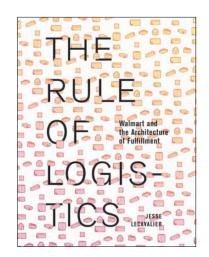


The Rule of Logistics: Walmart and the Architecture of Fulfillment

Jesse LeCavalier. Minneapolis, MN: University of Minnesota Press, 2016. 279 pp., maps, plates, notes, bibliography, index. \$30.00 paper (ISBN 978-0-8166-9332-0), \$105.00 cloth (ISBN 978-0-8166-9331-3).

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architecture and geography in a study of not just Walmart, but his concept of "logistification." I think it is this concept that explains why the transport of goods is rapidly being recognized by scholars as equally worthy of attention as the transport of people. In fact, LeCavalier argues that logistification represents a transformation in global economic activity on the scale of industrialization, mechanization, and automation. This is a bold claim, but a convincing one given the evidence he presents.

Over the past decade, more and more scholars from urban, economic, and political geography have been paying attention to transportation. Somewhat ironically, given the tendency within transportation studies to favor passenger over freight travel as an object of study, this new critical perspective has turned most noticeably toward freight, reserving much of the engagement with human travel to the burgeoning field of mobilities. Popular attention is being brought to freight and logistics as well through podcasts such as Containers and Cargoland, both of which explore the inner workings of an opaque system that undergirds our daily lives to an extent we rarely recognize. Academic work on infrastructure more broadly, especially urban infrastructure, emphasizes the importance of these systems in shaping political relationships and daily livelihoods whether in the Global North or South.

The Rule of Logistics provides a wonderful complement to that growing literature on critical logistics and critical transport geography more broadly. At the same time, it will also be of interest to scholars of digital and communication geographies, urban and rural infrastructure, and urban, economic, transport, labor, and retail geographers. This variety of interests gives an indication of the range of areas that LeCavalier touches on as he brings together

The main creative tension in the book is between concreteness and abstrac-

tion. On the one hand, there is the exceedingly material nature of moving goods from place to place, as well as the local characteristics of the places where those goods are temporarily housed, the bodies of workers who move them around, and the steady velocities that have to be maintained to keep the system functioning. On the other hand, there is the increasing abstraction of objects themselves into bits of information, along with the resulting patterns that are only legible to machines and not humans (with the bar code being the earliest example). Together, concreteness and abstraction merge in the concept of logistification, which LeCavalier denotes as a new era of production characterized by the need to be constantly aware of where objects are in time and space, the goal of reducing friction, and a forward-looking orientation to anticipate problems. He argues that logistification is producing a new kind of built environment, which forms the main subject of the book.

Despite the "architecture" in the title, geographers will find that this is not merely a study of buildings, but broader connections and spaces. The logistified built environment is broken down into various categories that serve as the chapter titles: logistics, buildings, locations, bodies, and

territory. The logistics chapter will not be innovative to anyone familiar with existing histories of containerization and warehousing (e.g., Levinson 2006; Cowen 2014), but for those approaching the book from an urban or digital geographies perspective, it serves as a good introduction to the processes at work. "Buildings and Locations" brings together interesting histories of Walmart's operations with broader ideas about space and scale. The gradual, step-by-step growth of the company from a single location in northwest Arkansas to a global retailer is explained in terms of physical connections to distribution centers and Sam Walton's love of flying, among other things. The section on workers focuses on the role of humans within the system and how at this point in time, human labor is still necessary, even if it is subordinate to the mechanized, computerized system. I was expecting to read more about the labor conditions of the pickers, but the author chose to remain more on the abstract than the concrete side in this regard. Throughout these sections, LeCavalier moves back and forth between specific schematic diagrams, broad spatial processes, and company operations, weaving together visual and textural evidence while telling an interesting story.

That said, it was the section on territory that I found the least persuasive. The Northwest Arkansas Metropolitan Statistical Area is an unusual kind of "city," a rare case where a global company is headquartered in a small enough town that the entire city-region orbits around it. This includes the business parks where suppliers locate their expatriates to negotiate directly with the heart of the organization, the art museum meant to draw tourists and establish the Walton family as philanthropists, and the data and distribution centers that keep the whole system running. At the same time that "world cities" dominate urbanization discourses, here is one of the largest companies in the world firmly rooted in a noncity, or at least a nontraditional city. LeCavalier makes a good case for this being a new kind of city, not quite suburban sprawl but nevertheless lacking an authentic urban core. I am not convinced, however, that this city type is likely to occur in many other places, which sits oddly among the broader argument on logistification and its effects on transportation, communications, and retail. Bentonville is likely to remain a unique kind of place, unlikely to serve as either a deliberate role model or an accidental template. That does not mean it is not worth studying, but it is not clear how it might be more broadly of interest to urban theorists.

At the same time, a broader critique that could be offered of the book is that it focuses on a single retailer, so how can it claim to establish a new economic order? Yes, Ben-

tonville is an unusual metropolitan area and an exception to the rule of global headquarters concentrating in world cities, but it's just one case. The scale at which Walmart operates, though, is so vast that it is worth studying in and of itself (and as LeCavalier mentions, Walmart describes itself as a logistics operation, not a retailer). Furthermore, many of the innovations that Walmart has developed over the years, whether in communications or real estate or logistics, have been taken up by enough other organizations that they have truly reshaped global landscapes. This is where digital geographies come in, for LeCavalier also argues that satellite communications and data centers are as fundamental a part of Walmart as their big box stores and hardline negotiations with suppliers. The history of the bar code and self-service supermarkets comes in here, where attaching scannable information to products meant that customers could select their own items off the shelves. This obviously reduced labor costs under the cover of increasing consumer choice—but it also set in motion the abstraction of goods from material objects in stores to data points along a global network. Perhaps the self-service checkouts now present at most major U.S. grocery stores were not yet in place as LeCavalier was writing, but they certainly carry this idea one step farther (as does Amazon's attempt to develop grocery stores that do away with checkouts entirely).

The book concludes by hinting at the broader consequences of logistification, specifically enabling so many consumers to get what they want almost instantly or without leaving home, a play on words of the "fulfillment" of the title. LeCavalier argues that because logistics comes out of the military, it is bound to its current goals of efficiency and control above all else. At the same time, because infrastructure more broadly serves the function of shaping lives in ways we rarely see, the potential exists for a more just or equitable infrastructure, one focused on "fulfillment" of a different kind than consumption. How to get to that kind of infrastructure remains an open question, but if as simple a technology as the container could reshape the global economic system in a matter of a few decades—in concert with high-tech communications and good old-fashioned land development—who's to say that another kind of infrastructure might not be possible?

References

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