as a tool of imperial governance. Indeed, with the world’s most extensive land empire, mapping was as important for Russia’s defence and expansion as sea charts were for Britain’s domination of the sea. A military topographic department was established in 1812, and in 1919, Lenin decreed that all mapping was to be carried out by the state. Until the 1940s, the main focus was on the western part of the empire – presumably for defensive reasons. The mapping of the USSR at the scale of 1:100,000 was first completed in 1954, requiring 13,133 sheets. The global mapping project was aided from 1962 by the Zenit space project, which took satellite photographs of the whole planet. From close examination of the maps and comparison with the western maps which were used as source materials by the VTU, Davies and Kent suggest how these technical sources were combined with other types of intelligence to produce the striking maps.

The book conveys great enthusiasm for the maps themselves. Aimed at a general audience with a predilection for maps rather than at historians, the book is copiously illustrated. Indeed, the 234 pages contain a relatively concise text with limited critical apparatus. The most detailed account is of the conventionally cartographical characteristics of the maps, and the authors emphasise projections, issues of interface between adjacent maps, the use of the International Map of the World grid of 1913 as a basis for the project and the comprehensive and the consistent symbology which was adopted. They make a number of general observations which are of great interest. During the Soviet period, the maps of Russia and eastern Europe which were available to the Russian population and tourists were uniformly inadequate, at times deliberately misleading. A parallel civilian mapping infrastructure, the Central Administration for Geodesy and Cartography of the USSR Council of Ministers (GUGK), had been set up to provide maps which on occasions included deliberate errors as well as omissions. The result of this was eventually to be that civilian planning authorities lacked accurate enough maps for infrastructure planning. The authors assure us that the VTU maps were of a high degree of accuracy, suitable for military use.

Davies and Kent consider why the Russians did not just use commercially available maps, where good ones were available, as they were in the USA and the UK for example. They suggest that the answer in part was that they assumed that publically available maps in the west would be as unreliable as their own. Of course, they also wanted maps which could be
read by Russian speakers, which meant rendering all the place names in the Cyrillic alphabet, and they wanted a consistent set of symbology across the whole global map. More fundamentally, though, Davies and Kent suggest that the Russians were out to create maps which were the visual embodiment of the totality of the useful intelligence they had about places, bringing together what they gleaned from western maps, other sources such as directories, satellite imagery and human intelligence. In the interests of clarity, they omitted information which they thought less useful – typically, references to historical monuments. What was useful was determined by what the maps were for, and, in the absence of Soviet documentation about the aims of the whole project, they can only speculate. These were not strategic targeting maps, although they are full of militarily relevant information about dockyards and factories, police stations and military bases. They provide details about transport and communications which go beyond the scope of ordinary OS maps, adding information about which railways were electrified, what were the weight limits for bridges and the speed of flow in the rivers. Davies and Kent suggests that these were maps for administering territory, perhaps after a coup, not for devastating it in a war.

The authors make a fascinating set of observations about the extent to which the western sources were supplemented with observations on the ground – and by implication by espionage. They conclude that, in the UK at least, very little was added on the basis of human sources, although they did better with naval charts. The visits of Russian marine research vessels were frequently used for gathering geographical information, although this was often obvious enough to the British authorities. In Sweden, Russian agents seem to have been more successful. When the Russian maps of Sweden were published in the 1990s, the Swedish authorities were apparently shocked by how much they showed of their defence establishments, and even provided information about the density of trees in the forests, crucial information for a tank-led invasion. Such detail, Davies and Kent suggest, would have been collected by diplomats and others on picnics in the woods.

While there was sometimes serious misunderstanding of what the surveillance photographs or the western maps showed – work on a gas pipeline in Yorkshire was mistaken for a new road, and the designation ‘Roman Pottery Kiln’ was read as the name of a housing estate, for example – on the whole the compilers drew extensive useful information from these sources. They were particularly adept at producing accurate transliterations of place names, and even got Wymondham right. In Ireland, they did the same for the Gaelic place names as well as the English ones. This suggests either access to very good reference books or information from people - perhaps diplomats – who had a good knowledge of foreign countries and languages.
The frustration is that, from *The Red Atlas* at least, we don't know anything from sources created by the project, other than the maps themselves. There is very little in the book about how the maps were produced or how choices were made about what was important, which sources should be used and how the information could be checked. There is a very brief glimpse into the internal structure of the VTU in a section where the authors look at the few examples of maps where the metadata names the people responsible for the work and for managing production. From hundreds of sheets examined, only 38 compliers are named (24 of them female), 42 editors (all but one male) and 63 unit commanders (all of them male military officers). But here the book raises more questions than it answers and we are left wanting to know more about the precise purpose of the maps (something more fine-grained than 'military and administrative') and perhaps even something about how they were used in practice. Did spies use them, for example? Davies and Kent show some interesting materials used for teaching the symbology, so there must have been some view taken by the Soviet authorities as to how military personnel should use it. There is clearly a need for more archival work, both in Russia and in western intelligence archives if possible. Moreover, while it is very likely that many of the people who produced the maps may be reluctant to discuss work which was and remains secret, they numbered tens of thousands. It would be remarkable if none were willing to discuss the work, of which they have reason to feel proud.

Davies and Kent assert that interest in research into Soviet maps was largely suppressed in the UK in the 1990s when the Ordnance Survey claimed that, since the maps of the UK were derived from OS maps but without due regard for copyright, they should all be confiscated and given to the OS. Happily, this initiative seems to have failed. Now Davies and Kent have done a great service in drawing attention to this fascinating corner of cold war history – there is certainly a lot more to be learned about it.