

John Davies, Alexander J. Kent. *The Red Atlas: How the Soviet Union Secretly Mapped the World.* Chicago: University Of Chicago Press, 2017. Maps. 272 pp. \$35.00, cloth, ISBN 978-0-226-38957-8.

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The story of how John Davies and Alexander J. Kent, the authors of *Red Atlas: How the Soviet Union Secretly Mapped the World*, gained access to the “secret” Soviet maps showcased in their book is both familiar and somewhat anticlimactic—as the Soviet Union disintegrated, pieces of it went up for sale, to include cartographic productions. The suddenness of the collapse created opportunities to make a quick ruble (or, more likely, dollar), particularly in places like the Baltic states, where Soviet rule was thrown off as expeditiously as possible. Given the culture of secrecy around all map production and cartography in the Soviet Union throughout its history, it is no wonder that the individuals who had access to the maps in bulk (and who coincidentally also needed money) were former Soviet military personnel. However, as the authors describe, despite the efforts of various parties to get their hands on them, a huge number of maps were simply destroyed. For example, Aivars Zvirbulis, a Latvian orienteer (orienteering is a sport that combines racing and navigation), negotiated to buy one hundred tons of maps out of *six thousand tons* set for destruction as waste paper, but in the end acquired only two or three tons as “local children” set fire to the rest (p. 132). The fact that the painstaking work of Soviet cartographers ended up all over the world in private hands, scholarly institutions, and museums, then,

is something to celebrate, given the work and craft that went into creating these maps. There is no end to the irony that Western military forces used Soviet-made maps of Afghanistan prior to invasion in 2001. Not only were these maps incredibly accurate but they were also the only such maps available.

The authors have compiled an atlas, which, though it provides some interesting insights and explanations, raises a host of broader questions: What was the purpose of creating detailed maps in the Russian language of places with seemingly little military or intelligence interest? Was it part of a plan to take over the world? If so, what does this say about the supposed threat of nuclear annihilation posed by a perennially aggressive, according to Western discourse, Soviet state, a threat that led directly to a central doctrine of US foreign policy during the Cold War: the concept of Mutually Assured Destruction (MAD)? Why create maps of places that theoretically would no longer exist in the event of nuclear holocaust? Was it because the Soviet government considered a nuclear exchange survivable? Or did the Soviet political and military leadership remain convinced that a conventional war was possible and thus drew up contingency plans that included “mapping the world” to assist their reconnaissance forces? Or was the global mapping project simply part of Soviet ef-

forts to maintain domestic full employment? There are no answers to these questions in the book; instead, the authors present the maps as curious examples of the focus and activity of a secretive repressive regime—a seemingly obsessive attempt between 1950 and 1990 to collect detailed topographic information literally from everywhere in the world and to create accurate high-quality maps of those locations. The military purpose of the mapping is clear and indubitable as the authors point out time and again: much of the information included in the maps is militarily oriented. Details such as navigability of rivers, carrying capacity of bridges, and number of tracks in railroads may interest some tourist travelers but are not details generally included in tourist maps or even standard maps for administrative purposes.

The book is divided into four chapters and includes eight appendices, but, at 234 pages, the text takes second place to the graphics: a significant portion of the book is dedicated to the maps, which are reproduced at a high level of quality. In the foreword, James Risen notes both the beauty and craft of the maps, as well as the mystery behind their production. And though the authors point to the age of the maps reproduced to account for problems of quality, the aesthetic aspect of Soviet cartography is evident throughout this book—the maps are beautiful, intricate, and detailed with, as Risen notes, “an artisanal quality” (p. xi). In chapter 1, titled perhaps with tongue somewhat in cheek as “War and Peace,” the authors provide brief (and therefore extremely limited in terms of context) background information on the history of Russian imperial as well as Soviet mapping. The cartographic craft in Russia was well developed before the Soviet period as “the vast extent of continental Russia ... led to the emergence of arguably the most talented pool” of experts in the fields of geodesy, surveying, and cartography in the world (p. 4). In the Soviet period, for obvious reasons, the state controlled all aspects of mapmaking, with constant revisions to

specifications and eventual complete standardization of “typefaces, colors, symbology, and projection system” (p. 5). Using highly trained and skilled printers, the Soviet government produced consistently high-quality maps for military use. Any maps available outside domestic military or intelligence use, on the contrary, were of either famously poor quality and/or deliberately incorrect.[1]

Chapter 2 describes the nuts and bolts of Soviet mapmaking: how the global mapping project began under Joseph Stalin’s aegis, evolving over time and continuing right up to 1990 in an elaborate comprehensive system that guaranteed comprehensibility of Soviet-made maps by anyone trained in that system. Training posters for Soviet personnel, reproduced in the book, show symbology and variations of specific features, such as railroads or hydrography. The authors explain the symbology and discuss style and content of the maps in this section. Interestingly, “the true extent of the Soviet cartographic enterprise [of mapping the world] ... has yet to emerge.” Cartographers mapped the entire USSR at the scale of 1:25,000 by 1987 but they were also mapping the entire globe so it is “impossible to quantify” the actual number of maps produced, though, given available information, the number, according to some estimates, is “well in excess of one million” (p. 11). Topographical and city plan maps for both military and civil use constituted the bulk of the maps, with a third category for special-use maps, such as for aeronavigation purposes. The Gauss-Krüger (G-K) conformal transverse cylindrical projection was the standard projection used in Soviet mapping, allowing “the depiction of the globe as a flat surface for relatively small areas” (p. 24). Though maps produced for use by civil authorities lacked the detail of military-purpose maps, all were classified “Secret” (p. 39).

In chapter 3, the authors delve into Soviet cartographers’ methods and highlight errors or discrepancies that assist in determining how various

maps may have actually been created (from satellite imagery, copying UK Ordnance Survey or US Geological Service [USGS] maps, or human observation, to name some options). The launching of the satellite program in 1962 facilitated map production but also led to errors, which, according to the authors, “proved” use of aerial reconnaissance. Misreading satellite images led sometimes to inclusion of nonexistent roads (ditches in actuality that looked like roads from miles above). Copying outdated maps led to erroneous inclusions, sometimes leading to later corrected versions, meaning that perhaps human intelligence provided updated information. Soviet maps were at times more accurate than the USGS maps: a Soviet Miami, Florida, city map, for instance, included the latest housing development that did not appear in “then-latest USGS map,” indicating reliance on aerial surveillance (p. 57). The authors dedicate most of this chapter (titled “Plots and Plans”) to examining US and UK maps, devoting a substantial amount of space on errata in Soviet maps of British road maps, for example. This section is fascinating and indicates the amount of work the authors did to arrive at their interpretations—comparing maps of similar dates, surmising the kinds of information available about a particular location (a veritable cornucopia of publicly available tourist and travel information generally exists for “capitalist cities”), and showing why or how such information might have been misread. Perhaps the most interesting aspect of Soviet mapmaking was the human intelligence factor or “boots on the ground”—for example, a Soviet military attaché picnicking on the beach in Sweden obtained information about secret mine fields by striking up a conversation with an excavator driver who dug trenches for the cables to those mine fields (p. 71). The extent and specificity of this human intelligence as a factor in mapmaking is the most difficult to gauge, according to the authors, with the exception of specific information, such as spacing of trees in a forest and similar types of measurements: only a human being

could provide such specific information. Of course, this opens up an entire range of questions about the leisure activities of Soviet diplomatic personnel in postings abroad—while picking mushrooms in the forest on their day off, they were apparently also counting trees or engaged in other information collection. More questions arise as well: Why did maps of a bridge in Miami include load-bearing capacity while maps of San Francisco area bridges did not? Was there a reason for such omissions or were boots on the ground unable to obtain the information?

Finally, in chapter 4, titled “Resurrection” (yet another nod to Leo Tolstoy?), the authors discuss the legacy of the maps in the post-Soviet world. In 1997, Britain’s Ordnance Survey sought to quash distribution of Soviet maps as the organization claimed they infringed on its copyright, “effectively” terminating the possibility of anyone using the maps openly in the UK for a period of time. The internet came to the rescue as is often the case in the modern world and the maps “proliferated on websites” proving “hugely valuable” in circumstances where no maps had existed (p. 133).

Appendix 1 consists of fifty-seven pages of vividly colored map extracts; appendix 2 lists references and resources in English, Finnish, Polish, German, Russian, and Swedish, largely reference books and articles about cartography. Despite the fact that this is a book about Soviet mapping, the Russian section is quite short (five sources). The authors are both cartographers by profession—Davies a journalist and Kent a reader at Canterbury Christ Church University—and are clearly masters of their craft, but it might have been worthwhile to interview someone from the intelligence community for insight into Soviet human intelligence collection. Appendices 3 and 4 consist of translations of descriptive information of Cambridge from maps of the location; appendix 5 lists selected symbols and annotations; appendix 6 is a glossary of common terms and abbreviations; appendix 7 elaborates on the print codes; and ap-

pendix 8 provides examples of forms Soviet military personnel had to fill out simply to access a map form the worldwide mapping project.

The title of the book is a bit misleading since the overwhelming majority of maps included in the book are of Europe, North America, and the Soviet Union itself. Included are one each maps of Beijing, Tokyo, Afghanistan, Istanbul and the area of Jordan, Israel, and Syria but no maps whatsoever of Latin America, Africa, or most of Asia. Therefore, from the materials highlighted in this particular book, it is not possible to determine whether the Soviet government produced such detailed maps of the southern hemisphere. According to the authors, however, 2,000 cities outside of Russia were mapped worldwide with only 220 of those in the US and UK (p. 31). And, in appendix 2, the authors do provide links and physical locations where Soviet-made maps may be viewed or purchased for those who may have an interest in the rest of the world.

The fact that the focus of this book is specifically on Russian-language maps draws attention to some lack of clarity in explanations of Russian transliteration and translation from Russian. It is a standard grammatical convention in Russian to hyphenate foreign multiple-word place-names (San Francisco is Сан-Франциско, for example). It is therefore logical that Soviet cartographers would include hyphens in the Russian versions of multiple-word foreign place-names on their maps. The authors, however, note the convention as if it is an interesting anomaly or peculiar to Soviet mapmaking rather than a standard Russian-language rule. With respect to translation, in appendices 3 and 4, the authors provide, as an example, translations of the descriptive information of Cambridge from Soviet maps under the Russian title of a “spravka” (справка). “Spravka” is a context-driven word, which means a variety of things depending on how it is used: it can mean anything from “certificate” to “fact sheet” to “summary.” In the case of the document in the appendix, the correct

translation would be “descriptive statement” or even “descriptive information,” not simply “information” as rendered. A correct translation of a term generally makes it unnecessary to include the transliterated term in the finished translation but the reoccurrence of “spravka” throughout the book indicates some uncertainty on the part of the authors as to its meaning. Within the book, on two occasions (pp. 30, 38), they refer to this “spravka” as a descriptive essay or description, but in a third reference they revert to explaining the content of the “spravka” to define its meaning (p. 128). In addition, in the caption to a graphic on page 31, “spravka” is in parentheses after “index,” implying that they are one and the same, but in the text accompanying the graphic, street index and “spravka” are not interchangeable, indicating there is some confusion as to the meaning of the word in this context. In general, the translations of cartographic text the authors use are literal and therefore somewhat awkward, even taking into account difference in British and American English; a “city plan” (p. 30) in most cases is a “city map”; a “plan-scheme” (p. 42) of a town is probably its “layout”; and an “important object” (p. 38) is more likely a “critical facility.” Further, in a listing of Soviet research vessels, the authors quote from a British Ministry of Defense memorandum, which lists a “Mikhael Lomondsov” (p. 127). It is unclear whether this is an error in the original document or a typo in the book. Mikhail Lomonosov, for whom the ship was named, was not only a renowned eighteenth-century Russian scientist but also a seminal contributor to the development of the modern Russian literary language, so misspelling his name is doubly lamentable. A curious omission occurs in a segment where the authors provide translations of text from Soviet maps (p. 49). In the bottom graphic, the Russian text includes the abbreviation РКЧ (RKCh), which is simply rendered as is in the English translation. What does it mean? A cursory internet search indicates that РКЧ stands for “научно-редакционная картосоставительская часть” or

“Map compilation research and editorial unit.” Does the abbreviation in the graphic stand for a similar such organization? Leaving the abbreviation or acronym as is without any explanatory note leaves its meaning open to speculation and is a strange oversight in a book with such otherwise acute attention to detail.

The importance of language and cultural interpretation are integral aspects of this story. The authors note several instances of incorrect renderings of British place-names by Soviet mapmakers or confusion as to meanings of words: Harvey Court, for example, the name of a building that is part of a college, is identified as a courthouse (“суд” in Russian) (p. 85). Such a basic error seems odd given the loving attention to detail by Soviet mapmakers, but it is a reminder that the person who actually produced the map had likely never been to Cambridge and, given the overwhelmingly “need to know” environment in the Soviet Union, may not have had access to any cultural information about the UK to assist in making translation or labeling decisions. Cold War paranoia, however, is not limited to the Soviet side: the authors make the somewhat histrionic assertion in the beginning of chapter 1 that it is “chilling” to see “the landscape of our childhood presented in ... an alien language” (p. 3). “Alien” in this context reinforces the idea of the “otherness” of the Russian language and therefore of Russians, with an implication that the language, and consequently the culture, is both threatening and even inferior. And the use of the word “chilling” implies that the mere rendering of conventionally Latin-alphabet place-names in the Cyrillic alphabet is an act of aggression. This statement thankfully stands alone with respect to tone as the overall discussion in the book about the scientific, practical, aesthetic, and politico-historical aspects of the maps does not include undue inflammatory rhetoric. Granted, the maps explored here were certainly produced for military purposes but even in tourist maps produced in other countries, the text is generally in the native language of those countries.

After all, American-made maps of Russia, produced for use by the US military, or by civilians for that matter, are not written in the Cyrillic alphabet, are they? Should Russian people feel discomfort or paranoia about the fact that Americans write “Санкт-Петербург” as “Sankt-Peterburg” or, worse yet, St. Petersburg?

Cartography enthusiasts will certainly be interested in this book if only for the gorgeous reproductions. Scholars specializing in the study of the Soviet Union or Soviet-American relations, whether historians or political scientists, as well as military historians, will also find this book a nice addition to their libraries as the authors do provide a substantial amount of cartographic information useful for further study and very digestible details in light of the hands-on examples provided. On a theoretical level, this book is a fascinating example of some of the seminal themes of scholars who write about the power, secrecy, and meanings of maps beyond the graphics on the physical page. Instead of the wages of sin, East Germany, for example, paid the wages of secrecy, as the inaccurate maps the GDR government had enthusiastically produced and proliferated were completely useless in post-unification Germany—construction companies had to resort to using pre-World War II maps (p. 139). Therefore, this would be a wonderful text to accompany J. B. Harley’s *The New Nature of Maps* (2001) or Mark Monmonier’s *How to Lie with Maps* (1991) in an undergraduate class on the history of cartography and the nation-state.

Note

[1]. See also Mark Monmonier, *How to Lie with Maps* (Chicago: University of Chicago Press, 1991), 115, for a discussion of the Soviet Union’s “systemic falsification of geographic location.”

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