How shipping containers shortened the life span of petro-civilization

Contributed by Alice Friedemann
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Editor's introduction: This analysis deftly reveals how our cities physically and culturally changed to accommodate commerce, technology and economies of scale to the detriment of communities' livelihoods. Alice Friedemann spent many years in the shipping business (ships), and since retirement has ratcheted up her critique of the corporate economy's distribution system as she explores peak oil. Her previous articles have focused on "Peak Soil", and the "Financial Monsters" we face as economic reality catches up with endless growth.- Jan Lundberg

Book Review: Mark Levinson: The Box. How the Shipping Container Made the World Smaller and the World Economy Bigger. Princeton University Press, 2006.

Mark Levinson has written a book that shows how containers made global trade possible. In the preface of the paperback edition, he notes other aspects of containerization he became aware of later, such as the potential for containers to harbor atomic weapons, how they've become homes, and so on.

To me, what Levinson leaves out is how this global distribution system will make it very difficult to go back to local production as energy declines. He doesn't mention that containerization was the fastest way yet for capitalism to loot the planet and strip Mother Earth down to her hard dry skin.

In 2005, roughly 18 million containers worldwide made over 200 million trips (wikipedia). Containers come in many sizes, an average one is 40 feet long, 8 feet wide, and 8 feet high, the size of three 10 by 10 foot bedrooms. There are 1,300 foot-long ships now that can carry 7,250 of them.

It's mind boggling to think about how different the world is now. My grandparents ate what was in season, an orange was a precious Christmas gift. Today, the Japanese are eating Wyoming beef and we're driving Japanese cars.

Before containers were used to move cargo, port cities had long piers where boxes and bales were moved by sweat and muscle onto ships. Longshoremen lived within two miles of the docks in cheap housing. Now the piers are gone and the only sweat comes from yuppies on treadmills in luxury apartments.

The cost of moving products by any means, whether truck, train, or ship, was often so high most goods were made locally. Factories were often located near ports to shorten the distance of getting products to ships.

The idea of containerization was around for a long time, and a few companies experimented with doing this and failed for various reasons. It took Malcolm McLean, the founder of Sea-Land, and standardization, to make containerization really take off.

The cost of shipping goods, whether the container was on land or water, dropped so drastically, that suddenly it made more economic sense for a factory to be located wherever land, labor, and electricity were inexpensive. Millions of high-paying factory jobs were lost as containerization made it possible for factories to move overseas.

Also very important was being able to get goods cheaply to a container port. The price of labor in Africa might even be less than China, but Africa has few container ports, so factories don't move there.

Containerization was a major revolution – instead of endless loading and unloading each box from trucks, to trains, to ships, moving cargo became so much simpler and cheaper that the cost to move cargo was no longer a major consideration. This made longer supply chains became possible. The example Levinson gives in his book is how Barbie dolls are manufactured. America ships China the cotton, molds, and pigments used to make Barbie, Japan the nylon hair, and Taiwan the plastic in her body. This allows Japan to get really, really good at nylon hair, and make it far cheaper.

The history of container ships contains a valuable lesson about why capitalism has hastened the collapse of petro-civilization. After the energy crises of the '70s, U. S. Lines built slow, energy efficient ships. Fuel had gone from 25% of operating costs in 1972 to 50% in 1975. If oil had gone to $50 per barrel as expected, U. S. Lines would have had the most profitable shipping line plying the ocean. But oil plunged to $14 a barrel, and the bankruptcy was the largest in history. Capitalism can only see profit this microsecond; it has no plans for the future.

Wham! Imagine what will happen when the energy crisis strikes forever, and only the military and politically connected have gasoline. It's great that container ships carry cargo efficiently, and perhaps can be towed by giant kites (experiments are underway). But what can be shipped with inland factories scattered across several continents? How will all the bits and pieces of Barbie find each other?

With limited energy, it will be hard to go back in time, to rebuild docks and local factories plus all the other sail-based infrastructure. Humpty Dumpty didn't just fall off the wall, where we could have glued him back, he's been blown up, his ashes scattered around the world, and there's not enough time or energy to put him back together again.

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Editor's further thoughts: Containers crossing the ocean are extremely hazardous to the ecosystem for centuries, when they fall off of freighters' decks in storms. The stuff that comes out of them are often plastics that add to the disaster befalling the North Pacific Gyre, for example. Thousands of basketballs can suddenly be loosed upon the waves, attracting pollutants as plastics do, and breaking down to smaller pieces to be ingested by sea life.

I've long thought that containerization and intermodal transport have had interesting and rather negative effects. Perhaps the worst one was to freeze railroads into perhaps permanent secondary status, or even hasten their ultimate demise. Although they move freight at one eighth the energy (and the pollution) of trucking, trucking dominates once the containers arrive across the seas. Because the railroads' signing onto containerization got them into bed with trucking, our Alliance for a Paving Moratorium and the Auto-Free Times magazine could make zero headway with the rail industry in fighting road construction such as NAFTA Superhighways.

One look at the port of Oakland and other modern ports shows huge cranes dealing with containers. Entirely out of human scale, these alien-looking contraptions were actually the inspiration for George Lucas's "Star Wars" films' evil robotic weaponry later mimicked in "The Matrix" sequels.
- JL
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Alice Friedemann's previous articles on Culture Change include:

Collapse: Walmart and Waiting for the Shoe to Drop

Financial Monsters

Peak Soil: Why cellulosic ethanol, biofuels are unsustainable and a threat to America

The Hydrogen Economy – Energy and Economic Black Hole

Further Resources:

The Forgotten Spaces, a film on container shipping