

# Apple Exposed

## The Untold Story of Globalization

---

Nicki Lisa Cole and Tara Krishna

Critical readers might have the impression that they are fully informed about labor and environmental abuses within Apple's supply chain in China. In fact, the *New York Times* would have us believe that Apple has made significant progress in addressing issues that have been brought to light over the last year and a half.<sup>1</sup> However, based on a comparative analysis of news coverage in the United States and China, we find that US reporting has been clouded by a Western lens, and that it has overwhelmingly ignored the voices of workers themselves: rural Chinese citizens affected by environmental pollution, and those displaced by ongoing construction of new factories. US coverage has focused nearly entirely on just one supplier, Foxconn, without specifying which factory location, and has disproportionately focused on the brand image of Apple. Our comparison to Chinese coverage of these issues reveals the US coverage to be unbalanced and narrow in focus, and thus it has missed the bigger picture of the systemic and extensive labor and environmental abuses coursing throughout Apple's Chinese supply chain.

Drawing on Chinese news media reports, a series of reports on Apple and its suppliers from a coalition of Chinese nongovernmental organizations (NGOs), and scholarly research from Chinese sociologists who study labor conditions and resistance, including numerous accounts of Chinese citizens, we offer a more robust and chilling account of the untold story of globalization in China. In this essay, we present worker perspectives on the rash of suicides at Foxconn factories, to counter the corporate media account of Chinese workers as grateful and passive, and to reposition them as people who regu-

larly resist, protest, and fight tirelessly for their rights. We highlight Chinese and English language news stories on the coerced enslavement of college students as “interns” at Foxconn factories, the forced relocation and reconfiguration of rural Chinese communities, and the destruction of agriculture as land is razed for ongoing factory construction. And we reveal that most Chinese factory workers are young migrants from rural peasant communities who face long-term and psychologically damaging isolation from their families and friends when they enter factory jobs. This trend not only affects the workers themselves, but also has negative consequences for Chinese elders who are left without a younger generation to assist in their care, and for “left-behind children” who grow up in rural communities without their parents. The combined pull of young adults into urban factories and the displacement of rural communities is resulting in a major geo-spatial and social reorganization of Chinese society, the implications of which have not been addressed at all in US news coverage.

And, while some recent coverage, including that by Project Censored authors, has pointed to the environmental problems that stem from technological production in China,<sup>2</sup> we draw on a series of Chinese NGO reports to reveal the long-term, systemic nature of this problem, and identify Apple as the most offensive and least-responsive tech contractor operating in the region. We illuminate the vast and intensely dangerous problem of air, water, and soil pollution that has ravaged mainland China and the health of its residents over the last decade. While the *New York Times* offered praise for minor changes in labor policy at one Foxconn factory, and while Chinese NGOs report that Apple has overseen some targeted and limited—though successful—environmental corrections at a couple of suppliers, we hesitate to applaud these moves because of the vast and mostly unaddressed scope of the implications of China’s role as the world’s factory.

### **MIKE DAISEY: THE SPARK THAT IGNITED A FIRESTORM OF COVERAGE**

As readers of last year’s *Censored 2013* are aware, on January 6, 2012, the popular public radio program *This American Life* aired an adapted version of performer Mike Daisey’s monologue, *The Agony and the Ec-*



stasy of Steve Jobs.<sup>3</sup> In the radio episode, Daisey explained that he became curious about the manufacturing process behind Apple products after an iPhone customer found photos of Chinese workers on his device. The customer shared these photos with the Cult of Mac website frequented by Apple devotees, which is how Daisey came upon them.

Inspired by these photos, Daisey took a trip to Shenzhen, China, to visit one of several Foxconn factories in the region where Apple's mobile devices—iPods, iPhones, and iPads—are assembled. After meeting with workers and visiting their dormitories, he was saddened to learn of the dangerous, sickening, and oppressive work conditions that young Chinese laborers endure in the factories. Consumer outcry and criticism of Apple followed these revelations.<sup>4</sup>

On March 16, 2012, *This American Life* host Ira Glass retracted the story and characterized Daisey's claims as lies.<sup>5</sup> While many were dismayed that Daisey had not witnessed firsthand all that he described in his monologue, he nonetheless deserved credit for sparking interest in Apple's highly secretive supply chain.

Since January 2012, corporate media have paid significant atten-

tion to Apple and to Foxconn, the Taiwanese company incorporated as Hon Hai that holds contracts for assembly of Apple products.<sup>6</sup> Building on Daisey's monologue, Western media outlets relayed reports of suicides at Foxconn factories, provided details about the health risks that assembly workers face because of long, break-free hours and chemical exposure, and described the crowded dorm rooms where workers live.<sup>7</sup> News sources, most notably the *New York Times* in its "iEconomy" series, prominently feature testimonies from Apple executives who explain the slow management of these problems by citing complex corporate procedures, and insist that Apple is doing its best to address the plight of workers. The series in the *Times* has been widely read, and was awarded a Pulitzer Prize for "Explanatory Reporting" on April 15, 2013.

### **THE US MEDIA INVESTIGATES FOXCONN: UNDERLINES APPLE, ECLIPSES WORKERS**

After reviewing print media coverage of labor issues in Apple's supply chain, from sources including the *New York Times*, the *Atlantic*, *PC Mag*, the *San Francisco Chronicle*, Mashable.com, *International Business Times*, the *Los Angeles Times*, Yahoo!, and the Cult of Mac, among others, we find significant disparity in Chinese versus US coverage. US corporate media coverage has been overly focused on one of many suppliers, Foxconn, and on the brand image of Apple, while Chinese coverage includes the voices of workers and speaks to issues throughout the entire Chinese supplier base. This narrow focus of corporate media coverage in the US does a disservice to Chinese workers and citizens, as it suggests that Apple's image is more important than their suffering. We recognize that significant decreases in funding for investigative reporting, even among major print news outlets like the *New York Times*, contributes to this problem, and that journalists themselves are not to blame.<sup>8</sup> Nonetheless, it is important that we recognize the full scope of the problem, and come to understand what has limited our ability to see the full scope.

Troublingly, US coverage of locations of labor abuses is uniformly vague. Although Foxconn, a Taiwanese-owned company that contracts production and assembly for Apple, has been the focus of re-

ports on labor abuses, specific factory sites go unmentioned. This gives us pause, as we have found that Foxconn has over twenty different production facilities throughout China, and five alone in Shenzhen.<sup>9</sup> We also note that this focus is curious, as there are dozens of other suppliers operating on Apple's behalf in China, and of those, only Wintek, where the workers have been subject to poisoning with n-hexane gas, has been included in US coverage.<sup>10</sup>

We are more disturbed by the finding that across the coverage, with the exception of a couple of articles from the *New York Times*' "iEconomy" series, writers consistently contribute to the dehumanization of Foxconn's already-exploited factory workers by not including first-hand accounts of the conditions from workers themselves, and typically, do not even name those whose workplace suicides are reported. Instead, coverage of labor abuses tends to focus on the brand and reputation of Apple, Inc., and on the Western activist group SumOfUs.

To this end, coverage of the SumOfUs "Ethical iPhone" campaign eclipses all the efforts that workers themselves have expended to fight for their rights, which we will elaborate later. Workers have been fighting labor battles at Apple suppliers in China for years, but it was only when SumOfUs refocused attention on consumer rights that corporate media picked up the story.<sup>11</sup> While it is the workers' voices that should matter most here, theirs are missing from US corporate media coverage.

Finally, the *New York Times* seems to have closed the door on conversation about these issues with its final installment in the iEconomy series published on December 26, 2012. Reporters Charles Duhigg and Keith Bradsher reviewed some changes at one Foxconn location in Shenzhen, which have happened since scrutiny has focused on the supplier. The piece champions Apple for joining the Fair Labor Association, and lauds minor changes to workplace safety and comfort made at Foxconn under the leadership of embarrassed founder and CEO Terry Gou.<sup>12</sup> The article seems to suggest that the media attention has done its job, yet Apple, Foxconn, and many other Apple suppliers have affected the lives of workers in more intimate and extensive ways than audits can uncover, in addition to wreaking environmental devastation and health and safety issues throughout Chinese communities on a mass scale.

## WORKERS TELL A DIFFERENT STORY

Factory workers' accounts complicate the reports provided by Western media sources. Research completed by Hong Kong Polytechnic University Associate Professor of Applied Social Sciences Pun Ngai and her colleagues at production sites throughout China reveals that workers experience many more problems than US corporate media accounts suggest.<sup>13</sup> Foxconn's leaders and factory supervisors demand that the workers execute their tasks efficiently and mechanistically, and workers recognize the company's "human subordination," putting into more serious terms the problems glossed over by US corporate media sources. In Pun's report, one male worker offered an explanation for the widespread suicides by attributing worker deaths to the fear caused by assembly line superiors and the immense amount of scrutiny faced by any frontline worker who has made a mistake—a perspective lacking, for example, in the *Los Angeles Times* coverage from June 2012.<sup>14</sup> Another worker, Tian Yu, survived her jump from the fourth floor of the Shenzhen Longhua dormitory but continued to feel the exhaustion of long work hours and the loneliness that had prompted her suicide attempt. Numerous reports, spanning several years' time, from Fiona Tam, reporter for the *South China Morning Post*, offer additional evidence of the poor working conditions and psychological distress that factory workers suffer.<sup>15</sup> Contributing to the oppression and stress of workers is that most are not given legally required employment contracts, and consequently lack job stability, rights, and resources.<sup>16</sup>

A January 2011 report from a group of Chinese NGOs including Friends of Nature, the Institute of Public and Environmental Affairs, and Green Beagle, titled *The Other Side of Apple*—which has been referenced in previous Project Censored coverage—offered further documentation of this problem.<sup>17</sup> The report stated that an examination by Xinhua News Agency of a worker paycheck found that 60 percent of the workers' monthly income was based on overtime.<sup>18</sup> One worker logged over 136 hours of overtime—100 hours more than what is legal in China. The report further stated that a random check by the Shenzhen Human Resources and Social Security Bureau found that nearly three-quarters of all workers had significantly exceeded the overtime limit.

Workers do, nevertheless, find ways to mitigate these stressors and put pressure on managers, factory owners, and the Chinese government to obey labor laws and improve working conditions. Pun and her research team found that some combat feelings of powerlessness by “[making] fun of their line leaders in their daily life.”<sup>19</sup> Others participate in more revolutionary behavior. Fieldwork completed from 2003 to 2007 at a Taiwanese-owned factory in Shenzhen details the worker networks created in their dormitories. The small amount of space available to workers in these dormitories facilitates kinship and encourages collective action.

Pun’s report explained that workers organized a strike in 2004 without much help from trade unions or labor organizations.<sup>20</sup> The 2011 NGO report also documented an April 2009 strike of 7,000 workers at Dongguan Wanshida in protest over high-volume production demands and thirteen-hour workdays. Interviews with and studies focused on the factory workers thus elucidate their frustration and strategic rebellion, whereas in US corporate media accounts, workers are portrayed either as victims or happy to have a job, if they are touched upon at all. Further, the absence of coverage of the work of Chinese labor groups, unions, and NGOs, in addition to the workers themselves, contributes to the erroneous Western perspective that China is a lawless land of capitalism run amok.

US corporate media coverage also suggests that the Chinese themselves are to blame for the labor and environmental abuses, rather than the American corporations, like Apple, that create these conditions by allotting suppliers the slimmest possible profit margin, which encourages suppliers to sidestep regulations and labor laws in the economic interest of their companies.<sup>21</sup>

The NGO report also provides evidence of worker mistreatment and unsafe workplace conditions as far back as 2007, when Apple launched the iPhone to consumers. The report reveals through interviews of workers at Apple touchscreen supplier Lian Jian Technology, a Taiwanese-owned facility located in the Suzhou Industrial Park, that workers had been poisoned and left with long-term illnesses. They were sickened while cleaning touchscreen glass for the iPhone after n-hexane was substituted for an alcohol-based cleaner, and the report notes that exposure to this poison “leads to peripheral neu-

ropathy, numbness of the limbs, and impedes movement and sense of touch.”<sup>22</sup> Workers reported losing strength in their bodies, fainting and collapsing at work, and doctors found nerve damage to be a result of the poisoning. Of the forty-nine young workers that were admitted to hospital for treatment, many are now classified with an occupational disability, and were given only a modest stipend by the company, which will not cover their lifelong medical bills. Workers reported that Apple representatives had visited the facility before workers became ill, and that Apple never communicated with any of the sickened workers.

At Yun Heng Hardware and Electrical, a factory of about thirty employees, poisoning of workers was also a problem. In 2010, five workers were still in hospital after being poisoned by n-hexane. Workers stated that they were never informed of the hazards, and reported the same ailments as those at Lian Jian. At the Yun Heng factory, Yuhon Photoelectric Technology (Suzhou) Co., Ltd., contracted workers to clean Apple logos and affix them to film. Workers reported the poisonings to the Wujiang Health Bureau in January 2010, and the Worker Safety Bureau subsequently found that the toxic work was done between April 2009 and January 2010. The investigation revealed that workers had labored in unventilated spaces without safety equipment, which led to eight cases of n-hexane poisoning. For some, the cost of treatment decimated family funds, which caused them to stop medical treatment before they were well. The report indicated that workers were also sickened in 2009 at Dongguan Wanshida, a sister company of Lian Jian. The Dongguan Health Bureau found that 234 workers had a history of exposure to occupational hazards, and that some had suffered hearing loss and anemia.

In *The Other Side of Apple II*, the second report of the three-part series, published in August 2011, the coalition of NGOs pointed out that despite Apple’s claims that it rigorously audits its supply chain, the Foxconn Chengdu facility, which was contracted by Apple to manufacture the iPad2, was the site of an explosion that resulted in the death of three workers and the injury of fifteen others.<sup>23</sup> The production facility was constructed in just seventy-six days, and through a media investigation it was found that workers had only been trained for a maximum of three days before entering the production line.<sup>24</sup>



The report noted that the granting of this contract to Foxconn raises serious questions about Apple's auditing process.

In addition to serious health and safety hazards, the first report recounted that workers suffered humiliation at the hands of management. At Dafu Scientific Building Material Co., Ltd., in Changsu, the *Southern Daily* news outlet found and published in December 2009 that women workers were forced to remove belts and submit to a body inspection when leaving the workplace. An anonymous worker posted on a website about this and stated that she left her job because of it. The worker recounted, "Watching a younger girl stand on the inspection platform with her pants suddenly falling down and run away as everyone laughed at her, my eyes filled with tears and I did not laugh. That day, I don't know how I ended up leaving. To this day I still do not dare recall those humiliating memories."<sup>25</sup>

This first report noted that Apple speaks broadly about how it manages its supply chain and never mentions specific sites in the supplier responsibility reports it publishes on its website, which prevents external monitoring of its claims of compliance with its supplier code. The report also spotlights Apple's pattern of nonresponse, denial, and stated nondisclosure when complaints are registered from Chinese NGOs or state and regional Chinese authorities. Apple denied using Lian Jian Technology as a supplier of touchscreens, despite worker-provided evidence of Apple-related production. More damning, the report stated that poisoned workers from this site wrote a letter to Steve Jobs in 2011, but they never received a response from Apple.

## **COMMUNITY IMPACTS OBSCURED BY CORPORATE MEDIA ACCOUNTS**

US corporate media reports additionally contribute to the simplification of the factory workers' situation by ignoring their backgrounds and their motivations to work for Apple suppliers. Chinese news stories note that many Foxconn workers are student interns who do not fall under the protections provided by labor laws.<sup>26</sup> The US news outlets do not explain, however, as Pun and Chan found in their research, that students in vocational schools report that pro-growth priorities in China encourage the government officers in charge of

their schools to connect students to Foxconn internships.<sup>27</sup> A Chinese story written by Xiaotian Ma, titled “Interns Behind the iPhone 5” and published online for *Nanfang People Weekly* on September 21, 2012, explained that school officials who arrange “involuntary internships” threaten to withhold degrees from college students who leave their Foxconn jobs and ask the interns to sign forms that suggested that they willingly took part in the internships.<sup>28</sup> Records of these interns’ workdays fail to capture the overtime hours assembly line leaders demanded from them. Western media sources leave out the emotional consequences of the interns’ forced labor, especially the reactions from the parents of the interns who feel that the school fees they pay are going toward the exploitation of their own children.<sup>29</sup>

Additionally, the US corporate media ignores the fact that most workers are migrants who have left their homes in rural areas for stable jobs in cities. A Chinese article published in *Henan Social Sciences* in 2011 by scholar Fang Qixiong sheds light on this issue.<sup>30</sup> Qixiong analyzed thirty-nine reports from the *Nanfang Weekend* on the topic of China’s migrant workers and found that, for rural Chinese, Foxconn has provided a source of consistent, if not significant, income. A letter from Shenzhen migrant worker Feng Ji to Steve Jobs, written in September 2011, highlighted the difference between the state of the Chinese factory worker and the American Apple executive, illustrating the way Apple’s leaders—and Americans in general—can distance themselves from the feelings of assembly line workers. Feng Ji reminded Steve Jobs that his employees in Cupertino return to their homes at the end of a workday and spend time with their spouses and children. Migrant workers, on the other hand, are physically separated from their own families for months or even years at a time.

The distance between the migrant workers and their families, in combination with the stress of factory work, makes the workers especially prone to psychological distress and is damaging to familial relationships. As Qixiong details, *Nanfang Weekend* reports that migrant workers who wish to see their families during major holidays like the Chinese New Year are thwarted by limited numbers of train tickets.

Many workers remain stranded in the city, the site of their difficult work lives, during periods of national celebration. Workers face disappointment and helplessness in this unfamiliar city and are cut off

from the kind of intimate emotional care they would receive at home. In fact, many—10 percent, according to Fiona Tam in 2008—Shenzhen-based migrant workers who are able to return to their rural-area homes for the Lunar New Year resolve to stay there.<sup>31</sup> They may forgo the stable factory wages for farming work that will resume only in the spring, but they restore the healing familial bonds the factory environment fails to offer.<sup>32</sup>

Additionally, Tam reported in 2008 that relocated migrant workers are not granted residency in their place of work and thus do not have voting rights in their districts.<sup>33</sup> In June 2010, this policy was changed, though workers felt the change was mostly symbolic because most of them do not meet the educational and community activities requirements for residency.<sup>34</sup> This means that in addition to suffering the stress of being separated from their families, being regularly overworked, and sometimes injured on the job, they are politically disenfranchised too.

The children of workers, their parents, and extended families also suffer the burden of the flight of young Chinese from rural areas to factory jobs. A July 2010 Chinese report published in *China Business News* details the phenomenon of “left-behind kids” who remain in rural villages with grandparents or other kin when one or both parents leave to work in a factory for an extended period of time. In a very sad case, four “left-behind” children about thirteen years of age attempted suicide together by consuming an agricultural chemical mixed with beer.<sup>35</sup> Fortunately all of the children survived, but their suicide attempt is indicative of the struggles children face when growing up without their parents, which is a widespread problem for Chinese families.

China’s role as the world’s factory not only sucks its young adults out of their communities, but sometimes factories encroach upon and displace rural communities too. A December 2010 report in *Nanfang Weekend* exposed the social effects of village displacement with the story of a ten-year-old child who is now the only pupil in her school because all other residents accepted the terms of forced relocation offered by Foxconn while her parents have not.<sup>36</sup> The story showcases a sad, lonely child who bursts into tears at a school staffed by a few dedicated teachers who insist on providing her education.

All but one of the school's 161 pupils left within a month of relocation notice, signaling the scattering of rural families and the disruption of community and social networks.

In fact, fourteen villages across fifteen square kilometers were displaced by Foxconn's building plans in Deyuan Town to clear the way for factory dormitories.<sup>37</sup> *South China Morning Post* reporter Fiona Tam emphasized in 2009 that rural citizens have been most affected by the mainland's shift to a manufacturing economy, as they have had to send their resources, including people, into the city for production.<sup>38</sup> Reports like these illustrate that Apple's presence in China has changed the geographic location, migratory patterns, familial structures, and even democratic participation of Chinese citizens in significant and harmful ways. These facts have been completely and irresponsibly ignored by both corporate and independent US media outlets.

## AN ENVIRONMENT DESTROYED

Although corporate media have recently reported on air quality in China, and some independent media have covered China's "cancer villages," US establishment media have ignored the pollution of China's rivers, lakes, reservoirs, and ground water as a result of wastewater disposal at tech production facilities. This is particularly egregious in the case of Apple and its suppliers; a study of twenty-nine information technology (IT) brands operating in China found that most had similar problems in their supply chains, however Apple was hands down the most evasive and resistant to hearing complaints and taking appropriate action in response to them.<sup>39</sup>

As of the August 2011 publication of the NGO report *The Other Side of Apple II*, Apple had continued to fail to act on the complaints detailed in the first report,<sup>40</sup> though other brands had publicly responded and taken responsibility. Some of the chronic and systemic problems that have been documented at Apple suppliers in China include hazardous and excessive wastewater runoff and toxic airborne emissions. The NGO report found that more than twenty-seven suspected Apple suppliers had significant environmental problems, and noted that Apple had not reported any of them in its 2011 *Supplier*

*Responsibility Report.*<sup>41</sup> Because Apple has only recently begun to respond, the company was ranked last of all twenty-nine IT brands in terms of environmental responsibility.

Meiko Electronics, a Japanese company, is one of Apple's admitted suppliers of printed circuit boards (PCBs) for the iPad 2. The report states that the Guangzho site is a known serious polluter in the region. The state has regularly monitored the site since 2009, and it has been found in breach of state standards for wastewater and gas emissions and listed as one of seven violators in need of enforcement. One resident of Nansha District reported a noxious smell that irritates the throat—evidence that points to the serious health implications of these emissions. Investigation by the Nansha District Environmental Supervision Unit found that the site was discharging gases from three outlets without use of required carbon scrubbers, and the facility was fined at the time for emitting exhaust from a generator that violated standards. Investigations also found that the company routinely attempted to conceal its violations.

The NGO report also cited another Meiko site in the Wuhan Economic and Technological Development Zone, located in Hubei province, also in violation of Chinese environmental laws.

Research found that residents have long been concerned about the growth of the production facility, as its wastewater discharge contains the heavy metals nickel and copper. Local investigation of the wastewater discharge found contamination in both a channel that leads to Nantaizi Lake and in the lake itself. A sample of the water tested by the Hongshan district's Wuhan Environmental Protection Bureau monitoring station was found to contain copper and nickel, and that the concentration of nickel was 11.15 times over the legal standard for water destined for human consumption. The report describes the lake as "an ash grey color with white bubbles accompanying groups of black floating objects." The report notes that the contamination in the lake has spread to the Yangtze River, where the copper level is 56 to 193 times the normal amount. The amount of copper found indicates that the likelihood of harmful toxicity is very high.

Another known Apple supplier, Kaedar Electronics located in Kunshan, Jiangsu province, holds the 2006 pollution record in the organization's Pollution Map Database for its excessive levels of untreated

wastewater discharge.<sup>42</sup> Another facility in the region, Unimicron Electronics, owned by the Taiwanese Unimicron Group, is a suspected PCB supplier to Apple, and also holds a pollution record for 2005. Kaedar is noted to produce exteriors and interiors of notebook computers, which result in emissions from sprays used in the production process, while Unimicron emits acid gas and dust.

An audit found that, given the proximity to residential areas, even if Kaedar abided by official standards, their operations would still be disruptive to residents.<sup>43</sup> Some residents reported that they have been living in fear of poisonous gases for six years. They do not open their windows because of this, and if they leave them open while sleeping, “they will wake in the middle of the night choking.” The report noted that Tong Haiyi, a student at a kindergarten that abuts the factory, said to his mother, “Sometimes when I come back home and I’m studying, I have chest pains, and when you come to fetch me, I feel really dizzy. Sometimes there is a really strange smell at school.” The mother noted that the child suffers from regular headaches, dizziness, and nose bleeds.

The report also noted that residents of nearby Tongxin Village explained that, prior to Kaedar Electronics coming to their area, their village was thriving. However, the facility consumed much of the arable land and blackened their previously clean stream. Residents noted a sharp increase in cancer rates since the facility was established, and said that when the state inspects the factory, the smell disappears—but it always returns. One villager, Zhu Guifen, had to have her stomach removed due to gastric cancer. The researchers reported that she and others fell to their knees and begged for help during the conversation. Following up on the cancer reports, the researchers found that more than nine people in a village of just sixty had contracted or died from cancer in recent years, while in the 1970s only one person from the village died of cancer. Some residents have sent their children to live in other locations over fears for their health.

## **BEWARE OF CORPORATE WASHING**

In early 2013, the coalition of Chinese NGOs released its third report, titled *Apple Opens Up: IT Industry Supply Chain Investigative Re-*

port.<sup>44</sup> In it, they stated that in response to the pressure brought by the previous two reports, Apple has begun working with them and with third-party auditors to remedy some environmental problems in its Chinese supplier base. In a few cases, suppliers have made significant and satisfactory improvements, while in others more still needs to be done. The report noted that significant improvements to the wastewater management system were made at the Meiko Electronics facility described previously after the company agreed to an audit in April 2012. Action was also taken at Tripod (Wuxi) Electronic Co., Ltd., which had been identified in the previous report as a generator of massive amounts of hazardous waste, and a water-recycling program was instituted at Ividen Electronics (Beijing) Co., Ltd., to significantly reduce water consumption at the PCB production plant. We emphasize, however, as does the report, that much of the supply chain remains unexamined.

On the labor side, the final installment of the *New York Times*' iEconomy series reported that targeted improvements in labor conditions had been made at one Foxconn site in Shenzhen.<sup>45</sup> Yet, critics have pointed out that Apple's partnership with the Fair Labor Association (FLA) to provide auditing of labor conditions at Chinese suppliers raises serious questions, as the FLA was founded in part by leading corporations in the global garment industry to monitor themselves.<sup>46</sup> Apple was also applauded by Gene Sperling, director of the US president's National Economic Council, when it announced in late 2012 that it would make some Macbooks here in the US in a move to bring production back home.<sup>47</sup>

While we praise Apple and these few suppliers for taking action in these cases, we point out that this level of response leaves much to be desired given the systemic nature of the problems in the supply chain. Given the scope of the issue, these moves strike us as a mostly symbolic response designed to protect Apple's brand, rather than a commitment to the well-being of Chinese citizens. For instance, although it is nice that Apple will create some US jobs for Macbook production, when over 70 percent of company revenue comes from iPods, iPads, and iPhones made in China, it is clear that this is not a substantive change in their production model.<sup>48</sup> Further, while the "amenities" available to Foxconn workers have been touted in both

corporate and independent media, in 2010 workers reported such long hours that they are not able to swim in the Olympic-sized swimming pool onsite at one of the Shenzhen factories, and that they spend their lunch break in a crowd of over 400,000 trying to access the provided meals.<sup>49</sup>

Until Apple makes systemic changes in its economic and managerial relations with its suppliers, these targeted efforts will be nothing more than symbolic management of the company's public relations problem. The third NGO report stated that it would like Apple to do systemic and in-depth environmental audits throughout its supply chain, not just at the sites identified in the previous reports.<sup>50</sup> They also call for Apple to take responsibility for checking China's Pollution Map Database for its suppliers who are in violation, to urge suppliers to publish discharge data regularly, and manage materials suppliers. In other words, they want Apple to be proactive instead of reactive in managing its supply chain. We add to this a call for systemic audits of labor conditions and Chinese labor law violations, and register our dismay that changes in this regard seem to have only been made at one Foxconn site, while abuses have been reported throughout the Chinese supply base. We applaud Apple for taking some baby steps in the last year to improve its deeply problematic supply chain, but we urge the company to give these long-term and systemic problems the committed and critical attention they deserve, and to recognize the company's role as the *driver* of these problems.

## CONCLUSIONS

Through a comparison of US corporate media coverage and Chinese news, scholarly research, and NGO reporting, we found that the story of labor and environmental abuses happening at Apple suppliers in China has not been fully or truly told. The Western-centric and narrow focus of US coverage has done a disservice to Chinese workers and citizens, and to American consumers who still do not know the extent of the problems generated by our demand for Apple products. The collective sweeping-under-the-rug by corporate media of Mike Daisey's account, and the *New York Times'* celebration of recent changes at one Foxconn site suggest that Apple consumers have nothing to be



concerned about. Ira Glass even went so far as to suggest in the *This American Life* retraction that difficult labor conditions are to be expected in “industrializing” economies, and that ultimately all of this is benefitting the Chinese.<sup>51</sup> However, when the Chinese perspective is considered, it is clear that the benefits, if any at all, are few—and when the profits from iPhones and iPads are examined, we see that only the slimmest margin of economic benefit goes to the Chinese.<sup>52</sup>

Labor abuses in Apple’s supply chain, and the social and psychological distress that follow, are not isolated to just one Foxconn facility, but are systemic, significant, and ongoing, and include enslavement of Chinese college students. China’s migrant workers and their families are far from content with this situation, in which there is sometimes not even enough work to go around for all those who flock to the factory zones.<sup>53</sup> They regularly express their dismay through resistance in the workplace, strikes, and broad-based labor rights campaigns, and in some cases, even express their dissent through suicide.<sup>54</sup> And beyond the impacts on workers themselves, Chinese accounts illuminate the community-wide social impacts of the forced relocation of villages, the economic impacts of the razing of agricultural land, and the widespread and systematic destruction of the environment, which produce serious health problems and compromise the well-being of many.

As sociologists, we recognize that these problems in Apple’s supply chain are typical of globalized production, and so too are Apple’s targeted and mostly symbolic responses to critics.<sup>55</sup> Symbolic response has historically proven to be a successful tactic when those in power seek to retain their power. For this reason, we urge readers to sustain the criticism of Apple and its suppliers, and to continue to press the company to make meaningful change in its supply chain. The fight for rights cannot be left to workers, because as has proven to be true in the garment industry,<sup>56</sup> among others, Chinese workers can only push so hard for their rights in a globalized system in which factories can leave their country for cheaper labor pools elsewhere.<sup>57</sup>

In addition to the focused effects of Apple’s globalized production system in China, we encourage readers to consider the chasm of global wealth inequality that these relations of production and trade yield. As we write this conclusion, news of Apple’s massive tax avoidance

scheme has just come to light.<sup>58</sup> Not only does Apple vastly undervalue the labor of those who make its products, thus ripping off the Chinese, the company also rips off American citizens to the tune of \$74 billion dollars in avoided tax liability between 2009 and 2012.<sup>59</sup> Most recently, as Isaiah J. Poole wrote for *Truthout*, Apple's cleverly financed \$55 billion payout to shareholders was executed in order to avoid paying \$9.2 billion in taxes for this year. Poole noted that had Apple paid that bill, all of the recent cuts to the federal budget known as "the sequester" would have been unnecessary.<sup>60</sup> The way Apple does business is not just bad for the Chinese, it is bad for us and our nation.

We encourage readers who wish to stay up to date on these issues to follow the work of Fiona Tam at the *South China Morning Post*, who offers consistent, critical, English-language coverage based on first-hand accounts of workers and citizens.

---

NICKI LISA COLE, PHD, is a visiting assistant professor of sociology at Pomona College in Claremont, California. She earned a PhD in sociology at the University of California–Santa Barbara in 2011, and since then has been committed to the practice of a critical, public sociology. With a general focus on consumer culture and global production and trade, she is currently researching the brand power, supply chain, and financial structure of Apple, Inc. She is the founder and head writer of the blog *21 Century Nomad*, where she has written extensively on fair trade and ethical consumption.

TARA KRISHNA is currently completing her final year at Pomona College, where she is studying sociology and public policy analysis with a focus on biology. Tara is interested in the impact of globalization on environmental justice, collective action, media responsibility, and public health.

The authors wish to acknowledge Li Zhao for providing invaluable Chinese news media research and translation services, as well as localized insights into Foxconn's presence in China. Ms. Zhao is a native of Shenzhen and a student at Pomona College. We also thank Yi Luo and Dingyun Zhang for providing insider perspectives on Apple's presence in Shenzhen, Richard P. Appelbaum for tipping us off to Fiona Tam's excellent coverage in the *South China Morning Post*, and Christine Shearer for editorial assistance on an earlier version of this essay. Finally, we thank Andy Lee Roth for dedicated guidance, support, and editorial expertise throughout the writing process.

## Notes

1. Keith Bradsher and Charles Duhigg, "Signs of Changes Taking Hold in Electronics Factories in China," *New York Times*, December 26, 2012, <http://nytimes.com/2012/12/27/buisness/signs-of-changes-taking-hold-in-electronics-in-electronics-factories-in-china.html>.
2. See *Censored* story #16, "Sweatshops in China Are Making Your iPods While Workers Suffer," *Censored 2012: Sourcebook for the Media Revolution*, Mickey Huff and Project Censored (New York: Seven Stories Press, 2011), 91–93; and follow-up coverage in *Censored 2013: Dispatches from the Media Revolution*, Mickey Huff and Andy Lee Roth with Project Censored (New York: Seven Stories Press, 2012), 145–147 and 168–169.
3. Project Censored's previous coverage, *ibid.*, mistakenly identified *This American Life* as a National Public Radio program. Chicago Public Radio produces the program and Chicago Public Radio distributes it. Some NPR-affiliated stations broadcast it.
4. For coverage of consumer protests at Apple stores following Daisey's appearance on *This American Life*, see Amy Goodman, "Apple Accustomed to Profits and Praise, Faces Outcry for Labor Practices at Chinese Factories," *Democracy Now!*, February 10, 2012, [http://democracynow.org/2012/10/apple\\_accustomed\\_to\\_profits\\_and\\_praise](http://democracynow.org/2012/10/apple_accustomed_to_profits_and_praise).
5. For more on this episode and what it entailed, see Ira Glass, "Retraction," *This American Life*, Chicago Public Radio, March 16, 2012, [http://podcast.thisamericanlife.org/special/TAL\\_460\\_Retraction\\_Transcript.pdf](http://podcast.thisamericanlife.org/special/TAL_460_Retraction_Transcript.pdf); and also "Who's the Rotten Apple? *This American Life* Goes Daisey Crazy," *Censored 2013*, 168–169.
6. "Group Profile," Foxconn Electronics Inc., accessed May 23, 2013, [http://www.foxconn.com/GroupProfile\\_En/GroupProfile.html](http://www.foxconn.com/GroupProfile_En/GroupProfile.html).
7. For one such example, see David Sarno, "Worker from Foxconn, Apple's Chinese Factory, Jumps to Death," *Los Angeles Times*, June 14, 2012, <http://articles.latimes.com/2012/jun/14/business/la-fi-tn-foxconn-worker-20120614>.
8. See, for example, Mary Walton, "Investigative Shortfall," *American Journalism Review* (September 2010), <http://www.ajr.org/Article.asp?id=4904>; and James T. Hamilton, "Subsidizing the Watchdog: What Would It Cost to Support Investigative Journalism at a Large Metropolitan Daily Newspaper?," Duke Conference on Nonprofit Media, May 4–5, 2009, <http://sanford.duke.edu//nonprofitmedia/documents/dwchamiltonfinal.pdf>.
9. "Supplier List 2013," Apple, Inc., [http://images.apple.com/supplierresponsibility/pdf/Apple\\_Supplier\\_List\\_2013.pdf](http://images.apple.com/supplierresponsibility/pdf/Apple_Supplier_List_2013.pdf).
10. For example, see David Barboza, "Workers Poisoned by Chemical at Apple Supplier in China," *New York Times*, February 22, 2011, [http://www.nytimes.com/2011/02/23/technology/23apple.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2011/02/23/technology/23apple.html?pagewanted=all&_r=0).
11. See, for example, Chenda Ngak, "SumOfUs Launches Apple, Foxconn Watchdog Site," *CBS News*, May 21, 2012, [http://www.cbsnews.com/8301-501465\\_162-57438213-501465/sumofus-launches-apple-foxconn-watchdog-site](http://www.cbsnews.com/8301-501465_162-57438213-501465/sumofus-launches-apple-foxconn-watchdog-site).
12. Bradsher and Duhigg, "Signs of Changes."
13. Pun Ngai and Jenny Chan, "Global Capital, the State, and Chinese Workers: The Foxconn Experience," *Modern China* 38 (2012): 383–410.
14. *Ibid.*, 397. On *Los Angeles Times* coverage, see Sarno, "Worker from Foxconn, Apple's Chinese Factory, Jumps to Death," cited in note 7, above.
15. See, for example, Fiona Tam and Danny Mok, "New Foxconn Suicide after Boss Visits Shenzhen Plant," *South China Morning Post*, May 27, 2010, <http://www.scmp.com/print/article/715408/new-foxconn-suicide-after-boss-visits-shenzhen-plant>; and Fiona Tam, "Foxconn Rallies Urge 800,000 to 'Treasure Life,'" *South China Morning Post*, August 18, 2010, <http://www.scmp.com/print/article/722411/foxconn-rallies-urge-800000-treasure-life>.
16. Tam, "Only a Third of Migrant Workers Given Contracts," *South China Morning Post*, January 22, 2010, <http://www.scmp.com/print/article/704346/only-third-migrant-workers-given-contracts>.

17. Mike Kolbe, "Sweatshops in China Are Making Your iPods While Workers Suffer," *Censored* 2013, 145–147.
18. Friends of Nature, IPE, Green Beagle, *The Other Side of Apple*, January 20, 2011, [http://www.business-humanrights.org/media/documents/it\\_report\\_phase\\_iv-the\\_other\\_side\\_of\\_apple-final.pdf](http://www.business-humanrights.org/media/documents/it_report_phase_iv-the_other_side_of_apple-final.pdf).
19. Pun and Chan, "Global Capital, the State, and Chinese Workers," 397.
20. Chris King-Chi Chan and Pun Ngai, "The Making of a New Working Class? A Study of Collective Actions of Migrant Workers in South China," *China Quarterly* 198 (2009): 287–303.
21. For a detailed breakdown of how profits from iPhones and iPads are distributed primarily to Apple and not to its suppliers, see Kenneth L. Kraemer, Greg Linden, and Jason Dedrick, "Capturing Value in Global Networks: Apple's iPad and iPhone," paper, Personal Computing Industry Center, July 2011, [http://pcic.merage.uci.edu/papers/2011/Value\\_iPad\\_iPhone.pdf](http://pcic.merage.uci.edu/papers/2011/Value_iPad_iPhone.pdf).
22. *The Other Side of Apple*.
23. Friends of Nature, IPE, Green Beagle, Envirofriends, Green Stone Environmental Action Network, *The Other Side of Apple II: Pollution Spreads Through Apple's Supply Chain*, August 31, 2011, <http://www.greenbiz.com/sites/default/files/63637255-Apple-II-Final-20-14.pdf>
24. *Ibid.*, 4.
25. *The Other Side of Apple*, 17.
26. Xiaotian Ma, "'Interns' Behind the iPhone 5," *Nanfang People Weekly*, September 21, 2012, <http://www.nfpeople.com/News-detail-item-3661.html>.
27. Pun and Chan, "Global Capital, the State, and Chinese Workers," 393.
28. Xiaotian, "'Interns' Behind the iPhone 5."
29. *Ibid.*
30. Fang Qixiong, "Traits of Nanfang Weekend's Coverage on the Topic of Migrant Workers," *Henan Social Sciences*, no. 4 (2011) (Huazhong University of Science and Technology, School of News and Communications).
31. Fiona Tam, "Delta Short of Workers Even as Migrants Return," *South China Morning Post*, February 23, 2008, <http://www.scmp.com/print/article/627273/delta-short-workers-even-migrants-return>.
32. Fiona Tam, "Migrants Left No Choice after Falling Victim to the Global Economic Downturn," *South China Morning Post*, January 5, 2009, <http://www.scmp.com/article/665862/migrants-left-no-choice-after-falling-victim-global-economic-downturn>.
33. Fiona Tam, "Moves to Help Migrants Fail to Convince Critics," *South China Morning Post*, April 8, 2008, <http://www.scmp.com/print/article/632918/moves-help-migrants-fail-convince-critics>.
34. Fiona Tam, "Migrant Workers Get Chance for Urban Residency," *South China Morning Post*, June 9, 2010, <http://www.scmp.com/print/article/716615/migrant-workers-get-chance-urban-residency>.
35. "Five Primary School Students Made Pact to Suicide by Drinking Agricultural Chemical; Most Left-Behind Kids," *China Business News*, July 5, 2010.
36. Jin Ran, "Foxconn and the Ten-Year-Old 'Nail,'" *Nanfang Weekend*, December 13, 2010, <http://www.infzm.com/content/53351>.
37. *Ibid.*
38. Fiona Tam, "Chongqing to Raise Migrant, Rural Incomes," *South China Morning Post*, January 3, 2009, <http://www.scmp.com/print/article/665654/chongqing-raise-migrant-rural-incomes>.
39. *The Other Side of Apple*, 25.
40. *The Other Side of Apple II*.
41. "Apple Supplier Responsibility 2011 Progress Report," Apple Inc., [http://images.apple.com/supplierresponsibility/pdf/Apple\\_SR\\_2011\\_Progress\\_Report.pdf](http://images.apple.com/supplierresponsibility/pdf/Apple_SR_2011_Progress_Report.pdf).
42. *Ibid.*
43. *The Other Side of Apple II*.
44. Friends of Nature, The Institute of Public & Environmental Affairs, Envirofriends, Nature University, Nanjing Greenstone, *Apple Opens Up: IT Industry Supply Chain Investigative Re-*

- port—Phase VI, January 29, 2013, <http://switchboard.nrdc.org/blogs/lgreer/Report-IT-Phase-VI-Draft-EN.pdf>.
45. Bradsher and Duhigg, “Signs of Changes.”
  46. Steven Greenhouse, “Critics Question Record of Fair Labor Association, Apple’s Monitor,” *New York Times*, February 13, 2012, <http://www.nytimes.com/2012/02/114/technology/critics-question-record-of-fair-labor-association-apples-monitor.html>.
  47. Catherine Rampell and Nick Wingfield, “In Shift of Jobs, Apple Will Make Some Macs in U.S.,” *New York Times*, December 6, 2012, [http://www.nytimes.com/2012/12/07/technology/apple-to-resume-us-manufacturing.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2012/12/07/technology/apple-to-resume-us-manufacturing.html?pagewanted=all&_r=0).
  48. For Apple revenue breakdown, see “Revenue by Product (as Percentage of Revenues),” Bare Figures, <http://barefigur.es>.
  49. Fiona Tam, “All Work and No Play Makes It a Dull Plant,” *South China Morning Post*, May 27, 2010, [www.scmp.com/print/article/715430/all-work-and-no-play-makes-it-dull-plant](http://www.scmp.com/print/article/715430/all-work-and-no-play-makes-it-dull-plant).
  50. *Apple Opens Up: IT Industry Supply Chain Investigative Report—Phase VI*, 33.
  51. Ira Glass, “Retraction.”
  52. Kraemer et al., “Capturing Value in Global Networks: Apple’s iPad and iPhone.”
  53. Fiona Tam, “Number of Migrant Workers in Delta Outstrips Job Vacancies,” *South China Morning Post*, March 4, 2009, <http://www.scmp.com/print/article/671980/number-migrant-workers-delta-outstrips-job-vacancies>.
  54. Pun and Chan, “Global Capital, the State, and Chinese Workers: The Foxconn Experience.”
  55. See, for example, William I. Robinson, *Latin America and Global Capitalism: A Critical Perspective* (Baltimore: John Hopkins University Press, 2008); Mike Davis, *Planet of Slums* (London: Versa, 2007); and Pun Ngai, *Made in China: Women Factory Workers in a Global Workplace* (North Carolina: Duke University Press, 2005).
  56. Edna Bonacich and Richard P. Appelbaum, *Behind the Label: Inequality in the Los Angeles Apparel Industry* (Berkeley: University of California Press, 2000).
  57. Fiona Tam, “Million to Be Trained to Fight Labour Shortage,” *South China Morning Post*, February 26, 2008, <http://www.scmp.com/print/article/627636/million-be-trained-fight-labour-shortage>; and Fiona Tam, “300,000 Foxconn Staff in Move to Henan,” *South China Morning Post*, June 30, 2010, <http://www.scmp.com/print/article/718493/300000-foxconn-staff-move-henan>.
  58. Nelson D. Schwartz and Charles Duhigg, “Apple’s Web of Tax Shelters Saved It Billions, Panel Finds,” *New York Times*, May 20, 2013, [http://www.nytimes.com/2013/05/21/business/apple-avoided-billions-in-taxes-congressional-panel-says.html?hp&\\_r=1&](http://www.nytimes.com/2013/05/21/business/apple-avoided-billions-in-taxes-congressional-panel-says.html?hp&_r=1&).
  59. Ibid.
  60. Isaiah J. Poole, “Apple Dodges Enough Taxes to Cover Much of the Sequester,” *Truthout*, May 5, 2013, <http://truth-out.org/opinion/item/116177-apple-dodges-enough-taxes-to-cover-much-of-the-sequester>.