Richard Rogers, **Digital Methods,** Cambridge, MA: The MIT Press, 2013, 280 pp., $29.68 (hardcover).

Reviewed by
Sangeet Kumar
Denison University, USA

The interdisciplinary nature of scholarship on new media has allowed it to benefit tremendously from the exchange between differing and sometimes opposing epistemologies and approaches. Richard Rogers' **Digital Methods** exemplifies the field's eclectic roots as it engages with the mechanics of conducting research using new forms of media and the questions and presuppositions that could drive that research. The book bridges the divide between scholarship that attempts meta-critiques of power structures on the Web on the one hand, and those that emphasize a methodical and systematic analysis by delving into the data generated by web devices on the other. It begins by asking us to make a distinction between pre-existing methodologies and approaches that have been "digitized" for the Web and the "natively digital" ones that are born out of—and hence unique to—the Web's medium. In differentiating between the two, Rogers emphasizes the need to "follow the medium" and make allowances for the distinct ways in which the Web generates data. This McLuhanesque emphasis on the uniqueness of the medium weaves through the book as it shows us ways to analyze the Web's data—ranging from hyperlinks, search engine results, Wikipedia pages, and social media profiles to Website archives and big data.

The book's laudatory endeavor to demystify the data generated through various Web devices is fraught with the challenges of lack of access, sheer volume, and the seemingly impenetrable world of code that is the invisible skeleton undergirding the Web's information. While embracing these challenges, Rogers' stated goal in the book is "the development of a methodological outlook and mindset for social research with the Web" (p. 4). The book meets its goals somewhat by showing us how new kinds of questions need to be asked of the new medium's data. Central among them is the question of how grounding and baseline are used for comparisons to make claims about newness, variations, degrees, and trends. Grounding one's findings in the data of the real world can lead to starkly different conclusions from grounding and comparing done only with data generated online. The book's introductory chapter illustrates this difference by comparing the example of flu trends tracked by Google on the one hand and data from the website allrecipe.com on the other. In predicting flu contagion based on search terms, Google's data were supported by actual, on-the-ground occurrences of flu cases that were being documented by the CDC. However, in the case of allrecipe.com—while the data collected through the website could be followed up through real-world surveys—they were meaningful in themselves only as a representation of the taste preferences of those looking for recipes online.

Another way in which the politics of the physical world can be reflected on and analyzed through the Web is by studying the linkages between web pages. Excavating the patterns of websites linking to others—and understanding whether or not the linking is reciprocal—can show us real-world affiliations and

hierarchies of value and importance. Similar goals and values lead to dense interlinking, but for a site to have a link to it from another that is either government owned or belonging to a prestigious organization such as the UN could significantly add to its value. These "political implications of surfer pathways" (p. 48) are often evident in the disclaimers that a link to another site is not necessarily an endorsement. The book's second chapter analyzes the interlinking between Novartis, Greenpeace, and a group of government websites to show their politics of association. The fact that Novartis links to Greenpeace (which does not link back) and both of them link to various government websites (none of which link back) shows a real-world hierarchy of value and desired association reflected in the online world. In this analysis, the Web emerges not as an ideal public sphere where opposing positions and viewpoints are engaged and debated, but as a space defined by "issue networks" where alliances between common viewpoints are more visible.

Applying the method of media historiography to a nascent and still emerging media technology may seem a far-fetched idea, but Rogers shows that the scale and scope of changes to the medium already witnessed in the first few decades of its existence allow for insightful conclusions about its evolving priorities and form. The key tool for this investigation is the Internet archive (archive.org) and its Wayback Machine, operational since 2001, which can be accessed to experience the "Web as it was." This tool can be used to insightful ends, as shown in the book's third chapter. A study of the changes in Google's interface shows the gradual devaluing of the human-created "directory" and its replacement by algorithmic search. In addition to the historical evolution of specific sites, the Internet archive can also be excavated for national and event-based Web histories. The rise of human activity online makes it an increasingly important repository of human interaction, culture, and memory. The specific ways in which the Web responded to an event or how the national digital sphere changed over time emerge as meaningful questions—with potential insights into online and offline social changes.

The rise of the culture of search and the dominant role of search engines in determining the sway of particular ideologies in the realm of politics, culture, and memory (among others) is increasingly emerging as a question that critical scholars of media would like to pursue. However, this quest is significantly impeded by the opacity of the process by which search engines determine and display results. Rogers' book contributes to ongoing attempts to understand and critique their consequent control over dominant social truths. He demonstrates that analysis of patterns in search results both longitudinally over time and horizontally across different "spheres" can lead to meaningful conclusions not only about the functioning of the search process but also about the changing nature of debates about social issues. The key methods for studying search presented in chapter 5 of the book are source distance and cross-spherical analysis—which shift focus away from questions of bias in search results to reconsider how those results can become starting points for analyzing social debates and issues. Source distance evaluates the resonance of offline public issues on the Web by investigating whether there are similarities or differences between topics "at the top of the news" in the offline world and those "at the top of the Web" (p. 113). By using commonly available software tools, one can compare the relative preponderance of particular kinds of sources (news, NGOs, government-owned—skeptical vs. factual) and their relative leanings within search results. The distance of particular sources from the top and their changing order over time shows online manifestations of trajectories of debate in the offline world. Cross-spherical analysis extends this

method to compare across different spheres (e.g., news, blogs, and image spheres, among others) to analyze the relative importance of issues within each sphere.

In moving from the study of search results to analyzing online collaborative knowledge production in Wikipedia, Rogers extends the question of bias to show the operation of linguistic points of view (LPOV) in different language pages about the same topic or event. By analyzing the points of convergence and divergence between the Bosnian, Serbian and Croatian Wikipedia pages on the Srebrenica massacre, the book's chapter eight challenges the notion of "neutrality" and shows us the political nature of historiography, particularly regarding controversial events. Given that these language communities had different stakes in the representation of the event, Rogers found that Wikipedia articles varied not only in their titles but also in their descriptions and the specific details (e.g., the number of dead). In this longest chapter of the book, the author details the "edit wars" that ensued about usage of words such as "massacre," "genocide" or "fall" in the articles' titles. The analysis peels away the rationale provided by editors in the "talk" section to show how Wikipedia can be an apt forum for posing broader questions about the historical relationship between knowledge and power.

The question of method is a fraught one in media/communication studies and one in which epistemic divergences often emerge. The fear that methodological tools may often obscure rather than lead to insights has led to rich conversations in the discipline. However, it is also true that a presumed lack of technical literacy has prevented media scholars from conducting a fuller engagement between extant theories of media and the emerging medium of the Web. *Digital Methods'* strength lies in the fact that it takes readily available data—which can be gained using the basic knowledge of the Web possessed by any scholar in the social sciences or humanities—and shows us new avenues of possible analysis. One can start with its approaches after a basic familiarity with the book's terminology and concepts to develop a "methodological outlook" and draw revealing conclusions. Arguably some methods and approaches discussed in the book are more generalizable and replicable than others, but in most cases the analytical tools can be viewed as a part of an evolving trajectory to which future scholars are sure to add. This process will hopefully gain from a more open conversation about the access and availability of Web data (big and small)—which, despite holding immense promise for insights into social behavior, currently remains fenced away for in-house scholars of digital corporations.