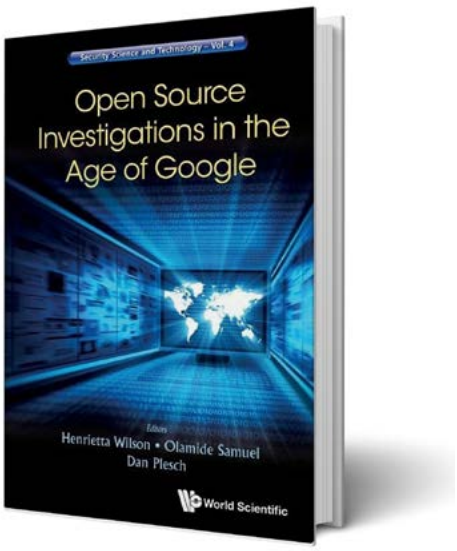
intelligence in public media

Open Source Investigations in the Age of Google



Author:	*Henrietta Wilson, Olamide Samuel, Dan Plesch (eds.)*
Published By:	Worldwide Scientific, 2024
Print Pages	388
Reviewer	*Stephen Mercado* The reviewer is a retired CIA open-source officer and frequent contributor to *Studies*.

In today's digital age, those who conduct the ancient art of open-source research benefit from technologies and techniques unknown to the medieval scribes who translated texts of classical Greek into Latin on parchment, or for that matter to the Cold War officers in the Foreign Broadcast Information Service (FBIS) who used typewriters to produce translations and analyses of Soviet media. The authors of *Open Source Investigations in the Age of Google* inform us of the modern ways and means to use open sources to investigate issues in human rights, military conflict, nuclear nonproliferation, and other issues of interest.

Advances in computer science and information technology have greatly changed the way we gather and analyze open sources. The vast card catalogs of research libraries have given way in recent years to rows of computer terminals. The World Wide Web went public in 1991. Google, the world's most popular web-based search engine, dates to 1998. Space Imaging released the world's first high-resolution commercial satellite images in 1999.

More than 30 experts have contributed 18 articles on conducting open-source investigations today. Most of the contributors hail from Great Britain or the United States. Many are academics. Some work at prominent open-source organizations, such as Bellingcat and the Federation of American Scientists (FAS).

The authors highlight the myriad tools for open-source investigations. Beyond Google, notes Christiaan Triebert of the *New York Times*, stands Russia's Yandex search engine. Alternatives to Google Maps, writes digital investigator Benjamin Strick, include China's Baidu Maps, Microsoft's Bing Maps, Apple Maps, and HERE WeGo's mapping from the Dutch multinational Here Technologies.

With tools come techniques. Several authors mention geolocation, the identification of an object's location in a digital image. Hans M. Kristensen and Matt Korda of the FAS, explaining that geolocation is sometimes possible with Chinese videos of military content, write that the technique led in 2019 "to the discovery of the Jilantai training area" for Chinese missiles, which led the next year to uncovering new silos, "which led to the discovery of China's three large missile silo fields in 2021."

Another technique is chronolocation, a technique to determine the time and place of an event. Henrietta Wilson, Olamide Samuel, and Dan Plesch note in the book's first article that cross-checking information from different data streams, such as comparing videos from social media against satellite imagery, is one way to locate and date an event. One can even travel back in time. Rhona Michie, Paul Holden, Andrew Feinstein and Alexandra Smidman explain how investigators can use the Wayback Machine (https://wayback-api.archive.org/) to compare new versions of corporate websites against old ones to catch businesses that have erased incriminating information from their corporate websites.

Even in this digital era, time-tested methods still hold true. Experts in open sources still read print media and monitor radio programs. The twist today is that we likely go online rather than read paper or listen to a nearby radio broadcast on a physical receiver. Andrea Carboni and Clionadh Raleigh of Britain's University of Sussex write that the Armed Conflict Location and Event Data Project for monitoring military actions, other violence, and protests, "collects reports from thousands of sources in over 75 distinct languages" as part of its intake of open sources.

Language, now as ever, remains important. As Triebert suggests in his article, when investigating an event in Yemen, conduct your search in Arabic. Remember that, even today, there is no standard transliteration for Arabic words in the Latin alphabet. Some aspects of open-source work remain the same today as in the era of typewriters.

The book's authors also point to the challenges and limits of open sources, including protecting the privacy of individuals in the course of investigations and sorting the real facts from disinformation. Within the US Intelligence Community, as Kathleen M. Vogel writes, open sources are at a disadvantage in organizations that prize secrets. Machine learning promises to take open-source investigations to an even higher level but, as Jamie Withorne notes, the emerging technology is not without limitations.

I could point out an isolated error here, a questionable assertion there, but my impression of the book is a positive one. A bibliography or guide to further reading would have made the book even better, but the copious footnotes effectively serve the same purpose. Contributions of open-source experts from China, Russia, and elsewhere outside the Anglo-American sphere would have given the book a more universal character.

Overall, the articles in this book provide much food for thought. Both students new to open-source investigations and experienced practitioners in the field will find material that is new and interesting. Much has changed in open-source investigations since the internet came on the scene in 1991. This book gives us a good idea of where we are today.

The book is available free of charge at https://www.worldscientific.com/doi/epdf/10.1142/q0414 ■