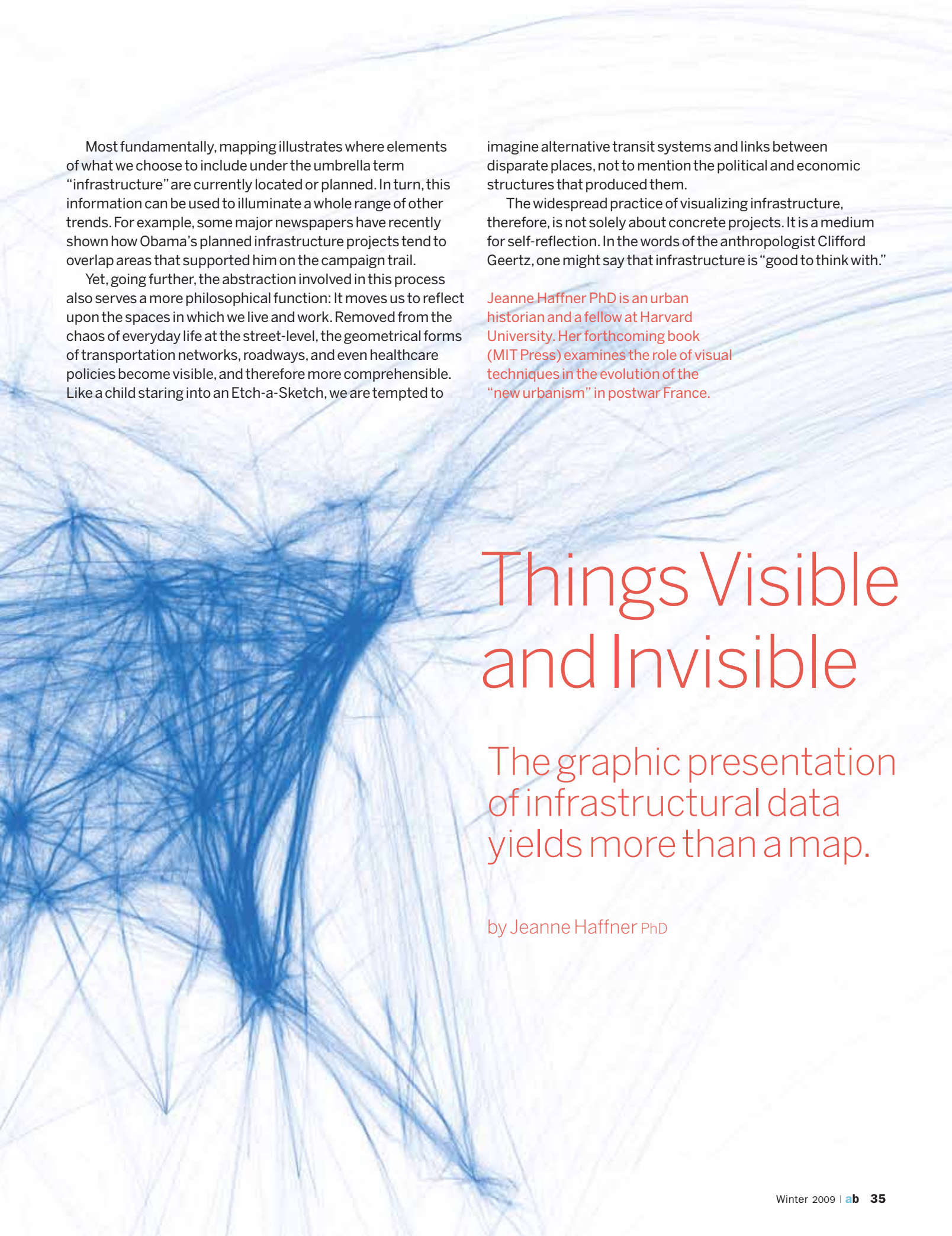


Postmodern theorists writing in the late 20th-century once surmised that, during an era of airplanes, cell phones, and the Internet, the importance of geographical space was quickly diminishing. The French anthropologist Marc Augé, for example, famously claimed that modern technological developments such as these had led to a homogenization of culture that was reflected in the proliferation of “non-places” (*non-lieux*) that were devoid of any particular cultural identity. For him, a perfect example was the airport: surrounded by impersonal signs and identified by government-issued documents that cloaked individuality, travelers waiting for a plane epitomized the late 20th-century transitory experience and its lack of concern for place, cultural particularity, and personal identity.

The following images demonstrate that, whether or not the importance of geographical space has diminished, the *representation* of topographical space certainly has not. The fusillade of modern technological advances over the last several decades has only precipitated an explosion in cartographic curiosity and related explorations into data visualization. The very existence of multiple websites and conferences devoted to exploring innovative ways of depicting infrastructure cartographically begs two key questions: What lies behind this surge in the production of maps of all kinds, from simple delineations of proposed high-speed rail projects in the United States to more creative ventures in “experimental geography”? What does the practice of cartography allow us to see that we would not otherwise have seen?

FLIGHT PATTERNS

One of a series of visualizations depicting airline traffic across the United States created by Aaron Koblin, this image is based on data from the US Federal Aviation Administration for August 12, 2008. Free of traditional territorial lines and city icons, the geography of North America can be seen in terms of connections, providing a fresh understanding of land-use and economic activity. For more information: www.aaronkoblin.com.



Most fundamentally, mapping illustrates where elements of what we choose to include under the umbrella term “infrastructure” are currently located or planned. In turn, this information can be used to illuminate a whole range of other trends. For example, some major newspapers have recently shown how Obama’s planned infrastructure projects tend to overlap areas that supported him on the campaign trail.

Yet, going further, the abstraction involved in this process also serves a more philosophical function: It moves us to reflect upon the spaces in which we live and work. Removed from the chaos of everyday life at the street-level, the geometrical forms of transportation networks, roadways, and even healthcare policies become visible, and therefore more comprehensible. Like a child staring into an Etch-a-Sketch, we are tempted to

imagine alternative transit systems and links between disparate places, not to mention the political and economic structures that produced them.

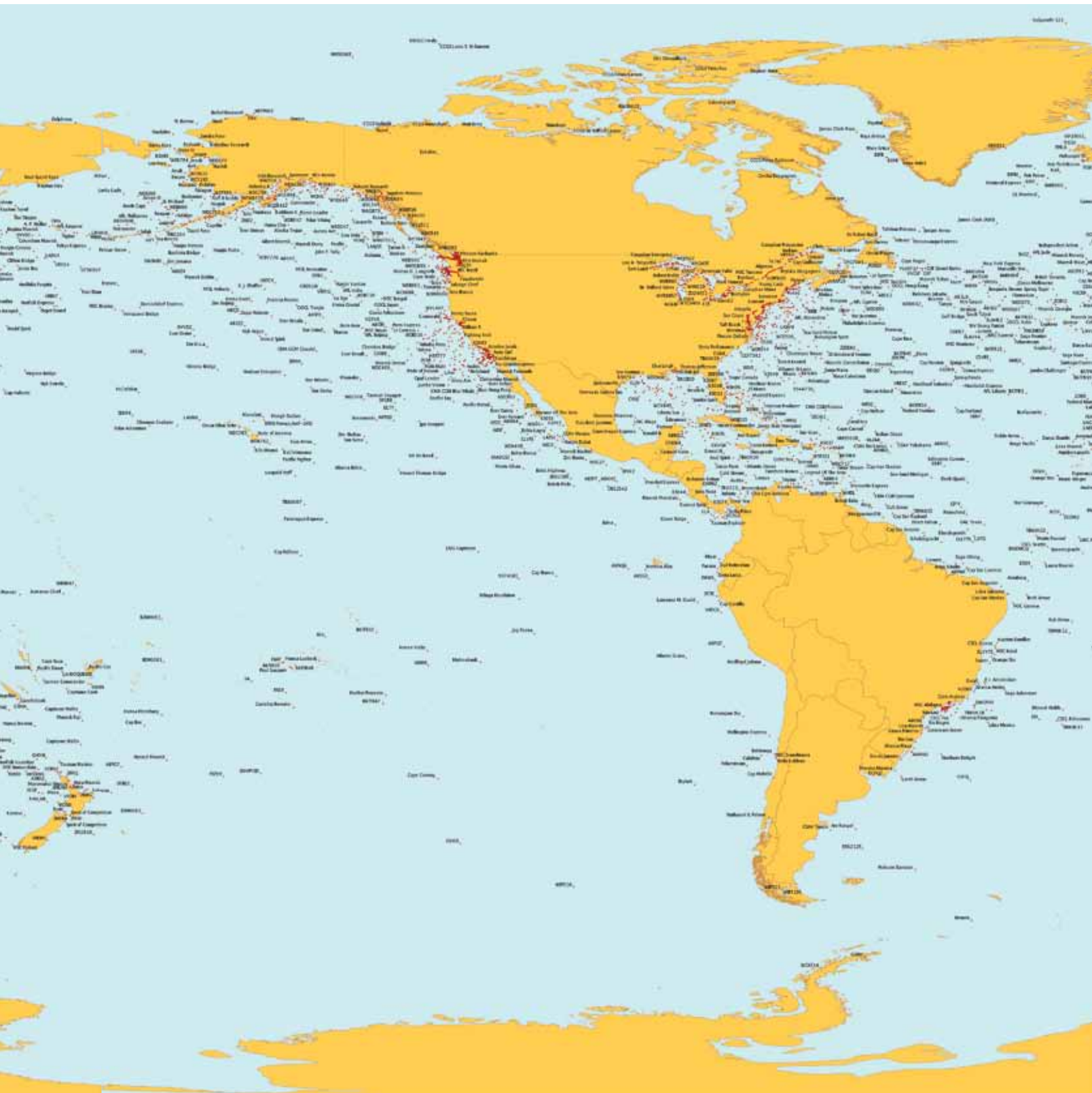
The widespread practice of visualizing infrastructure, therefore, is not solely about concrete projects. It is a medium for self-reflection. In the words of the anthropologist Clifford Geertz, one might say that infrastructure is “good to think with.”

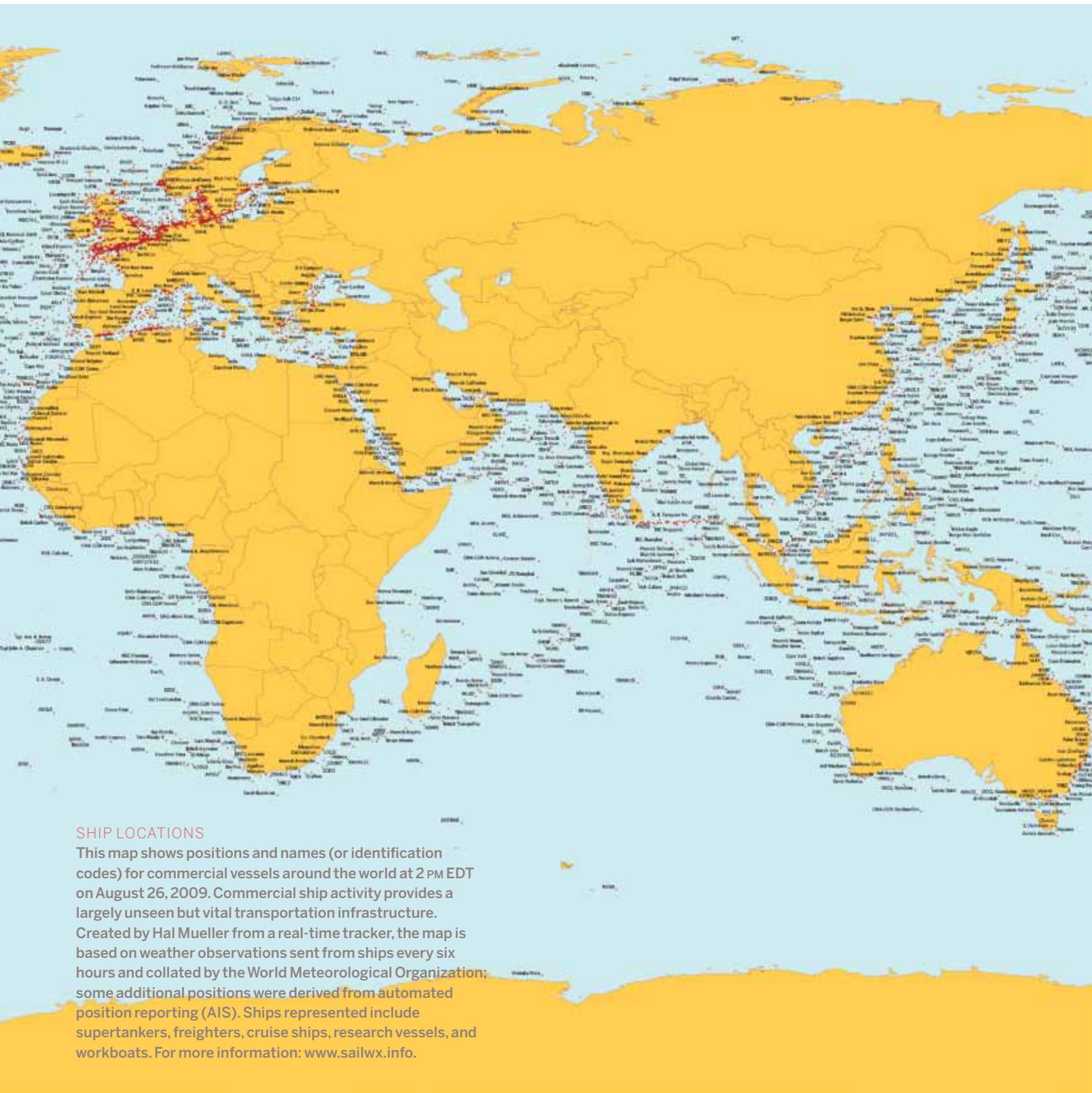
Jeanne Haffner PhD is an urban historian and a fellow at Harvard University. Her forthcoming book (MIT Press) examines the role of visual techniques in the evolution of the “new urbanism” in postwar France.

Things Visible and Invisible

The graphic presentation of infrastructural data yields more than a map.

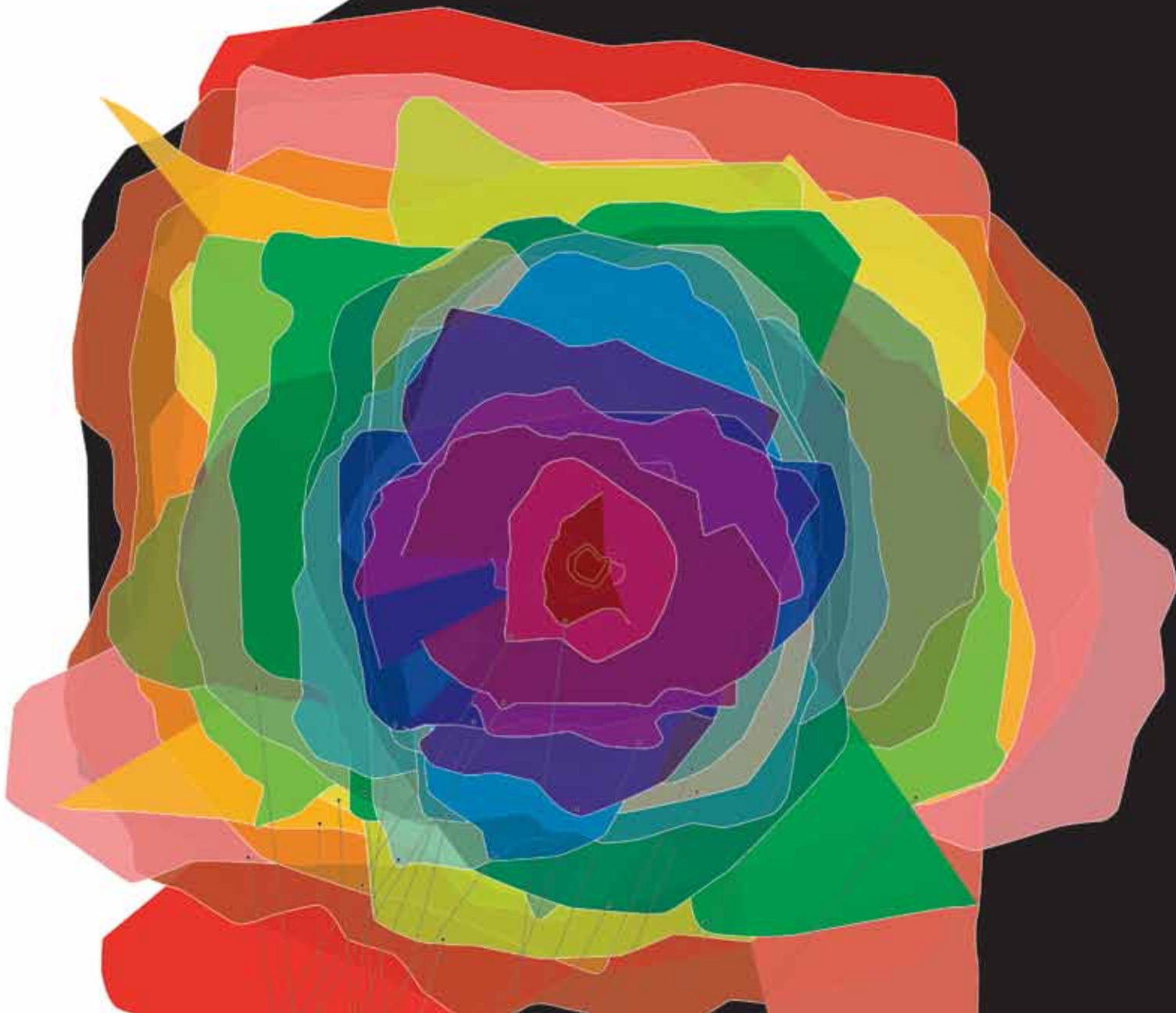
by Jeanne Haffner PhD





SHIP LOCATIONS

This map shows positions and names (or identification codes) for commercial vessels around the world at 2 PM EDT on August 26, 2009. Commercial ship activity provides a largely unseen but vital transportation infrastructure. Created by Hal Mueller from a real-time tracker, the map is based on weather observations sent from ships every six hours and collated by the World Meteorological Organization; some additional positions were derived from automated position reporting (AIS). Ships represented include supertankers, freighters, cruise ships, research vessels, and workboats. For more information: www.sailwx.info.



- AMSTERDAM
- ATLANTA
- BANGALORE
- BEIJING
- BERLIN
- BRUSSELS
- CAIRO
- CINCINNATI
- DALLAS
- GUANGZHOU
- HOUSTON
- JOHANNESBURG
- KANSAS CITY
- LAS VEGAS
- LONDON
- MADRID
- MEXICO CITY
- MOSCOW
- PARIS
- PHOENIX
- ROME
- ST. LOUIS
- SYDNEY
- TIANJIN
- TOKYO
- WASHINGTON D.C.
- VIENNA

RING ROADS OF THE WORLD

A depiction of ring roads from 27 cities, all layered at the same scale. The largest, shown in black, is from Houston, Texas, home of Rice University School of Architecture, which commissioned the image in 2009 from Thumb (www.thumbprojects.com) as a poster. The second largest, shown in red, is Beijing.

NORTH AMERICAN MASS TRANSIT

In this image, the mass-transit systems of North America are all drawn to the same scale, and placed in relative locations. Current as of 2005, it includes regional or commuter systems that connect two downtown areas of comparable size.

Revealing differences in both density and growth patterns, the map was created by Bill Rankin, now a PhD candidate in both architecture and the history of science at Harvard. For more information: www.radicalcartography.net.



CELL PHONE USAGE

These two images are part of a series representing text messages sent in the city of Amsterdam on New Year's Eve, 2007. This page: activity at 9 AM. Page opposite: activity at midnight. SMS visualization tool developed by Aaron Koblin, with MIT SENSEable City Lab and CurrentCity, based on data from KPN Telcom. For more information: www.currentcity.org and www.aaronkoblin.com.



