

The Story of a Shoe

by John C. Ryan and Alan Thein Durning,
 excerpted from *Stuff: The Secret Lives of Everyday Things*

Editor's Introduction: *Since the days when Nike Corporation co-founder Phil Knight sold shoes out of the trunk of his car at track meets, his high-flying sports-shoe company has developed a reputation as one of the United States' more progressive corporations. But this reputation—based on the company's strong leadership in supporting equal participation for women in sports, for example, or on the wooded running trails it provides for its U.S. employees—contrasts sharply with reports of its operations in Asia, where growing scrutiny has revealed widespread labor abuses.*

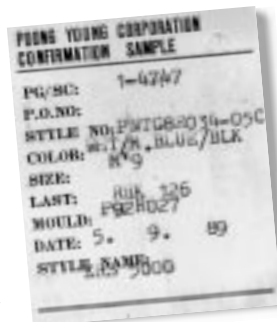
By employing subcontractors in Asia to assemble shoes, Nike has made big profits—\$800 million on sales of \$9.2 billion in 1996. But the company's success, and the disparity between its profits and the wages it pays its subcontracted labor force, has made it a target for critics who say the company has a double standard. Last spring thousands of Indonesian workers, complaining that they were not receiving the required minimum wage of \$2.50-a-day, "ransacked" their factory. In Vietnam, where workers churn out a million pairs of shoes every month for a minimum monthly wage of \$42, 800 workers recently walked off the job to protest poor working conditions. Wages are nearly as low in China and Indonesia, where 70 percent of all Nike shoes are made.

Last year, in response to growing criticism Nike hired noted civil rights activist Andrew Young to draft a report on the state of Nike's labor practices—though Young admittedly has no labor expertise. Based on a two-week, whirlwind tour through 12 different factories in Indonesia, China, and Vietnam, Young concluded that there was no "widespread or systematic abuse or mistreatment of workers" at these operations. But the leak of one of Nike's internal human rights

and labor assessments—documenting many unsafe conditions at a plant in Vietnam—has seriously called Young's findings into question. In a sobering refutation of Young's report in the New Republic, Stephen Glass avers that in order to soothe labor critics, "the world's largest sneaker company did what it did best: it purchased a celebrity endorsement."

Nike's ability to reconfigure its public image through advertising and celebrity endorsements points to another troubling aspect of the company's success. Perhaps as much a matter of concern as Nike's exploitation of its factory workers, is the shoe company's ability to manipulate its consumers, the people who purchase and wear its shoes. The human rights organization Christian Aid estimates that the labor component of athletic shoes manufactured in Asia is roughly equivalent to 6 percent of the price Nike pays for them, or about 3 percent of the price they fetch in stores. Since Nike spent \$978 million on advertising in 1997—more than 10 percent of its earnings—it appears that the company spends significantly more marketing its shoes than it does paying its labor force to make them. Along with countless other businesses and advertising companies, Nike is working to create needs, rather than meet existing ones—the satisfaction of which exacts unnecessary social and environmental costs.

*As John Ryan and Alan Thein Durning have documented in their book *Stuff: The Secret Lives of Everyday Things*, consuming goods has come to play a different role in our lives than anyone, even economists, ever imagined it would. For many, the consumer culture has become an ideology "where buying things is believed to provide the sort of existential satisfaction that, say, going to church once did," as Thomas Frank puts it in an essay in the book *Commodify Your Dissent*. *Businesses now spend staggering**



amounts of money on advertising to influence cultural trends toward greater demand for their products. Rather than lauding the utility of products, with an aim of attracting consumers who need what those products offer, companies now attempt to promote entire lifestyles that require the purchase of their products. Athletes aren't buying the vast majority of shoe companies' athletic shoes; people who want to look and feel like athletes are.

Using ersatz product "innovations," "celebrity" promotions, or refurbished concepts of "cool," companies have engineered an endless consumer's quest for new products. Nike CEO Phil Knight explains: "There is no value in making things any more. The value is added

I put on my sneakers—"cross-trainers," I guess they're called—and got ready to go to work. I don't "cross-train"; I'm not sure I even know what it is. But I do wear the shoes a lot.

Eighty percent of athletic shoes in the United States are not used for their designed purpose. As an executive for L.A. Gear put it, "If you're talking performance shoes, you need only one or two pair. If you're talking fashion, you're talking endless pairs of shoes." According to surveys, U.S. women own between 15 and 25 pairs of shoes, men 6 to 10 pairs. Americans spend twice as much on children's athletic shoes as they do on children's books.

My two shoes weighed about a pound and were composed of dozens of different, mostly synthetic, materials. Like almost all athletic shoes sold in the United States, they were manufactured overseas by an obscure firm contracting to the company whose name and logo actually appeared on the shoes. Mine were assembled in a Korean-owned factory in Tangerang, an industrial district outside of Jakarta, Indonesia. But almost all the component parts were made elsewhere.

The shoe company in Oregon specified the shoes' high-tech design and materials and relayed the plans by satellite to a computer-aided-design firm in Taiwan. This firm taxed plans to engineers in South Korea.

In the 1980s, South Korea was a leading exporter of athletic shoes, but democratic reforms, labor unrest, and economic development resulted in shoe workers' wages more than doubling in the four years before 1990. Shoe companies moved to cheaper pastures in China and Southeast Asia. Over the next three years, employment in South Korea's shoe industry fell by three-fourths; nearly 400,000 Koreans lost their jobs.

by careful research, by innovation, and by marketing." In other words, there's no reward for those who make shoes in Vietnam or Indonesia. The reward goes to those who can think of clever ways to make people think those shoes are worth a lot more than they really are.

In a world where forests, oceans, freshwater, and other basic resources are being degraded, consumption for the sake of consumption is an obsolescent goal. In the following excerpt, John Ryan and Alan Thein Durning uncover what it is that we really buy in each shoebox—the costs that we don't see each time we examine a new pair of shoes. Their thoughtful investigation is the perfect antidote to the corporate hype of the consumer society.

—Curtis Runyan

Leather My shoes had three main parts: the logo-covered upper, the shock-absorbing midsole, and the waffle-treaded outsole. The upper had about 20 different parts. It was mostly cow leather. The cow was raised, slaughtered, and skinned in Texas. Most of the carcass became human and pet food. The hide was cured with salt and stacked with 750 others in a 20-foot container and carried by freight train from Amarillo to Los Angeles. From there it was shipped to Pusan, South Korea. Most U.S. hides are exported for tanning: labor costs and environmental standards are lower overseas.

Tanning makes leather soft and keeps it from decaying. For centuries, tanning meant soaking animal hides in tannins from bark and vegetable extracts; today it usually entails a 20-step process with large

Industrial Globetrotters

The manufacture of footwear has become such an interrelated global industry that attempting to determine the composition and manufacturing sites of a shoe's components is often like trying to unscramble the proverbial egg.

—*Journal of Commerce*

With modern industries freely roaming the planet, it can be difficult for any single government, labor union, or activist group to have much leverage on corporate behavior. If pushed too hard, a company may relocate—or at least threaten to do so. Ultimately, by voting with their pocketbooks for responsibly made products, consumers have the most influence over the practices of far-flung corporations.

spinning drums and solutions of chrome, calcium hydroxide, and other strong chemicals. Chrome tanning (including unhairing, deliming, pickling, tanning, retanning, dyeing, and lubricating) can be done in a day; vegetable tanning can take weeks.

Workers in Pusan loaded the tanned leather onto an airplane headed to Jakarta, while the tanning plant discharged hair, epidermis, leather scraps, and processing chemicals into the Naktong River. Much of South Korea's tap water is not fit for human consumption because it is tainted with metals and other pollutants from heavy industry.

Synthetics Except for the leather, my shoes were made from petroleum-based chemicals. The midsole was a custom-designed EVA (ethylene vinyl acetate) foam: a composite of

several substances, each with its own valued properties. Ethylene made the mix easy to mold, vinyl made it resilient, and acetate made it strong and stiff. One of the most important building blocks for making synthetic chemicals, ethylene is a colorless, slightly sweet-smelling, yet toxic gas. It was distilled and "cracked" from Saudi petroleum shipped in a tanker to a Korean refinery.

More ethylene was heated with acetic acid (the main ingredient of vinegar) and a palladium catalyst to form vinyl acetate. The acetic acid didn't come from vinegar: it was synthesized from natural gas and carbon monoxide.

The ethylene and vinyl acetate were mixed with pigments, antioxidants, and catalysts; poured into a mold; and baked. During the ensuing reaction, millions of tiny gas bubbles arose to make a foam. The foam gives my shoes that cushy feel and protects my foot from the impact (two to three times my body weight) each time my heel hits the ground when I run.

Below the heel was my shoe's only component manufactured in the United States: a small amber-colored polyurethane bag filled with (marketing notwithstanding) a pressurized gas of secret composition, not air. (I guess "Pressurized-Gas Jordans" just wouldn't sell like "Air Jordans.")

Rubber My shoes' outer soles were made of styrene-butadiene rubber. The rubber was synthesized from Saudi petroleum and local benzene (made from coal) in a factory in Taiwan. The Taiwanese factory got its electricity from one of the island's three nuclear power plants. Though tree farmers in the tropics still grow natural rubber, about two-thirds of the world's rubber is synthetic. The rubber was formed into large sheets and flown to Jakarta.

In the shoe factory, machines cut up the sheets and molded the grooved tread that I see on the bottom of my shoe. Like too much batter in a waffle



ILLUSTRATION BY JANET HAMLIN

iron, some of the rubber oozed out the edges. According to Nike, this excess rubber made up the largest volume of solid waste generated by its shoe factories; it used to be sent to landfills. Now it is ground into a powder and put back into the rubber “batter” for the next batch of shoes. Nike reports cutting its rubber waste by 40 percent with this “Regrind” system, saving 5 million pounds of rubber annually.

Belabored Points

International shoe companies alternately argue that their presence directly benefits Asian workers, or that they cannot much influence how workers are treated in repressive Asian countries or in factories run by separate companies. Or they insist that their factories comply fully with local government regulations—which isn't saying much. As Rahman, a 20-year-old hot-press operator in a Jakarta shoe factory, explained, “We need protection from our government. We don't need foreign companies to come to Indonesia to take advantage of [President] Suharto's denial of human rights.”

Assembly The factory in Tangerang manufactured shoes for Adidas, Nike, and Reebok. Mine happened to be Nikes—not terribly different from the others except for the logo and which athlete was paid to endorse them.

Powerful machines used pressure and sharp blades to precisely cut the leather and other tough materials into shoe parts. A Japanese-made embroidery machine speed-sewed the corporate logo on the sides of my shoes.

Though high-tech equipment helps, putting shoes together remains the domain of hand labor. On the assembly line, several hundred young Javanese women with names like Suraya, Tri, and Yuli cut, sewed, and glued my uppers and soles together to make shoes. The air smelled of paint and glue, and the temperature neared 100°F. Like most of the workers, Suraya wore cheap rubber flip-flops. She would have to pay more than a month's salary to buy the \$75 pair of shoes she helped make for me. She earned the Indonesian minimum wage—650 rupiah (about 23 cents) an hour.

Under the discotheque-like glow of black lights, Suraya brushed a sparkling, solvent-based glue across the bottom of my midsole to attach it to my rubber outsole. The glue contained luminous dyes: under the black lights, Suraya could easily see if she had

spread it evenly across the entire surface for a tight seal. Other workers glued the sole to the upper (using nontoxic water-based glues as well as toxic solvent-based ones), trimmed and polished my shoe, and inserted the laces and insole.

Discipline was strict, sometimes abusive, in the factory, which was run by ex-military men from Korea. But Suraya knew not to complain about the pay or the illegal, compulsory overtime she sometimes worked. She was replaceable—Indonesia has a huge surplus of cheap labor—and speaking out could mean getting fired, or worse. The Indonesian military routinely intervenes in the country's labor disputes through interrogations, threats, and even murder. The Indonesian government believes that even at \$2 a day, workers' wages are too high for the country to compete with lower-wage nations like India and Vietnam.

Though solvent fumes caused health problems for some workers, the shoe factory generated little pollution and required little energy compared with the refineries, chemical plants, and tanneries that produced its raw materials.

Shoe Box My shoes were hand stuffed with light weight tissue paper (made from Sumatran rainforest trees) and put in a shoe box. The box had been made in a “closed-loop” paper mill in New Mexico that recycled all its sludge. Waste steam from a nearby power plant powered the mill. All Nike shoe boxes are made at this mill.

The box was corrugated cardboard that was 100 percent recycled and unbleached. The corrugated box used 10 percent less pulp than one made of solid cardboard. The box was much improved over old designs: tabs and slots, not toxic petrochemical glues, held it together; its outside was printed with inks that contained no heavy metals.

Folded stacks of empty boxes were shipped west across the Pacific from Los Angeles; boxed shoes were shipped east in a supercontainer ship carrying 5,000 20-foot containers. Each journey took three weeks. Shoes were the third largest cargo shipped to the United States from eastern Asia in 1995, after toys and auto parts.

As I laced up my shoes, I noticed a small tear over my big toe. At this rate, the pair wouldn't last a year. That's much longer than throwaway items like my newspaper, but still, maybe I could find my old needle and stitch up the hole before it grew. Maybe I could make my shoes last longer, walk more softly on the earth, and save 75 bucks, too.

Stuff: The Secret Lives of Everyday Things by John C. Ryan and Alan Thein Durning, Northwest Environment Watch Report No. 4, January 1997