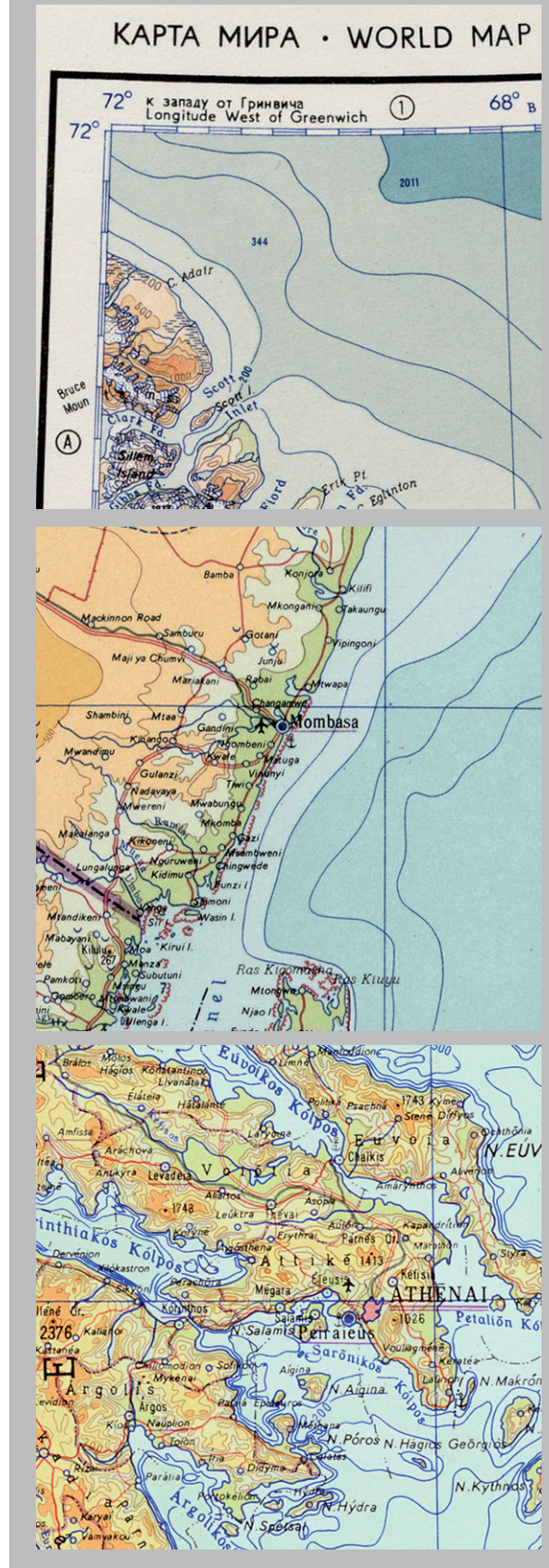Christian Lotz and Charlotte Gohr

Anti-imperialism or new imperialism?

Examining the production and content of the World Map / Karta Mira 1 : 2 500 000 (1956–1989)

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Examining the production and content
of the World Map/Karta Mira 1:2 500 000 (1956–1989)

By Christian Lotz and Charlotte Gohr

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Since the late 19th century, geographers and cartographers have been fascinated by the notion of a map series for the whole world that would depict all of the continents in a uniform style and at a standardised scale. Several studies have addressed the International Map of the World, with its scale of 1:1,000,000, conceived by German geographer Albrecht Penck in 1891 at the International Geographical Congress in Bern.[1] Equally as interesting, but far less well known, are the world map aspirations of other geographers, including Élisée Reclus and Charles Perron, two French geographers with close ties to anarchist circles in the late 19th century. Criticising the geo-political attitude of many geographer colleagues of their day, Reclus and Perron proposed several maps and atlases that they believed could overcome Eurocentric

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[1]   Pearson, Alastair W./ Heffernan, Michael: Globalizing Cartography? The International Map of the World, the International Geographical Union, and the United Nations; in: Imago Mundi: The International Journal for the History of Cartography 67 (2015), pp. 58–80.

perspectives of the world.[2] However, neither their atlas nor the International Map of the World has been finished.

Against that background, in 1956, delegates of the Soviet Union to the Economic and Social Council of the United Nations Organisation proposed the production of a world map series at a scale of 1:2,500,000 million. Although the council did not approve the proposal, Hungarian cartographer Sandor Radó pursued the project and, to complete it, mobilised the geodetic services of Europe's socialist countries: Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and the Soviet Union. In the years that followed, Radó and his team elaborated a working plan,[3] in which each participating country had to map a part of the globe (see Figure 1: Index sheet of the Karta Mira). Preparatory work, including the elaboration of instructions for style and standards for place names, as well as the map's production and marketing, was divided among the participating countries.[4]

With the idea of a world map at a scale of 1:2,500,000, socialist cartographers not only aimed to realise the dream of a standardised map series for the entire globe. Moreover, the Karta Mira, as German cartographer and member of the German Democratic Republic (GDR) team Erfried Haack put it in 1969, 'will be produced following the latest scientific findings based on Marxist–Leninist ideology [Weltanschauung]'. The Karta Mira was planned as 'a basis map [Grundlagenkarte] for the production of various geographical and thematical maps, as a working map for research and as an information map for general use'.[5] Although the nod to Marxist–Leninist ideology in Haack's appraisal of the project was compulsory in almost all scientific texts in socialist countries until 1989, regarding the Karta Mira, by contrast, Haack's specific allusion clearly asserted that socialist countries sought to challenge the position of Western (i.e. capitalist) imperial powers that had dominated geography

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2   Ferretti, Federico: Pioneers in the history of cartography: The Geneva map collection of Élisée Reclus and Charles Perron; in: Journal of Historical Geography 43 (2014) pp. 85–95; Siegrist, Pascale: Historicising 'anarchist geography': Six issues for debate from a historian's point of view; in: Ferretti, Federico et al. (ed.): Historical Geographies of Anarchism. Early Critical Geographers and Present-Day Scientific Challenges, Routledge 2017, S. 129–150; Guyou, Georges/ Reclus, Élisée: D'un atlas à l'échelle uniforme; in: Bulletin de la Société Neuchâteloise de Géographie 9 (1896/1897), pp. 163–169.

3   Radó, Sandor: The World Map at the Scale of 1:2 500 000; in: The Geographical Journal 143 (1977), pp. 489–490; Pfahlbusch, René: Das Geowesen in der DDR – Die Weltkarte 1:2.500.000; in: Fasching, Gerhard (ed.): Das militärische Geowesen der DDR, Vienna 2006, pp. 25–28.

4   Kluge, W. (ed.): Beiträge zur Weltkarte 1:2.500.000. Erfahrungen der internationalen Zusammenarbeit bei der Schaffung großer kartographischer Werke (Arbeiten aus dem Vermessungs- und Kartenwesen der DDR, ed. by VEB Kombinat Geodäsie und Kartographie, vol. 37), Berlin (East) 1977.

5   Haack, Erfried: Die Herstellung der Weltkarte 1:2500000 als Beispiel des Fortschritts der Kartographie; in: Petermanns Geographische Mitteilungen (1969), pp. 231–238, here 232.

and cartographic production since early modern times. Furthermore, if socialist countries could succeed in producing a complete world map series, then the achievement, at least from their perspective, would prove the technological superiority of socialist engineering and cartography.

In 1963, East German cartographers presented the first draft sheets of the world map at a scale of 1:2,500,000 at an international conference in Erfurt, East Germany. A year later, in 1964, Sandor Radó attended the congress of the International Geographical Union, here in London, to present the first printed sheet. By 1979, the first edition of the Karta Mira, consisting of 262 sheets, had been completed.

As many other map projects, the production of the Karta Mira invites a variety of questions and interpretive frameworks from history and geography:

During the 1960s and 1970s, when the Karta Mira was created, rivalry between the nuclear superpowers of the Soviet Union and the United States persisted. In many disciplines, new technologies proved challenging to practitioners, including cartographers,[6] in particular because aerial and satellite reconnaissance provided an increasing amount of geographical information. Meanwhile, intercontinental missiles threatened every corner of the globe, thereby forcing governments to conceal specific locations and even entire areas of strategic relevance. Amid those circumstances, how did the Karta Mira as a world map series represent the tensions and challenges of the Cold War?

The Karta Mira's production also occurred during the slow process of ongoing decolonisation, particularly in Africa and Asia, regarding which the Soviet Union and other socialist countries, to differing degrees, supported independence movements.[7] As such, how did the Karta Mira reflect decolonisation processes? Did it challenge long-standing imperial geographical discourses about Africa and Asia apparent in maps produced by Western colonial powers? If so, then what new geographical discourses did the socialist cartographers inscribe into the sheets of the Karta Mira?

Since the 1990s, in well-known scholarship on strict confidentiality in the topographic maps of socialist countries, debate about so-called 'map falsification' during the

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[6] Turchetti, Simone/ Roberts, Peder (ed.): The Surveillance Imperative: Geosciences during the Cold War and Beyond, New York 2014.

[7] James, Leslie/ Leake, Elisabeth (ed.): Decolonization and the Cold War: Negotiating Independence, London 2015; Rupprecht, Tobias: Soviet Internationalism after Stalin: Interaction and Exchange between the USSR and Latin America during the Cold War. Cambridge 2015; Reid, Richard: History of Modern Africa: 1800 to the Present, Oxford 2008; questioning Soviet active influence: Sanchez-Sibony, Oscar: Red Globalization. The Political Economy of the Soviet Cold War from Stalin to Khrushchev, New York 2014.

socialist era has been vigorous.[8] However, we avoid that debate, largely for methodological reasons, since the term 'falsification' implies a 'correct' type of map. Instead, we understand maps as representations of space depending on the particular relations between geographical knowledge and political power in the map-making process.

To gain insights into the content of the Karta Mira, we examined the precision of the positions of settlements on map sheets and of the naming of places. In preparation for comparative studies, the Karta Mira sheets had to be geo-referenced in their corresponding projection—that is, equidistant conic projection with the Krasovsky ellipsoid. For comparison, we used OpenStreetMap data that we re-projected as necessary for a valid topographical analogy.

For an initial impression of the precision of the positions of cities depicted on the Karta Mira, we extracted the coordinates of cities with a certain number of inhabitants from Karta Mira map sheets 37 and 48, as well as their coordinates from OpenStreetMap data.

As Figures 3 and 5 demonstrate, the positions of cities on the Karta Mira, depicted as dots, and the positions of cities from OpenStreetMap data, depicted as circles, vary on the Moscow map sheet almost as similarly as on the Washington map sheet. In some cases, the positions vary by less than 500 meters, which suits the scale of 1:2,500,000 and is a matter of appropriate presentability. However, in other cases, the position varies by more than a kilometre in different directions.

Yet, it would be too easy to say that the cartographers of the Karta Mira simply 'falsified' the positions of places on purpose. Of course, in 1964, the Soviet government issued instructions that tightened the censorship of maps, and following that, socialist countries published two topographic map series: a civil one with distortions for public use and a military one without distortions.[9] Although the instructions referred only to territory of the Soviet Union and other socialist countries in Europe, the positions of places clearly vary on the Moscow sheet as well as on the Washington sheet. That trend raises the question of whether the variety of positions of settlements was more a question of cartographic generalisation than of state censorship.

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[8]   Unverhau, Dagmar (ed.): State security and mapping in the GDR. Map falsification as a consequence of excessive secrecy? Berlin 2006; Fasching, Gerhard (ed.): Das militärische Geowesen der DDR, Vienna 2006.

[9]   Konopska, Beata: The tightening of censorship rules in cartography in Poland 1944–1989; in: Geoinformation Issues 5 (2013) 1, pp. 5–20, here 12.
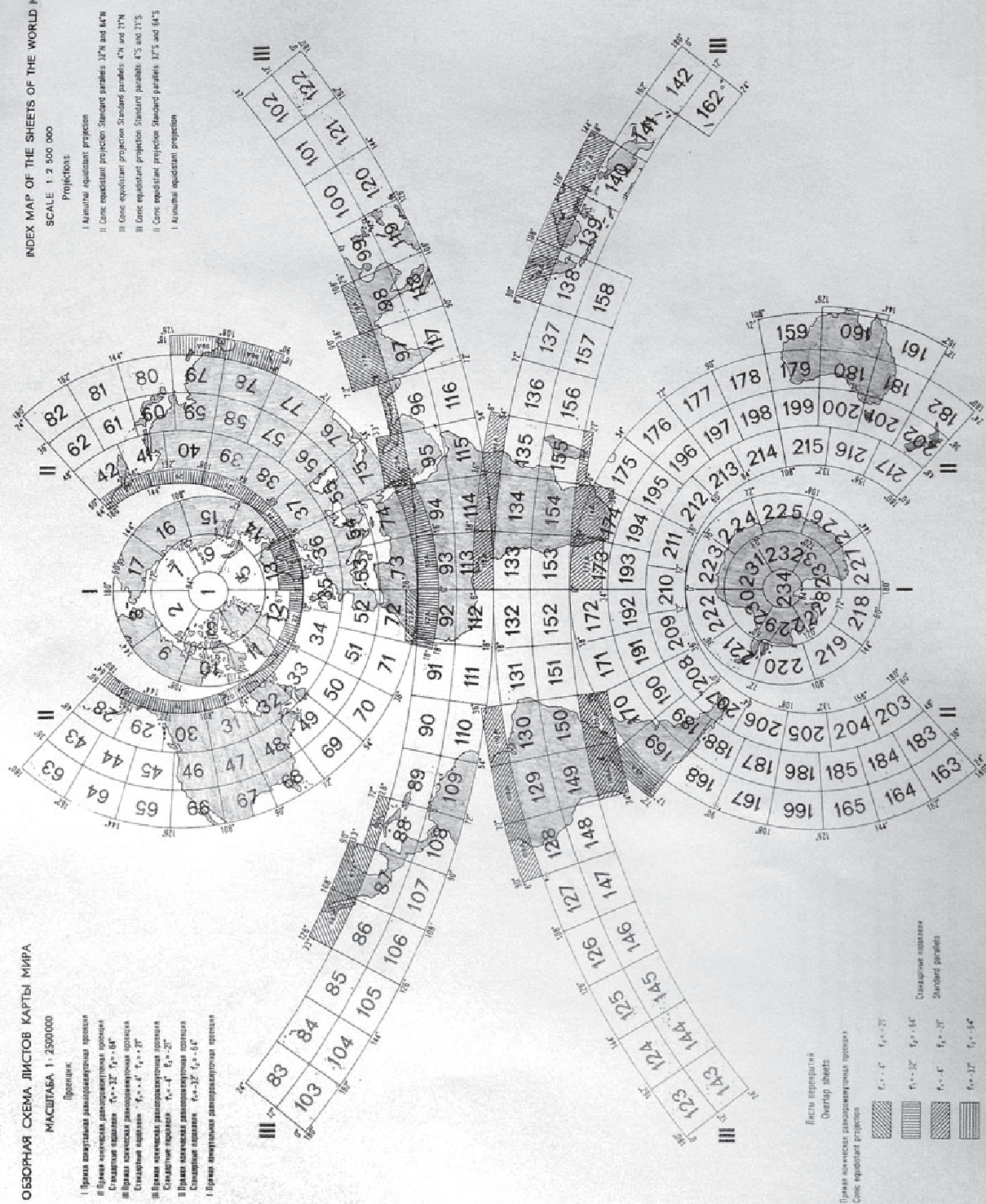
Figure 1: Index to the Karta Mira / World Map 1:2,500,000; source: Kluge, W. (ed.): Beiträge zur Weltkarte 1:2.500.000. Erfahrungen der internationalen Zusammenarbeit bei der Schaffung großer kartographischer Werke, Berlin (East) 1977.
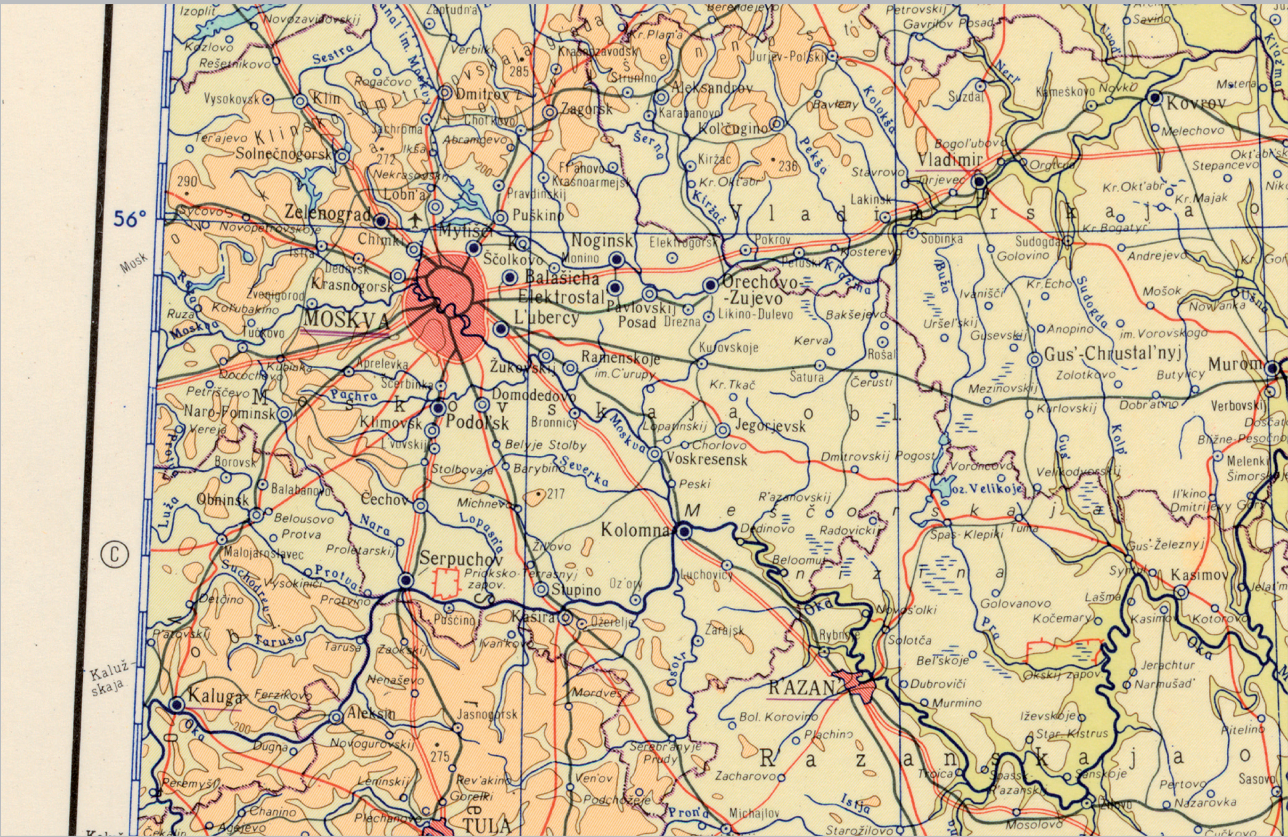
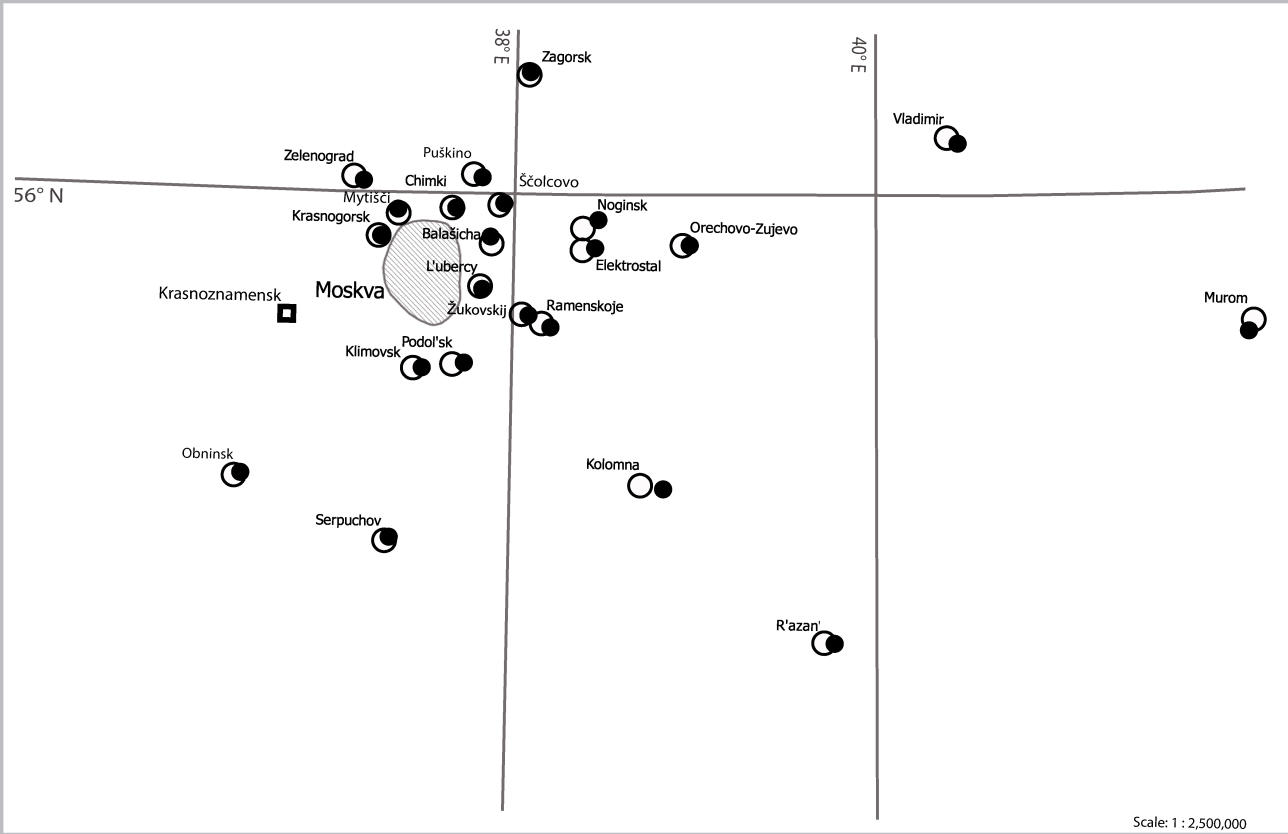Figure 2: Detail of Karta Mira map sheet 37 Moscow, Moscow 1975.

Figure 3: Surroundings of Moscow; dots represent locations of cities on the Karta Mira, circles represent the locations of cities on the OpenStreetMap, the square represents the location of the closed city Krasnoznamensk which is not depicted on the Karta Mira.

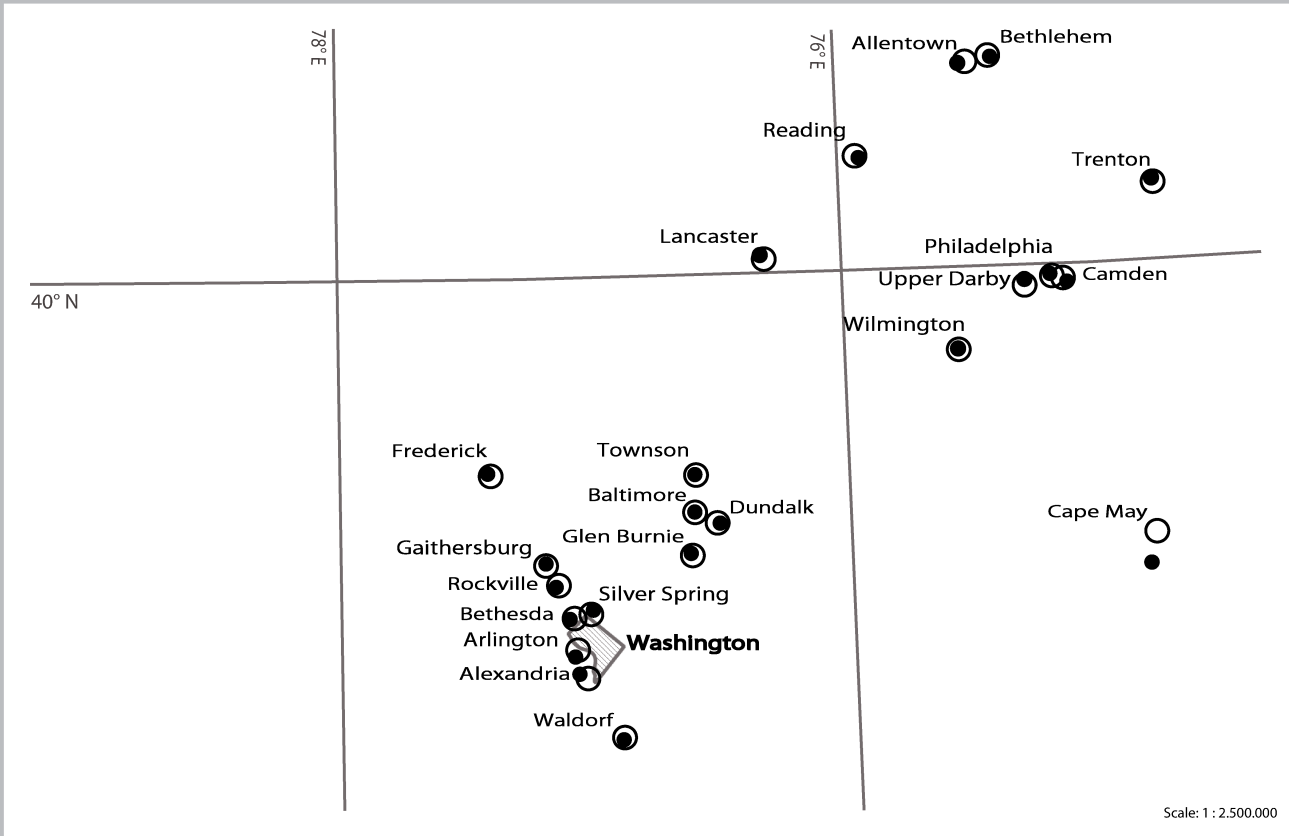Figure 4: Detail of Karta Mira map sheet 48 New York, Budapest 1968.

Figure 5: Surroundings of Washington, D.C.; dots represent the locations of cities on the Karta Mira, circles represent the locations of cities on the OpenStreetMap.
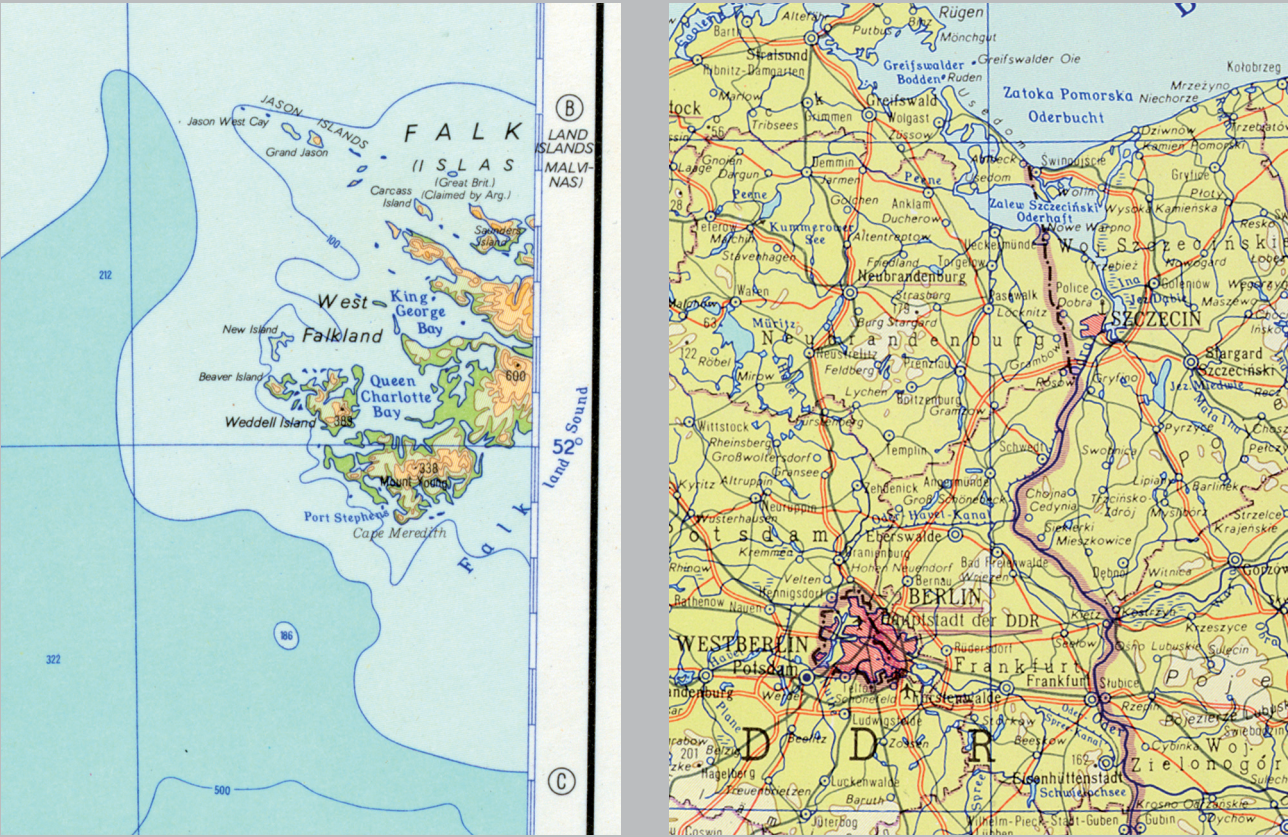
Figure 6: Detail of Karta Mira map sheet 207 Tierra Del Fuego, Berlin (East)1966 (left)
and detail of Karta Mira map sheet 36 Warsaw, Moscow 1972 (right).

Figure 7: Detail of Schweinfurth's map, 1871 (top left), detail of Afrika, sheet 4. No. 72 in
Stielers Handatlas, Gotha 1908 (top right), detail of map sheet NB 35 Wau, World, Army
Map Service, Washington, D.C. 1955 (down left), detail of Karta Mira, sheet 114 Kisanga-
ni, Sofia 1969 (down right).

For a second perspective regarding the position of cities, we directed our focus on closed cities—that is, territories with special military establishments or research facilities that warrant unique requirements. The degree of closure in such cities range from total secrecy ('secret cities') and a handful of access restrictions ('closed cities'). Some closed cities remain closed today, whereas other opened or reopened after 1991.[10]

Seversk, a closed city until today, was founded in 1949 on the land of the villages of Iglakovo and Beloborodovo in northern Tomsk on the occasion of the establishment of nuclear facilities. Since secret cities have not been depicted on secret or unclassified maps, Seversk appears neither on the map series of the Soviet General Staff 1:50,000 (ed. 1974) nor on the Karta Mira map sheet 39 (ed. 1975). A similar dynamic characterises the closed city of Krasnoznamensk in south-eastern Moscow (Fig. 2 and 3). In contrast to those two examples, closed cities that existed before their closure—for instance, Paldiski and Sillamäe in the Estonian Soviet Socialist Republic—are depicted on maps.

Understanding the Karta Mira as a representation of space dependent on the specific relation of power and knowledge amid which a cartographer produces a map,[11] the Karta Mira was partly a compromise between two conflicting aims. On the one hand, it had to serve the aim of showing socialist progress in technology via accurate map production; on the other, because it had to submit to the Soviet fear of nuclear warfare, it concealed places of military relevance and shifted the places of many other cities to varying degrees.

In addition to the positioning of places, the naming of places is another challenge that cartographers have to address while producing a world map. Regarding place names, to scrutinise the so-called 'anti-imperial' claim of the Karta Mira, we focussed on areas outside the Soviet Union.

An example of the Karta Mira's tendency to present political issues depending on the region appears in Figure 6. On the left-hand side of the figure, the Falkland Islands are called 'Falkland Islands/ (Islas Malvinas)/ (Great Brit.)/ (Claimed by Arg.)'. Here, the cartographers inscribed on their map the conflict between Great Britain and Argentina—a conflict that had lasted since the early 19th century and that, in 1982, prompted the Falklands War.[12] On the right-hand side of the figure, neither the

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[10] Gentile, Michael: Former closed cities and urbanisation in the FSU: An exploration in Kazakhstan; in: Europe–Asia Studies 56 (2004) 2, pp. 263–278, here 263–264.

[11] Harley, John B.: The New Nature of Maps. Essays in the History of Cartography, Baltimore 2001.

[12] Caviedes, César: Conflict over the Falkland Islands. A Never-Ending Story? In: Latin American Research Review 29 (1994) 2, pp. 172–187.

region along the border of the GDR and Poland nor the depiction of Berlin present any conflicting claims. In 1972, when the sheet was published, the West German Parliament accepted the Oder and Neisse Rivers as borders, in keeping with the Treaty of Warsaw of 1970. However, conservative politicians in West Germany, as well as organisations of German expellees, continued to question the border and even filed a lawsuit against the border treaty.[13] Whereas Berlin's status in international law was by no means clear, the Karta Mira provided the socialist interpretation by presenting the city as 'Berlin/ Hauptstadt der DDR' and 'Westberlin'.

Although the map sheets of the Falkland Islands and Berlin provide clear examples of the specific socialist interpretation of existent or non-existent territorial conflicts in the world, the examination of place names is far more complicated. Our starting point for investigating that topic was research about naming in current South Sudan. Ute Wardenga and Karsten Jahn have investigated the distortions and colonial influences apparent on maps of the area from the end of the 19th century. Their work shows that, in time, Georg Schweinfurth, an explorer of Africa, produced a map with place names partly used by locals.[14]

To trace possible changes of place names over the course of time, we examined the Schweinfurth map from 1871, maps from atlases such as *Stielers Handatlas* from 1908, and sheets from a 1:1,000,000 map series from 1955. As Wardenga and Jahn have shown, although Schweinfurth sought to record place names used by locals, in order to produce a printable map version, not only did he remove several local place names, but staff members at Justus Perthes publishing company changed names as well, before publishing the final product in 1871 in *Petermanns Geographische Mitteilungen*. The different maps in Figure 7 show that most place names were maintained between the Schweinfurth map and the Karta Mira. Despite the anti-colonial ambitions of the Karta Mira, the map series retained place names that had been established in the late 19th century amid colonial exploration, likely because the Sudanese government pragmatically kept place names from the colonial era as well.

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13 Lotz, Christian: Die anspruchsvollen Karten. Polnische, ost- und westdeutsche Auslandsrepräsentationen und der Streit um die Oder-Neiße-Grenze (1945–1972), Leipzig 2011.

14 Jahn, Karsten/ Wardenga, Ute: Wie Afrika auf die Karte kommt. Das Beispiel Georg Schweinfurth; in: Castryck, Geert/ Strickrodt, Silke/ Werthmann, Katja (ed.): Sources and methods for African history and culture. Essays in honour of Adam Jones, Leipzig 2016, pp. 137–161.

Summary

Since the late 19th century, the idea of producing a map series that depicts the entire world in a uniform style and at a standardised scale has been a fascinating one. After the Second World War, when the prospects of the International Map of the World at a scale of 1:1,000,000 continued to face severe problems, cartographers from socialist countries in Europe produced the Karta Mira, a world map at a scale of 1:2,500,000. In our work, we examined the content of selected Karta Mira sheets, particularly the depiction of settlements, competing territorial claims, and place names. Avoiding the ongoing debate about so-called 'map falsification' in socialist countries, we shifted our methodological approach by conceiving the Karta Mira as a representation of Cold War rivalry in geography and cartography. From that perspective, the production of the Karta Mira appears as an attempt to achieve two opposing aims at once. On the one hand, in fear of nuclear war, cartographers hid strategic and relevant cities and shifted various other Soviet cities to an extent that map reviewers might have criticised the accuracy of the map. On the other, questioning territorial claims of Western colonial powers on Karta Mira sheets, as well as the fact of realising the long-cherished plan of a standardised world map, the Karta Mira challenged Western geographical discourses and, from the perspective of its makers, proved the superiority and technical efficiency of socialist geography.
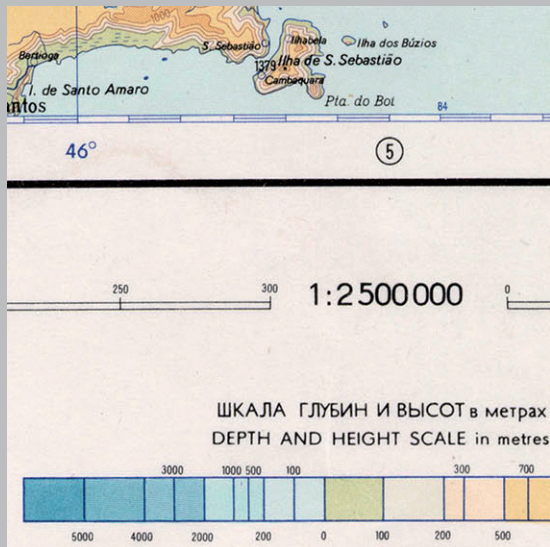
Christian Lotz teaches history at the University of Giessen and is head of the map collection at the Herder Institute for Historical Research on East Central Europe in Marburg, Germany.
christian.lotz@herder-institut.de

Charlotte Gohr studies geography at the University of Marburg and is junior researcher at the Herder Institute.
charlotte.gohr@posteo.de

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