

**Notes from Geospatial/GIS Meetup
December 12, 2023**

Rivera Library, Room 140 and Zoom

Attendees: Janet Reyes, facilitator;

In person: Amanda Grey, Darren Furey, David Biggs, Heiko Mühr, Mike Cohen

Via Zoom: Ademide Adelusi-Adeluyi, Andrew Haglund, Elia Scudiero, Erika Quintana, Gerald Winkel, Krystal Boehlert, Lily Barger, Mia Ashby, Natalie Moller, Ramon Barcia, Steve Ries, Tiffany Moxham, Zoe Dilles

Announcements

This meeting was recorded; video is available [here](#). The passcode to view is 40W*V9.E

Students can apply for a [summer internship at Esri](#) by the end of December.

Meetups in Winter 2024 will be held at noon on the following Tuesdays: January 16, February 13, and March 12. The presenter slot for February 13 is currently open; let Janet know if you would like to present or have a discussion topic in mind.

Save the date: On Tuesday, January 23 from 9:00 am - 3:00 pm, Orbach Science Library, Room 122 will be the site of **Planet Imagery Day**, coordinated by the [Artificial Intelligence for Sustainable Agriculture](#) program. The event will feature presentations by UCR researchers who use Planet imagery as well as instructional sessions from Planet staff. Lunch will be provided.

The [Los Angeles Geospatial Summit](#) will be held at the USC Hotel on Friday, February 23, 2024. This is a great opportunity for students in particular to network. Registration is \$25 for students and is affordably priced for others as well.

Shared links

Artistic maps by Anton Thomas: <https://www.antonthomasart.com/>

Library of Congress blog post on the never-built Cape to Cairo railway in Africa:

<https://blogs.loc.gov/maps/2023/10/following-the-cape-to-cairo-railway/?loclr=eamap>

Presentation

Heiko Mühr, the Map Metadata and Curatorial Specialist at UC Berkeley's Earth Sciences and Map Library, presented on **German World War II Maps: Geospatial Data from A Hidden Collection**.

The project at UCB Library to scan German captured World War II maps and make them digitally available started prior to the pandemic, when UCR Library began shipping portions of our holdings to Berkeley. Heiko's role is to create and update catalog records for the maps, especially for map series.

Currently UCB Library estimates that they hold 21,000 of these maps; the number will grow when UCR resumes sending maps to Berkeley. Both libraries were among the 35 research libraries that received a portion of the German and Japanese maps that the US Army Map Service acquired late in the war and immediately after. The libraries haven't given the maps much attention, even though they contain information not found elsewhere, such as old place names and locations of Jewish communities that were eradicated by the Nazis.

The first mapping agency was established in France in the 17th century. One of the big "mapping machines" of the 1800's was the Austro-Hungarian Empire's Imperial & Royal Military Geographical Institute. They created a map series of Central Europe at 1:200,000; the Nazis found these maps valuable after they annexed Austria.

The maps being digitized were issued chiefly between 1930-1945 by German mapping agencies, although some had been issued as early as the 1860s. Germany has had a fragmented political history; during the period in which German states were all sovereign, each state had its own mapping agency. This led to a diversity in German cartography, including a range of deficiencies and innovations.

In Germany in the late 1800s, the biggest mapping agency was the Royal Prussian Land Survey. After the 1918 November Revolution, that agency was replaced with the Land Survey Office, which was reorganized once the Nazis seized power in the 1930s.

Heiko spoke about Gerlach Hemmerich, who, although he wasn't a Nazi, geared up and then led the German military mapping agency at the heart of the Nazi war effort.

Meanwhile, the US Army Map Service was formed in 1941 from existing assets. As World War II was coming to a close, the US and Britain saw the opportunity to extract technological products (including maps and mapping procedures) that the Nazis had been using. The US and Britain used "T-forces" in a joint military mission to obtain specific German scientific and technology targets. The team that collected 250 tons of maps and related items was led by Floyd Hough of the US Coast and Geodetic Survey. They moved the materials from an area soon to be overseen by the Soviets to a US logistics base in Bamberg, then shipped the maps to a military facility in Omaha, Nebraska.

The Germans often started creating their maps by reproducing an existing map. Sometimes very different styles of maps were merged to create a map sheet. Some of the maps in the collection were annotated by hand during the war. While topographic maps constitute most of the collection, it also contains road maps, maps produced by local military units, city plans, resource inventories of occupied areas, and ethnographic maps created by research institutes. The latter maps were used in support of Nazi plans to organize population transfers and ethnic cleansing activities. (Wilfried Krallert, the editor of the ethnographic map series, was in the SS but was also a double agent for the French and British and thereby escaped retribution for his wartime activities.)

Learn more about Berkeley's digitized collection and download map images at <https://guides.lib.berkeley.edu/germancapturedmaps>

Additional reference:

Powell, S. & Mühr, H. (2020). Capturing the Complex Histories of German World War II Captured Maps. *Journal of Map & Geography Libraries* 16 (2): 166–193.

<https://doi.org/10.1080/15420353.2021.1922569>

Discussion

Amanda asked what percentage of the maps have been digitized. Heiko said they have digitized around 13,000-14,000 maps to date, but more maps may be added from UCR. Most of the digitized maps have been topographic maps. In the process of describing the maps, he has learned a lot about the backstories of the mapping agencies and the key players.

David asked about the map image in one of the slides that had a two-letter grid overlay. Is it comparable to the [Military Grid Reference System](#)? Heiko said that the grid was used to relay messages, and yes, it was equivalent. David's follow-up question was whether Heiko observed that the Germans switched from the map projections they had been using to a Soviet-style UTM grid because the latter had more spatial accuracy. Heiko said it's complicated, but the Nazis did take some ideas from the Austrians and the Soviets, and they had a lot of respect for Soviet cartography. David added that his understanding is that during the Cold War, when it came to mapping the world, the American military adapted the systems the Germans and Soviets had created rather than using existing American systems.

Amanda asked when the use of aerial photography to create accurate maps began. Heiko said that aerial photos were used in World War I. In Germany during World War II, the aerial photo assets were controlled by the Air Force, which focused on its own needs, making it somewhat difficult for the Army and Navy to get aerial photo support specific to their needs.

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