EDITORIAL

Maurie J. Cohen
Editor

When sustainability bites back: cautionary lessons from the field of public health

Given their scope and prospect for harm, contemporary sustainability challenges unquestionably demand urgency. Forthright action is desperately needed, as is innovative experimentation. At the same time, there is value in reflecting on some well-meaning proto-sustainability interventions from a century ago that have only dug us into a deeper hole.

These cases came to my attention in a circuitous way. While working this past summer on a project involving the so-called sharing economy (incidentally, an economy woefully short on what most of us regard to be sharing), I became preoccupied with the upsurge of consumer interest in the rental of clothing and fashion accessories. Numerous websites have cropped up in recent years where one can acquire a Dior dress or a pair of Jimmy Choo shoes for a week at a time at a quite affordable price. The upshot is that some observers—as astonishing as it may seem—contend that such activity constitutes an efficacious sustainability strategy because it aligns with a permissive definition of “sharing.”

During the course of this work, I found myself pondering the origins of the pervasive stigma that has, at least until quite recently, been ascribed to second-hand apparel. One does not need to drill down too deeply into the historical record to discover that, prior to the twentieth century, clothing was widely used on a collaborative basis regardless of income or social rank. For instance, it was customary for gentlemen to swap dress uniforms and tailcoats and for ladies to trade court dresses. Entire wardrobes were bequeathed due to their high monetary value and sentimental significance. With respect to the far more prevalent supply of casual garments, reassignment to a chain of subsequent users was common.¹

From a sustainability standpoint, it clearly would have been beneficial to retain this norm of exchanging clothing rather than to fall into the trap of premature obsolescence and, more recently, fast fashion. Shared use extends the life of apparel and helps to maintain the vitality of useful practical skills like tailoring and sewing (Fletcher et al. 2001; see also Thorpe, 2012). Why did we let these practices slip away?²

Though they predated formulation of the term, it was ironically the first generation of sustainability champions, nineteenth-century sanitarians concerned with the transmission of infectious diseases, who closed down the commercial trade of second-hand clothing in many U.S. cities (Joseph, 1915). There is little question that these officials, using the best knowledge available at the time, took aggressive action to protect public welfare and their resolute actions certainly saved many lives. However, the unfortunate side effect was that used clothing in the decades afterward came to be inseparably conflated with illness and even death in the minds of ordinary people.³ Once so tainted, it did not take much work for manufacturers and retailers to amplify this anxiety to increase the sale of new garments.

Further research turns up the fact that the field of public health, despite its estimable intentions and progressive resolve, triggered other measures that inadvertently augmented our unsustainable trajectory. While nineteenth-century urban life was fraught with all manner of malodorous and dangerous nuisances, some of the greatest problems were caused by horses

---

¹ Though outside of what I take to be the purview of most readers of SSPP, there is a very interesting literature on the history of second-hand textiles and clothing. See, for example, Ginsburg (1980), Styles (1994), Allerton (1997), Sanderson (1997), Lambert (2004; 2014), and Barahone & Sánchez (2012).
² To be sure, the exchange of second-hand garments in various guises did not disappear entirely. Especially in the case of childrenswear, as well as among less well-off households, apparel continued to be passed from hand to hand. And in recent years, vintage attire from consignment or charity shops has become fashionable.
³ It merits noting that bans on second-hand clothing to protect public health are not of a bygone era. In 2001, at the height of the European foot-and-mouth epidemic, Latvia prohibited the importation of used apparel and other countries have implemented similar measures during outbreaks of public concern over disease transmission.
in the urban rights of way. The volume of excrement dumped daily on city streets was enormous. In 1880, Manhattan and Brooklyn were home to more than 150,000 horses, each depositing daily on public thoroughfares 15–30 pounds of manure and a quart of urine (Morris, 2007; see also McShane & Tarr, 2011). The animals regularly dropped dead in the middle of their workday either from old age, or more likely overexertion, and the festering carcasses often remained in the road for days, attracting flies and communicating infectious disease.

Given the circumstances, arrival of the horseless carriage during the 1890s was seen as a public health godsend. Despite its belching engine and terrifying speed of ten miles per hour, the first cars were widely deemed clean and well-suited to supplant the horse for urban transportation, especially for delivering goods. Delighting in the machines, public health officials used their scientific authority to actively advocate for urban automobilezation at a time when its prospects were decidedly indeterminate. Of course, they were not anticipating that deployment of the car would grow vertiginously, with most households in the United States in due course owning not one, but multiple vehicles.

Zoning is a related example of a well-intentioned intervention championed by public health officials that, with the passage of time, went terribly awry. During the nineteenth century, factories and homes were typically built cheek by jowl and this led to fetid and often dangerous environmental conditions. Los Angeles established a series of districts in 1905 as a way to separate hazardous industrial activities from residential communities, and New York City adopted in 1916 what is generally regarded as the country’s first zoning ordinance (subsequently upheld as constitutional by the Supreme Court in 1926). This land use-control tool came to be applied in ways that had nothing to do with environmental management and, by encouraging sprawl and outsized consumption, has often worked against ecological considerations. In addition, zoning has a long and sordid history of being used as a legally defensible way to achieve exclusionary social objectives (Duany et al. 2000; see also Gallagher 2013).

Though it would be decades before sustainability came to be conceptually operationalized, the steadfast, and often heroic, efforts of early public health practitioners were at the forefront in ameliorating some of the worst effects of industrialization (Duffy, 1992; Rosen 1993). Moreover, as one of the first interdisciplinary and socially accountable sciences, public health is today an indispensable part of sustainability science (see, e.g., Bloom, 2007). The point here is not to interrogate the integrity of these noble professionals, but rather to illuminate how decisions initially impelled by the best of intentions led to unintended outcomes.

It is not a matter of better prognostication or more prescient modeling. Could better multivariate analysis have helped to avoid the side effects of programs to suppress disease transmission via second-hand clothing? Would more elaborate forecasts of transportation demand have prompted more measured endorsement of the automobile? How could any reasonable soul have anticipated that decisions decades ago to protect human beings from industrial effluents would lead to conditions in numberless communities today where it is virtually impossible to purchase a gallon of milk without undertaking a journey by car? Such questions fall into the category, frequently and mistakenly disparaged, of “unknown unknowns” (see also Taleb, 2007).

The key insight of these examples from the history of public health is that we need to exercise precaution, as difficult as it might be, when we take steps with unfathomable consequences. This is obvious for disputable technologies like nuclear power and carbon sequestration, but it also holds true for less contested innovations. Perhaps the most important lesson from past experience is that we need to check our exuberance while seeking middle-way strategies that preserve options for continual course correction. The case of the car is especially perspicacious. We would be more readily able today to navigate toward a new mobility future if we had made the transition to automobilezation with greater judiciousness. The point here is that it is likely worthwhile to facilitate sustainable systems innovation in stepwise increments. Such an approach, it is important to recognize, differs from familiar commitment to incremental improvement, which typically is devoid of any comprehensive vision or plan.

While Woody Allen was probably being a tad too pessimistic when he described our options for the future in terms of “[o]n one side is doom and dark despair; on the other is failure and ignominy” he was surely proffering sound wisdom when he went on to...

---

4 Friedrich Engels’ account of Manchester, developed during his residency in the city between 1842 and 1844, remains one of the most evocative descriptions of urban conditions during this era. See his book The Condition of the Working-Class in England in 1844. Also valuable are the journalistic accounts of Jacob Riis, in particular his volume entitled How the Other Half Lives: Studies Among the Tenements of New York, published in 1890.

5 The math, as Morris (2007) reports, calculates out for Manhattan and Brooklyn to three to four million pounds of manure and 40,000 gallons of urine each day.

6 Edward Tenner (1996; 2004) is the most insightful thinker about this problem that I have encountered.
presage, “Let us hope we have the courage to choose wisely.”

References


About the Author

Maurie J. Cohen is Editor of *Sustainability: Science, Practice, & Policy*. He is also Associate Professor and Director of the Program in Science, Technology, and Society at the New Jersey Institute of Technology and Associate Fellow at the Tellus Institute. Dr. Cohen is co-founder and Executive Board Member of the Sustainable Consumption Research and Action Initiative (SCORAI) and his most recent book is *Innovations in Sustainable Consumption: New Economics, Socio-technical Transitions and Social Practices* (with Halina Brown and Philip Vergragt). Dr. Cohen served last year as a member of the Task Force on Sustainable Consumption and Green Development created under the auspices of the China Council for International Cooperation on Environment and Development. He can be contacted at email: mcohen@adm.njit.edu.