You're No Fun Anymore: The Ethics of Acquiring Electronic Devices in Light of E-Waste, Sweatshops, and Globalization

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I. Introduction: Ethical Consumerism and Libraries

In developed countries, environmental and social justice advocacy frequently come into conflict with local, day-to-day needs and priorities. This is especially true of the sustainability issues surrounding technology. As a profession, librarians embrace new technologies, seeing them as a means to provide access to information, facilitate effective information literacy instruction, and increase engagement with a range of audiences. This has led many libraries to acquire cutting-edge technologies such as iPads, Kindles, Chromebooks, or Google Glasses. But how carefully have we examined the complicated ethics involved in the manufacture and disposal of these electronic devices? Is it necessarily the case that our local concerns outweigh global considerations, such as sweatshop labor, natural resource exploitation, and the pollution and illness that can result from the manufacture and disposal of these devices?

This paper considers the acquisition of technological devices in light of larger ethical debates about environmentalism and human rights, and suggests practical strategies for making ethical decisions. Like Camille Price, I propose that librarians have a responsibility to practice ethical consumerism.[1] Simply stated, ethical consumerism is a social movement that examines the harm that our consumer behaviors inflict on people, cultures, and societies as well as animals, plants, and the environment, and explores ways these harms can be mitigated. As Jo Littler notes, the term ethical consumerism encompasses a wide range of sometimes contradictory behaviors and actions, including purchasing products that are "green" or Fair Trade, joining a local food co-operative, and radically reducing or eliminating consumption all together.[2] Littler goes on to divide these actions into two basic categories: those that are anti-consumerist and those that are anti-consumption. Anti-consumerist behaviors are characterized by a concern for changing the social or political systems that affect (perhaps dictate) our consumption of goods; anti-consumption "means simply advocating consuming less, whatever the economic system."[3]

Adopting these definitions, I suggest an ethical consumption approach to electronics acquisition, which carefully weighs the pros and cons of each purchase and, when in doubt, errs on the side of foregoing a new electronic device altogether. This is because, like Dave Hudson, I believe that "A practice of greening libraries must confront the very need for those acts of consumption in which we engage…."[4] Fortunately, libraries are already aligned with the principles of ethical consumption. They are explicitly built upon

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the idea that communities can and should share resources. In most cases, library funding is limited and we must consider potential usage before purchasing an item, just as we choose to repair, rebind, or otherwise preserve print materials rather than repurchase them.[5] Furthermore, libraries have for some time been concerned with sustainability (as this year's ACRL conference theme indicates). The American Library Association's sustainability efforts include the "Libraries Build Sustainable Communities" campaign of 1999-2000 and the more recently created Sustainability Roundtable. The profession likewise has a tradition of human rights and social justice activism, often led by ALA's Social Responsibilities Roundtable. Adopting an ethical consumption approach to the purchase of electronic devices can be seen as an extension of these efforts.

II. The Electronic Lifecycle: Against Acquisition

As consumers of electronics, it is easy to believe that the life of a device begins with purchase or delivery and ends with disposal. This is true of so many consumer products, and for good reason: consumer behavior might well be different if we understood the full lifecycle of the products we buy. Indeed, understanding this lifecycle is key to practicing ethical consumption.

At the very beginning of the electronics supply chain are raw materials, including minerals such as gold, tin, copper, nickel, and lead. In an introduction to a special issue of *Virginia Quarterly Review*, Ted Genoways notes that these metals are often mined in "economically depressed countries where miners work under dangerous conditions, use environmentally devastating methods, and toil for the benefit of dictators and military strongmen."[6] Indeed, in 2010 the world was riveted by the plight of thirty-three Chilean men who were trapped for sixty-nine days after a collapse at the copper and gold mine at which they worked. This mine had been shut down by the Chilean government for safety violations twice in the previous four years.[7] In the Democratic Republic of Congo (DCR), the country's mineral deposits became tied up in the vicious war that has raged there since the early 1990s. Profits from mining these minerals, including columbite-tantalite, or coltan, have been used to fund the various militias that ravaged the eastern portion of the country.[8] With passage of the Dodd-Frank Act in 2010, the United States took steps to address the problem of "conflict minerals" in DCR by requiring greater supply-chain accountability. Unfortunately, many feel the law has done more harm than good by halting mining operations, stagnating the local economy, creating a black market for minerals, and forcing unemployed miners into militias.[9]

These minerals are only a tiny part of the products we eventually receive. Copper wires and gold circuit boards are assembled into electronic devices in factories that, as the events of the past several years have reminded us, also hold to very different labor rights standards than the U.S. Starting in 2010, a series of revelations about working conditions in Chinese factories owned by Foxconn sparked outrage with Apple and other electronics companies. Employees in Foxconn's factories were working well over the legal limit of overtime, sometimes laboring for as many as thirteen consecutive days, and receiving the equivalent of about one dollar an hour.[10] These abuses, which were blamed for a spate of suicides at the factory, were followed in 2011 by an explosion at a Foxconn factory that killed two workers and injured sixteen.[11] Since that time, under immense public pressure, Apple and other electronics companies have taken steps to promote fair wages and to improve conditions at the factories that build their products.

Similar cycles of abuse, protest, and corporate response have been rehearsed in the apparel industry for over twenty years. The United Students Against Sweatshops movement of the late 1990s and early 2000s spurred the creation of the Fair Labor Association, a corporate-sponsored non-profit that sets standards and inspects apparel manufacturers in developing countries.[12] Yet November 2012 brought news of a fire in a Bangladesh sweatshop that killed 112; five months later, in April 2013, a building collapsed in

that country killing over 1,100 people, many of them garment workers.[13] The causes of this backsliding are most likely myriad—including the inadequacy of corporate oversight of supply chains and the grim economics of globalization—but their occurrence should give pause to anyone inclined to suppose that the response of electronics manufacturers to the Foxconn revelations will prevent future abuses and tragedies.

The manufacture of electronic devices involves the use of toxic materials that are environmental and health hazards. In an article in *PC World*, Lincoln Spector highlights many of these dangerous substances, including brominated flame retardants (BFRs), which cause birth defects; polyvinyl chlorides (PVC), a carcinogen; phthalates, which are linked to birth defects and asthma; beryllium, which can cause cancer as well as chronic beryllium disease; and cadmium, which is linked to lung cancer and liver and kidney damage.[14] These substances are dangerous to factory workers, and they are also of serious concern at the end of a product's lifecycle. The EPA estimates that in 2012 twenty-nine percent of end-of-life electronics were collected for recycling,[15] while in 2009 only thirty-eight percent of computers, eighteen percent of TVs, and eight percent of cell phones were recycled.[16] The rest were disposed of, primarily in landfills, where hazardous chemicals can enter the ground water and damage public health and the environment. Greenpeace has met with success in pressuring manufacturers, notably Apple, to eliminate PVC and BFRs from their products; however, these and other hazardous chemicals are still common in PCs, monitors, TVs, power adapters and cords, and peripherals.[17]

As far back as 2002, Barbara Beebe called on librarians to become educated about electronic waste, or e-waste, and to ensure that their old electronics are disposed of safely and responsibly,[18] and others have made similar calls to action.[19] Recycling, however, is not a panacea to the e-waste problem. Greenpeace has noted that electronics are often recycled in developing countries, using methods that may endanger the health of workers.[20] In an essay on information literacy and e-waste, Zazzau observes "Poor people and people of color experience the ramifications of improper e-waste disposal more than others because they have fewer resources and are correctly perceived as being less capable of resisting such violations."[21] This makes the ethics of e-waste one with both environmental and social justice implications.

E-waste becomes an even more crucial issue when one considers the shortened lifespan of so many innovative devices. Electronics companies utilize a strategy known as planned obsolescence, in which a product's design spurs consumers to replace it at a rate that is faster than necessary. Planned obsolescence was first practiced in the 1920s, when General Motors began releasing new model vehicles every year.[22] Joseph Guiltinan has shown how obsolescence may result from several factors, including planned functional failure and the release of upgraded models with additional features.[23] We certainly see both of these at work in today's devices. As has been frequently noted, the batteries in Apple's iPods and iPhones are notoriously hard to replace and are designed to fail after a certain number of charges, while each successive model includes flashy upgrades such as Retina display or fingerprint recognition.[24] Considering the environmental impact and human rights issues surrounding the manufacture and disposal of these devices, a business model based on planned obsolescence should be factored into an examination of the ethics of our purchasing decisions.

III. The Potential for Responsible Device Acquisition

In his essay "Beyond Swag: Reflections on Libraries, Pencils, and the Limits of Green Consumerism," Dave Hudson argues convincingly that librarians should rethink their "green" behaviors, reorienting them from the purchase of more "eco-friendly" goods to an anti-consumption stance. Hudson frames his argument around "swag"—those inexpensive gifts given out in libraries and at conferences. Rather than foregoing such items entirely, librarians have striven to make them more "green" or "eco-friendly," thus signaling our acceptance of the values of consumer culture. In Hudson's words,

Commitments to civilizational progress and community well-being (be it local, national, or global) are measured chiefly in terms of material accumulation and constant growth; and personal happiness, care for others, and a whole host of other relations are centrally negotiated through shopping within a cultural surround that devalues the old, the slow, and the long-term, while romanticizing the new, the fast, and the immediate—a culture of swag, fears of obsolescence, and constant upgrades.[25]

Much of Hudson's argument resonates with my thinking about electronic device acquisition, which often seems to be motivated by fears of obsolescence and romanticized notions of innovation.

Still, it is easier to argue that librarians forego promotional bookmarks and conference tote bags than new electronics, which may bring real benefits to our communities. My own institution began lending Sony e-book readers as early as 2009 in order to provide students at our urban, public college access to e-books.[26] We have since moved on to offering iPads and an array of laptops for much the same reason. New technologies have also proven effective in increasing community engagement. René Battelle found that the presence of a single Google Glass brought male teens—a difficult audience to engage—into her public library.[27] Engagement is also crucial to effective teaching, and there are cases in which devices have been shown to increase student attention and satisfaction.[28] If a device is capable of addressing injustice at home, by providing opportunities to underserved communities, or if it demonstrably improves teaching and learning, can we justify its purchase on these grounds?

Furthermore, many of the issues addressed in the second part of this paper are subject to their own ethical debates. Nicholas Kristof, for example, has defended sweatshop labor on the grounds that it brings jobs to regions and countries suffering from extreme poverty.[29] His argument is that sweatshop labor improves the lives of most workers, and is therefore an overall good. This is basically a utilitarian perspective on ethics, which "advocates practices that maximize the overall sum happiness."[30] In many ways, determining where one stands on issues related to ethical consumption requires a philosophical framework that defines ethical behavior.

My intention is not to delve into moral philosophy, but I should acknowledge that I believe a utilitarian approach to these questions is likely to prove most practical in a library context. We need flexibility in order to balance the demands of our communities with our responsibilities to other human beings and to the environment. I suggest we evaluate the pros and cons of electronic device acquisition each time we wish to make a purchase, and ask ourselves whether the potential good is enough to justify the potential harm.

So how can librarians determine whether or not to acquire a given device? We should begin by defining the reasons we want to purchase the device and the audience we plan to serve. What do we hope our libraries and communities will gain? How large is the community that is likely to benefit, and how significant will that benefit be to their lives? Are there other ways this goal may be accomplished? If not, could you achieve the goal by purchasing only one device, rather than many?

Once our goals and audience are defined, we should develop strategies for measuring our success in achieving them. We might plan to track loan statistics and ask those who use the device to complete a survey, volunteer for a short interview, or take part in a focus group. If we selected a device for its educational affordances, but the assessment shows that it's being used primarily for entertainment, then we will be able to factor this information into our next decision-making process.

Besides goals and outcomes, we should also evaluate the physical qualities of the device. Zazzau makes a number of recommendations for how academic librarians can become more knowledgeable about e-waste, and promote such knowledge on their campuses and with their students. Among other things, she suggests checking into state and local e-waste

laws and recycling programs, teaming with campus sustainability leaders, and investigating the manufacturing and recycling practices of major companies.[31] There are also consumer guides and rankings, such as Greenpeace's Guide to Greener Electronics (available at http://www.greenpeace.org/international/en/campaigns/climate-change/cool-it/Campaign-analysis/Guide-to-Greener-Electronics/) and the EPEAT Registry (http://www.epeat.net/), which provide information on the environmental impact of a product or company.

Next, we should consider the product's potential lifespan. Is the device the first of its kind, such as the first generation iPad? If so, how likely is it to be upgraded or superseded by a new "improved" version? Alternatively, is the device dependent on proprietary software that has not yet been broadly adopted, or is it possible it will soon become the victim of a "format war"? If we believe device will become significantly less useful or desirable in a year or two, we should consider what impact it can realistically make in such a short period of time.

Before purchasing, we should also be sure we truly understand patron demand for the item. We can conduct research, such as surveys or focus groups, to discover what our constituents need and want. A literature review may reveal information on device performance at other institutions. We will be on most solid ground if we can justify our purchases with evidence that the technology will be used as we hope.

Finally, keep in mind that in an academic setting, an ethical quandary can become a learning experience for students. What might they think about the value of a device once they have learned about its environmental and human rights implications? Such information can be provided on a student interest survey, or might become a discussion point in a focus group. Since the issues are multifaceted and evolving, they would make good topics for formal debates, panel discussions, and lecture series. Such events could be a call for students to get informed and to contribute to the decision-making process.

Ultimately, these decisions are going to depend on your institutional context—your community's needs, your resources, your personal and collective values—and on the nature of the technology. An approach based on ethical consumption may result in fewer purchases, but those you make will likely be more meaningful. Practicing ethical consumption in our electronic device acquisitions can be one more step in our profession's history of sustainability and social justice advocacy. After all, "Every reader his book" need not necessarily be updated as "Every reader her tablet, e-reader, Google Glass, Makerbot…"

Notes

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