

Using a Nested Levels-of-Organization Conceptualization to Mitigate the Costs and Redistribute the Benefits of the Globalizing Industrial Production-Consumption Complex

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Back in December 1991, Lawrence Summers, who was then Chief Economist at the World Bank, signed off on an internally circulated memo which opened with the speculation that the economically efficient way to deal with toxic waste might be to ship it to nations with the lowest life expectancy--folks there were going to die younger, anyway, the memo is said to have suggested, and so the costs of pollution in terms of reduced human life years would be lower if they were to bear the impacts of toxic waste. Of course, the memo leaked, hit the papers, and generated a suitably outraged reaction from all. Dr. Summers apologized, explaining that the statement was intended as ironic commentary on globalization. He was promoted upward into the International Monetary Fund and the US Department of the Treasury, and Washington settled back into its conventional torpor.

If you felt any outrage at the notion implicit in the original assertion, you need to examine that outrage somewhat carefully. For, as it turns out, Dr. Summers was merely predictive, because that is quite precisely what the West has been doing in the decades since. The only difference is, instead of merely shipping our toxic wastes to less developed economies, we have instead shipped the entire polluting manufacturing process overseas. And that seems to have been accepted by most of us quite calmly, and certainly unthinkingly, as the "price of progress." The poor need work, some work is dangerous, we all accept risks as we consider our own personal calculus of occupational risks and benefits, and, besides, they have choices, don't they?

Or is all this instead merely an instance of an extremely distorting externality that demands correction? I would argue that the manufacturers and buyers of a diverse array of modern-day consumer goods have successfully externalized the polluting costs of manufacturing and transporting consumer goods onto people less able to protest (and so less protected from) such pollution. The average US consumer gains on at least two counts--not only are Americans able to buy consumer goods at a fraction of what they would have cost if they had been manufactured within the US, but we are also able to capture the quite significant benefits of reduced toxic environmental pollution, and claim those benefits as the earned rewards of our own putatively enlightened modernization project.

Markets are legitimately useful mechanisms for planning and social decision making, but they can only operate in an informative way if we are conscientious

about rooting out distortions and externalities. As matters stand today, the apparent monetary benefits of globalization rest at least partly on the externalization of pollution costs. We have pushed onto others some chunk of the costs of modern-day consumerism, while retaining for ourselves the bulk of the benefits.

One such sub-population of people upon whom we are imposing these sorts of externalities are the usually low-income families that live and work in close proximity to the various goods movement infrastructure that enable this capture of benefits. The residents of Long Beach and Los Angeles living around the San Pedro Port Complex and to either side of the I-710 and the Alameda corridors, are paying part of the actual human health costs of the globalizing transnational industrial manufacturing complex. Children born with respiratory impairments, higher incidences of cancers and other sorts of air pollution-related illnesses are part of the price that is being levied upon the poor and the oppressed so that we can buy that flat panel large screen television set at a fraction of its legitimate market cost. And so it is that some few people sicken and die, every day and in very factual ways, to make the American way of life affordable for others.

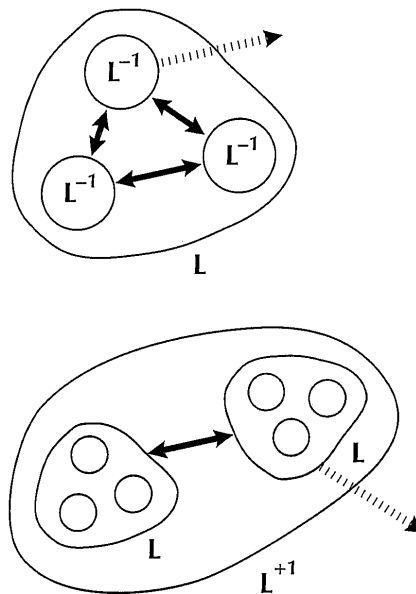


Figure 1: [Insert appended file Levels.jpg] In the nested levels of organization conception, the strength of relationships (constituted by processes and functions) between sub-systems makes it meaningful to name a particular system as a level of concern (L). This system, represented at that named level of concern, may in its own turn be seen to meaningfully interact with other systems at that same level of concern, to give rise to a supra-system. [p. 157: Ahl, Valerie & Timothy F.H. Allen. 1996. Hierarchy Theory: A Vision, Vocabulary, and Epistemology. New York: Columbia University Press.]

If we visualize the neighborhood surrounding the San Pedro Port complex as the system of concern, and as part of a nested system, containing within it the various sub-systems that make up the operating Ports of Los Angeles and Long Beach, and contained itself and in interaction with other neighborhoods by the region of Southern California, then we can expand the levels of organization outward still further to take in, first, the consumption system that is the United States of America, and beyond that, the global production-consumption complex that is the world economy. It becomes fairly clear that there are substantial benefits being generated by this supra-system, as economies of scale are captured, and as information itself becomes a primary factor of production. Of course, as in all things, there are costs as well. However, it is also evident that the benefits and costs are distributed in a quite lumpy and incommensurate way—some few people, in some few localized sub-systems, seem to be bearing the brunt of the environmental health impacts of the production and the transportation processes, while an entirely different and substantially more diffused populations of producers and consumers are capturing the benefits of such a globalized supra-system.

Processing about 132 million tons of cargo each year, the San Pedro Port complex comprising the adjacent ports of Los Angeles and Long Beach, is by far and above the largest US sea port in terms of both the volume and the dollar value of cargo processed, and the fourth-largest US sea port in terms of tonnage. Some 13 million twenty-foot equivalent unit (TEU) containers flow through this port complex, serviced almost entirely by a single freeway, the I-710, and the Alameda Corridor rail line. A report recently released by the Ditching Dirty Diesel Coalition, titled [Paying With Our Health: The Real Cost of Freight Transport in California](#), asserts that the freight industry “generated \$231 billion in revenues from their California operations in 2005.” [see http://www.pacinst.org/reports/freight_transport/index.htm for more information]

The San Pedro Port Complex is under substantial pressure to expand its facilities to accommodate the conservatively estimated doubling of sea-borne goods movement traffic that has been projected. But, at the same time, the residents living around this goods movement complex are beginning to gain a voice, insisting that this progress in economic development not be built upon their health. And this is only as it ought to be. Besides, it turns out that there are very concrete sorts of actions that can be taken, right now, to measurably reduce at least some of these adverse impacts of the globalizing transnational production-consumption complex.

That’s the nub of my assertion—there are things we can do, in the here and the now, to make for different, fairer outcomes. Why should the few poor folk carry the brunt of the burden of improving life for the rest of us, without redress? What is needed is a multi-level mitigation scheme that can gather up some tiny fraction of the diffuse benefits accruing to a majority of the individuals throughout the

supra-system, and then redirecting these monies to those specific areas where people are being asked, unfairly, to carry a share of the burden that is not, properly, theirs to bear. Such a mitigation scheme can be structured in a way that assures the implementation of design and operational improvements that can be used to reduce or eliminate adverse impacts in these few places.

We can act to accelerate the replacement of older, higher polluting trucks with new, lower-polluting ones. We can accelerate the shift toward the new low-sulfur diesel fuel, which would allow the installation of catalytic converters and other emission control technologies onto trucks and dock equipment. We can heavily subsidize smart growth sorts of urban infill and densification projects in the communities, so as to give those currently living around the ports and the freeways an alternative but neighborly residential location option. We can even acquire properties that are most severely impacted by this increased flow of goods movement, with very, very generous compensations and reparations, and then plant suitable species of native trees in dense groves around these polluting facilities.

The bald fact of the matter is, there are actual actions that can be taken today, to reduce these adverse human health impacts of this particular form of industrial globalization. Environmental justice demands that some tiny portion of the benefits accruing to all consuming Americans, everywhere, be gathered up and transferred back to help pay for these sorts of actions, and to offset the localized costs imposed by goods movement-related pollution. We have targeted tobacco, in getting it to pay its fair share of the human and social health costs of its use. Now let's move on that other oh-so-cancerous addiction--conspicuous consumption.