

## ROBERT GOTTLIEB

## Port of Call

On becoming China's entrepôt

tart with a doll—a Barbie, say, although it could be an Apple computer or iPhone, a cotton shirt or denim jeans, a clove of garlic or a bottle of wine, dog food or toothpaste. From manufacturing centers in China, to the Ports of Los Angeles and Long Beach and the huge warehouses in the Inland Empire, and then to a big box store in Chicago or Kansas City, Barbie's journey is emblematic of what is sometimes called "the global trade and goods-movement system." And it reveals how Los Angeles's relationship to China has changed in the past century.

Rather than being at the center of a Pacific Rim periphery, Los Angeles is now an *entrepôt* in a global system with China at is center. This system for the movement of goods has also brought bad effects—especially pollution—to Los Angeles communities. At the same time, it has spurred a movement for environmental justice and cleanup that is now reaching back across the Pacific to China.

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Today, 80 percent of the world's toys are produced in China, primarily in Guangdong province in the Pearl River Delta in Southern China. Mattel, which produces Barbie, has dozens of suppliers in Guangdong, including the city of Shenzhen, which has grown from a small fishing village to a metropolis of ten million. The major players shaping the goods-movement system are the ship owners (who transport the goods across the ocean) and the large end users (who sell the goods). They have developed a strategic connection to the producers (those who make the goods), the port owners and managers (who bring in and send out the goods), and the rail, truck, and warehouse companies (who take the goods from the ports, repackage them, and send them to their final destination).

Over the last three decades, this system has become a central economic driver and a huge community and environmental burden for Los Angeles. It has also made Los Angeles something of an appendage to China. China, in that same period of time, has strengthened its role as the world's factory and export powerhouse. At the same time, China has become one of the most polluted countries in the world.

At each stage of the doll's journey, there are impacts. They begin at one of the Shenzhen factories where different parts have been assembled from other factories and subcontractors in Southern China or from other countries in Asia. Once assembled, the doll continues its journey from manufacturing facility to a port, whether the port at Shenzhen, third largest in the world, or the nearby port at Hong Kong, the fourth largest in the world. Packed in containers, the dolls, along with the computers, iPads, T-shirts, and hundreds of other goods, are loaded onto a giant container ship, vessels owned by some of the largest ocean vessel companies in the world. Most of the ships still run on bunker fuel, a grade of fuel lower than diesel and even more polluting. Absent strikes, fires, or other disruptions, it takes about a day (but sometimes quite a bit longer if there's congestion) to unload all the containers from ships that arrive at the Port of Los Angeles or the adjacent Port of Long Beach and then reload containers heading back to China (although not all containers are reloaded for their return journey, given United States-China trade imbalances). A crane lifts each container off the ship, placing it onto a truck. The truck hauls the container (with the dolls inside) to a rail facility where it is reloaded onto a train, powered by diesel-fueled locomotives. The train then travels to one of Southern California's giant inland ports, where the container is moved to another truck, which takes it to a huge distribution center further inland, and another truck ultimately hauls Barbie to the big box store where she will be sold.

These endpoint retailers, such as Walmart or Target, are also key players in the goods movement/supply chain system. Thousands of trucks operate throughout the country along this supply chain, from ports to retail stores; Walmart alone has a fleet of more than fifty-three thousand trucks. Many trucks are operated by independent owner operators, many of them undocumented immigrants, who work long hours with small compensation, while the large trucking companies often lease the trucks and assign deliveries, which further fragments the trucker workforce.

Environmental, public health, workplace, and community impacts arise along this entire system, especially from the diesel pollution resulting from this pattern of moving goods. The diesel emissions can in turn contribute to such health impacts as asthma, reduced lung development in children, cardiovascular disease, lung cancer, and premature death. Community environmental sacrifice zones have been created in the process, almost all low-income immigrant communities adjacent to the ports, the rail and truck routes, and the warehouse complexes.

This elaborate goods-movement system has significantly expanded during the past several decades. According to port officials, international trade increased nearly thirty times at West Coast ports since the 1970s, with a far more phenomenal growth in Chinese ports such as Shanghai, which has become the largest port complex in the world. Today, the links between Los Angeles and China resemble the dreams promoted by the *Los Angeles Times* in the 1950s of establishing a "Pacific Littoral" that would stretch from LA to Asia—but reversed. Los Angeles was supposed be the center not an *entrepôt* in "a maritime world economy" with China at its center.

Clarence Matson, the long time head of the LA Harbor Department, in a 1935 book about the history of the LA port, spoke of the "westward march of empire and civilization which is now reaching its climax on the eastern shores of the Pacific with Los Angeles as its apex." This focus on Pacific trade expanded after World War II, with interest in new global trade opportunities and investments by



American businesses and government officials spurred by talk of a new Pacific Rim constellation of players. When interest in promoting US exports and increasing imports further developed in the late 1950s and early 1960s, delegations from LA would continually travel to various Asian ports, including Hong Kong, Taipei, Manila, Tokyo, and Singapore, to highlight the changes that were increasing their port's capacity and to look for new trade opportunities. By the early 1980s, LA Mayor Tom Bradley had emerged as the major champion for LA port expansion and increased trade, with a strong focus on Asia, and especially the emerging power of China. The growth in international trade from the Pacific picked up considerably in the 1980s and 1990s and exploded even further in the new century with the huge volume of exports now entering the United States from China.

Celebrating this expansion in trade, Bradley would proudly proclaim that LA had positioned itself as the "gateway city for the Pacific Rim." The ports of LA and Long Beach embarked on massive expansions of their facilities, which included increased cooperation (as well as continuing competition) between the two ports in anticipation of increased trade and to accommodate the largest container ships, which could not fit through the Panama Canal. Periodic efforts were made at anticipating future growth, which led to further changes in port operations and facility developments.

Changes included building new terminals on existing vacant land, redeveloping and expanding existing container terminals, deepening waterside berths, building a bridge replacement to accommodate more goods-movement traffic, and constructing a major rail corridor, the Alameda Corridor, a \$2.4 billion, twenty-four mile rail link from the port to the huge railyards and intermodal facilities situated in the low income communities to the south and east of downtown Los Angeles. There were also plans to expand the Interstate 710 freeway, the primary route for the thousands of trucks entering to and from the ports, with the

freeway passing through the same neighborhoods that were located next to the large intermodal facilities. At the eastern edge of the Southern California region, in the Inland Empire, massive new warehouses and intermodal facilities (some one to two million square feet or larger) were being constructed or expanded to establish Southern California's "inland ports," designed to move goods inland from (and to) the ports, often by rail, to be repackaged and then transferred to their final inland destinations.

Today, the Port of Los Angeles is the busiest container port in the United States, while its neighbor to the south, the Port of Long Beach, is the nation's second busiest. Together, the two ports constitute by far the largest port facility complex in the United States and the ninth largest (when combined) in the world. The Port of Los Angeles encompasses 7,500 acres, including twenty-four passenger and cargo terminals, on-dock intermodal facilities, and railyards. The Port of Long Beach resides on 3,200 acres and includes twenty-two terminals, ten piers, and eighty cargo berths that handle nearly five thousand vessel calls a year, as well as on dock rail facilities, with more than six million containers passing through the port. About 40 percent of the nation's imports come through these two ports, and they are the primary destination for goods from China, establishing a new version of the old Pacific trade routes. Policy makers in both Los Angeles and Long Beach have heralded the economic value of the ports and logistics industries, proclaiming that they are the economic drivers and job creators in the region, and that a double and even triple expansion of the ports is poised to occur in the next two decades.

The combination of these developments has led policy makers to talk of a logistics industry revolution in the Los Angeles region, with huge transportation, land use, and environmental impacts identified as side issues, at most. Supporters of this goods-movement sector characterize it as a win-win for the region—good for the ports and the logistics industries such as warehousing and trucking and the railroads; good for other sectors of the Los Angeles regional economy and for the global economy; and good for consumers who buy cheap imported goods. If there are concerns for its boosters, it has more to do with competition from the newly expanding ports in the southern and eastern coasts of the United States—ports and regions eagerly awaiting a new enlargement of the Panama Canal's capacity. This projected expansion, designed to accommodate the largest

container ships, has spurred a frenzy of new expansion in eastern seaboard ports such as Jacksonville, Savannah, Miami, Gulfport, New York, and New Jersey. In addition, the Panama Canal expansion is seen as a major boost for the export of natural gas from the United States, thanks to huge increases in production due to advanced technologies such as hydraulic fracturing or "fracking."

For the communities in the path of this logistics revolution, win-win could better be characterized as lose-lose. Beginning about thirteen years ago, community groups, along with environmental and academic allies, began to identify the enormous negative impacts this system generates. This includes the emissions from the ships, cranes, trucks, railroads, highways and high traffic roadways, as well as the twenty-four-hour bright lights, noise pollution, and land-use impacts.

The core community and residential health and environmental concern has been the diesel emissions that occur along each of these pathways. It is this concern that has led some community residents to describe their neighborhoods as "diesel death zones." Diesel is considered a mobile source air toxic by the US Environmental Protection Agency. In California, diesel exhaust has been regulated as a toxic air contaminant since 1998, based on more than thirty studies showing that worker exposure to diesel exhaust is linked to lung cancer and other health effects. In 2012, pointing to cumulative research, the International Agency for Cancer Research, a part of the World Health Organization, identified diesel as carcinogenic to humans, based on evidence that exposure is associated with an increased risk of lung cancer.

The concern over diesel is also linked to the pollution associated with heavy truck traffic and congested high-traffic roads that affect nearby residences, schools, playgrounds, and other community gathering places. As in many other regions in the United States, land-use decisions in Southern California have resulted in homes, schools, and even parks being located near highways, and highways later being expanded so they end up even closer to homes. For example, sixty-five schools are located within one mile of the I-710 freeway with its huge goods-movement-related truck traffic, and there are more than 600,000 residents (including 212,000 under eighteen) who live within 1,500 meters of that same freeway. People living that close to the highway also have higher poverty rates and include a larger



proportion of people of color than Los Angeles County as a whole.

It is due to this web of impacts through the goods-movement system that the oppositional movements took root. In 2001, scientists at the University of Southern California hosted a conference on air pollution and invited a number of environmental justice groups in the region to hear the findings of the scientists, including groups located in heavily affected neighborhoods adjacent to the goods-movement corridors. Scientists at USC were in the midst of a longitudinal study of air pollution, with a focus on children's health, and had begun to map air pollution hot spots. While discussing the problem of exposure to particulate matter and diesel exhaust, several community members spoke of the health, community, and environmental issues in their neighborhoods.

Toward the end of the conference, Jesse Marquez, a resident of the low-income community of Wilmington adjacent to the Port of Los Angeles, rattled off a series of anecdotes

about people in his neighborhood facing serious health problems. "The ships at the port are not even regulated for their impacts, yet we face the consequences every day," Marquez told the assembled scientists. "Of course it's regulated," the scientists replied, less knowledgeable about how the goodsmovement system operated. The scientists soon discovered that Marquez was right, suggesting that community experiences and knowledge were also critical in helping frame the research. As it turned out, already by the time of the conference in 2001, several of the community groups had linked up with the Natural Resources Defense Council (NRDC) to contest a port expansion project involving a major Chinese shipping company. As these and additional partnerships began to be formed, they set out to change the nature of the debate and challenge policy makers to begin to address community, health, and environmental issues as part of their goods-movement policy agenda.

The community groups were linked to an evolving environmental justice framework. Based in low income,

predominantly Latino and immigrant neighborhoods, the focus on goods-movement represented not just the classic environmental justice argument about the toxic burdens in such communities, but a strong desire to have residents help create more livable places, underlining the environmental justice argument that environmental advocacy is about the places where people live, work, play, eat, and go to school. What became especially compelling about this place-based focus was the understanding that their struggle was at once local and global. China was also on their agenda, as linkages have begun to be pursued with community and environmental advocates in Hong Kong and China who are addressing some of the same types of pollution and "sacrifice zones" on the other side of the Pacific.

Labor groups also became engaged in these issues. There are substantial numbers of people employed in the goods-movement system, including those represented by a strong and historically significant union at the ports (the International Longshore and Warehouse Union) as well as those not represented and often exploited and subject to some of the same environmental and health impacts as the community residents, including independent truck drivers and warehouse workers (many of them undocumented immigrants).

One of the first organizing and policy battles involved the fight over dockside ship emissions, specifically plans for a major Chinese shipping company to occupy a \$650 million 174-acre terminal to be built by the Port of Los Angeles. The terminal would house as many as 9,100 containers for the China Shipping Holding Company, larger than any at the time. It would also include ten massive cranes, up to sixteen stories high to unload the containers. Yet the site was just five hundred feet from homes and would involve new roads to accommodate the anticipated huge increase in truck traffic.

These plans immediately generated community opposition. For one, the ships that would be docked at the port were likely to keep their engines running until containers could be unloaded. Dockside diesel-related emissions for just a single vessel at berth could include as much as one ton of nitrogen oxide and nearly one hundred pounds of particulates each day before the unloading took place. Given the issues involved, the community groups immediately went into action and convinced NRDC to bring suit against the port to stop the completion of the new terminal until an

agreement could be reached with the community groups. After losing in district court, NRDC appealed and won a major decision at the appellate court level. As a result, the port (and the City of Los Angeles) decided to settle in order to avoid a lengthy court battle whose outcome was not assured.

The results of the agreement, known as the China Shipping settlement, were impressive. On the one hand, China Shipping agreed that its ships would use "cold ironing," a long-standing technology used by naval vessels and ferries but never before by container ships. This technology established a simple change: instead of running on diesel power, the ships would plug into an electric source while at berth. In doing so, more than three tons of nitrogen oxide and 350 pounds of diesel particulate matter would be eliminated for each ship that plugged in. The settlement also called for other environmental changes at the terminal, including the use of dock tractors that could run on cleaner, alternative fuels instead of diesel, shorter cranes, and ultimately a shift toward cleaner marine fuels once their feasibility had been evaluated. A community mitigation fund was also established, including incentives to replace diesel-powered trucks, air quality mitigation measures, and community improvements.

The China Shipping agreement turned out to be the opening effort to address future expansion plans and produce environmental changes in current as well as future port operations. The community groups also gave notice that additional expansion of port projects that would increase emissions would likely be challenged. This included expansion of existing terminals, one of which involved an expansion from 176 acres to 243 acres and reconfiguring of roadways to accommodate the anticipated increase in traffic. Once again a lawsuit was filed and a settlement was reached out of court. This included, notably, a \$50 million port community mitigation fund to be administered by a community and environmental board; \$3.5 million for parks and open space, installation of air purification and sound proofing in the nearby public elementary schools and residents' homes, new health services resources and research on health and land use impacts, and potential wetlands restoration projects in Wilmington and San Pedro.

The settlement was concluded in the midst of a lengthy and contentious policy process where the community and



environmental groups, with their research, legal, and labor partners sought to establish an overarching plan to guide the environmental change, impacts on communities, and additional issues related to truck emissions and the conditions faced by drivers. It resulted in an overarching clean air action plan adopted in 2006 and a subsequent clean trucks plan the next year that included both ports, although the Long Beach port eliminated one key provision of the truck plan. In many ways, these plans provided the most substantial changes to date of any port in the United States and for many other ports worldwide. The clean air action plan set significant emission reduction targets—a 45 percent emissions reduction in diesel particulate matter, nitrogen oxides, and sulfur oxides by the end of 2011 from the baseline year of 2007; a goal that was achieved and even exceeded in part due to reduced ship traffic during the recent recession. Other changes that predated the adoption of the clean air plan or were put in place subsequently included a ship speed reduction plan, the change to electric shore power,

a shift to alternative fuels for cargo equipment, including for cranes, and future changes in the fuel sources for incoming ships.

The most impressive—and contentious—of the changes involved a transition toward replacing dirty diesel trucks with less-polluting trucks at the port. This clean trucks plan included replacing and retrofitting approximately sixteen thousand trucks in order to meet federal EPA emissions standards. To achieve these goals, the program featured a \$1.6 billion concessionaire model that would require trucking companies who serviced the port to hire truck drivers as employees in return for securing transport contracts with the port. These new employees would replace the heavily exploited system of independent contractors, the *tranqueros*, who resided at the economic margins and would find the truck replacement costs nearly impossible to meet.

The adoption of the clean trucks program marked a pathbreaking accomplishment for the community, environmental, and labor networks engaged in bringing about changes

at the ports. It represented a major potential reduction in the environmental exposures experienced by both truckers and community residents, and a major benefit for the environment as a whole. It directly addressed the exploitative trucking system put in place with the deregulation of the industry in the 1980s that required independent truck drivers to bear the burden of all maintenance and upkeep for trucks that cost over \$100,000, along with port fees and other costs of doing business at the port. Many of the individual truckers who owned and operated their own trucks and needed to compete individually for hauling jobs, were those low income, immigrant truck drivers who netted about \$30,000 annually and worked eleven to twelve hour days. The immigration status of the truckers also reinforced the potential for exploitation. Immigration issues have loomed large in relation to port trucking and goods-movement issues. For example, on I May 2006, a year prior to the clean trucks plan agreement, 90 percent of all the truck drivers serving the LA port refused to make or pick up their deliveries, in solidarity with a massive immigration rights rally that took place that day. Participation in this action was significantly motivated by an immigration raid at the port two weeks prior that had targeted immigrant truck drivers, leading to several drivers hauled out of their trucks and detained, while their trucks were towed away.

Faced with these changes, the goods-movement industries, led by the trucking companies and the big box retailers have fought back, bringing legal challenges and seeking to undermine a key provision of the clean trucks plan, the concessionaire model. With their army of lawyers and deep

pockets, and unusual alliances (for example, a Chinese government agreement with the American Legislative Exchange Council to promote fracking and natural gas exports), the community groups continue their battle, securing additional victories amidst various setbacks.

This goods-movement system is just one illustration of the increasing China-Los Angeles links. Los Angeles is an immigrant city—upward of 35 percent of its population are immigrants. Its Chinese population numbers 566,000 according to the 2012 census (the Bay Area is slightly higher at 629,000). One of the new destinations for Chinese immigrants is Monterey Park, which has the largest percentage of Chinese residents (42.7 percent) of any city in the United States. Similarly, Chinese investors have eagerly bought up Los Angeles assets, including commercial and residential real estate and high-end hotels.

But the heart of the Chinese presence in Los Angeles is represented by the goods that arrive and depart from the ports of Los Angeles and Long Beach. For Los Angeles (and for other West Coast ports), the Pacific Littoral has become more of a transfer point than a center for trade, while at the same time increasing the pollution that has for so long plagued Los Angeles. But it is also where the most dynamic community organizing in the country is taking place, seeking to create another notion of what Los Angeles—and perhaps China—could become. **B** 

## Note

Photographs of shipping containers by Nolan Webb.

