Blind Spots: Electronics Firms, Impression Management, and the Harms of the Electronics Commodity Chain

Lucy D. McAllister
November 3rd, 2014
Environmental Studies Program
Structure of Presentation

1. Motivation
2. Research questions
3. Theory – Impression management
4. Case selection criteria
   • Samsung, Apple, HP & Toshiba
5. Dissertation chapters
   – Corporate impression management tactics
   – NGO perceptions of electronics firms
   – Consumer perceptions of electronics firms
6. Conclusion
What is e-waste?
• E-waste is the fastest growing waste stream worldwide, estimated at 20–50 million tonnes per year (Boone & Ganeshan 2012).

– This year, the number of mobile devices exceeded the world’s population and an estimated one billion computers were retired (LaDou & Lovegrove 2006).
Adult gadget ownership over time

% of American adults ages 18+ who own each device

Source: Pew Internet surveys 2006-2013
Note: 2013 e-reader/tablet results based on Americans ages 16+
Just a fraction of the electronics are being recycled...why?

1. People don’t know what to do with their e-waste

2. Piecemeal U.S. State legislation

3. Inadequate Recycling infrastructure
   • cheaper to trash than recover

Table 4: Current E-Waste Recycling in the US in 2010

<table>
<thead>
<tr>
<th>Products</th>
<th>Recycling Rate</th>
<th>E-Waste (1,000 ton)</th>
<th>E Waste (1,000 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers &amp; Laptops</td>
<td>39.7%</td>
<td>Disposed: 423</td>
<td>Disposed: 51,900</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recycled: 168</td>
<td>Recycled: 20,600</td>
</tr>
<tr>
<td>Cellphones &amp; Pagers</td>
<td>11.4%</td>
<td>Disposed: 19.5</td>
<td>Disposed: 152,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recycled: 2.24</td>
<td>Recycled: 17,400</td>
</tr>
<tr>
<td>Televisions</td>
<td>17.3%</td>
<td>Disposed: 1,045</td>
<td>Disposed: 28,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recycled: 181</td>
<td>Recycled: 4,940</td>
</tr>
<tr>
<td>Computer Monitors</td>
<td>32.7%</td>
<td>Disposed: 595</td>
<td>Disposed: 35,800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recycled: 194</td>
<td>Recycled: 11,700</td>
</tr>
<tr>
<td>Printers/Copiers</td>
<td>33.3%</td>
<td>Disposed: 290</td>
<td>Disposed: 33,600</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recycled: 97</td>
<td>Recycled: 11,200</td>
</tr>
</tbody>
</table>
Why is this so problematic…?

To start:

• Perpetuates the depletion of finite virgin minerals and precious metals, primarily, from Africa (Boone & Ganeshan 2012).

• Fuels the global sale of “conflict minerals” that are used to fund the violence of warlords (Spectrum 2011)

• 50 to 80 percent of the e-waste collected for recycling in the “developed” world is shipped to the informal markets of “developing” countries (UNEP 2005).
What’s so toxic...?
Electronics Manufacturing

China receives 90% of the Asian recycling market... around 100,000 workers (including children) undrinkable water

11
19
23
28
29
334
38
39
149

from Europe
India
Indian Ocean

from North America
Harms at production facilities…

**Manufacturing**
- 2009-2010 Foxconn suicides (14 dead, 4 severely injured)
- 2010 n-hexane poisonings (137 severely injured)
- 2012 - 2 aluminum dust explosions at Foxconn factories (4 dead, 41 severely injured)
- Rampant child labor (CLW 2014)

**Health issues**
- Breathing ailments
- Skin infections
- Stomach diseases
- Leukemia
- Heart disease
- Stunted growth
- learning disabilities
- behavioral issues
- Increased miscarriages
- Lead poisonings
The *Disconnect*

- Despite the existence of these harms at every stage of the electronics commodity chain, consumers often perceive lead electronics firms as being at the forefront of ‘green’ and socially responsible business practices.
- These findings raise the question of how electronics firms that regularly harm both the environment and human health can be perceived so favorably by the U.S. public?
Possible Explanations...

One possibility is that multinational electronics firms are making serious efforts to improve.
Another Example…

Samsung has a “zero tolerance” policy on child labor

• In July 2014, China Labor Watch (CLW) accused a supplier of Samsung located in southern China of
  – illegal child labor practices
    ▪ unpaid and excessive overtime
    ▪ inadequate protective equipment
    ▪ a lack of safety training for the use of toxic chemicals
    ▪ among many other allegations…
“You can set all the rules you want, but they’re meaningless if you don’t give suppliers enough profit to treat workers well,” said one former Apple executive with firsthand knowledge of the supplier responsibility group. “If you squeeze margins, you’re forcing them to cut safety” (as cited in Duhigg & Barboza 2012: 9).
“We’ve known about labor abuses in some factories for four years, and they’re still going on,” said one former Apple executive who, like others, spoke on the condition of anonymity because of confidentiality agreements. “Why? Because the system works for us. Suppliers would change everything tomorrow if Apple told them they didn’t have another choice. If half of iPhones were malfunctioning, do you think Apple would let it go on for four years?” the executive asked (as cited in Duhigg and Barboza 2012: 3).
Research Questions

• (a) whether or not lead firms attempt to hide the role they play in producing severe human and environmental problems throughout the electronics commodity chain?

• (b) whether or not NGOs and consumers have accepted corporate framings of the electronics commodity chain, and if so, why?
Theoretical Framework

Impression Management

- In essence, “...the individual is likely to present himself in a light that is favorable to him” (Goffman 1959:7)
  - Applies to both individual and organizational interactions
Diversionary Reframing

- **Diversionary reframing** is the attempt to redirect attention, change the subject, or reframe the story (Freudenburg and Alario 2007).
  - However, diversionary reframing is only successful if target audiences accept impression management messages (Freudenburg and Alario 2007; Goffman 1959).
Performativity

• Performativity is most basically the reiteration of norms so that certain perceptions or activities become normal, natural, or even unquestionable (Butler 1993).
Case Selection Criteria (1/3)

1. The scale criterion
   - Each case is a Global Fortune 500 company: Samsung (13th/500) Apple (15th), HP (50th), and Toshiba (145th)
Case Selection Criteria (2/3)

2. The admiration criterion: Fortune 50 most admired firms
   - Two of the companies I will study are among Fortune’s 50 most admired businesses in the world: Apple (1st/50), and Samsung (21st)
   - And two, HP and Toshiba, do not rank among the top 500 most admired businesses
Case Selection Criteria (3/3)

3. The green and social practices criterion

- There is variation across these firms in terms of green and social business practices.

- Some of these firms have more positive environmental and social reputations, while others are perceived as lagging.
<table>
<thead>
<tr>
<th><strong>Table 1: Greenpeace’s Guide to Greener Electronics Criteria</strong></th>
<th><strong>Green Practices</strong></th>
<th><strong>Social Practices</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy and Climate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Does the company disclose and set targets for operational green house gas (GHG) emissions and renewable energy (RE) supply?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Does the company disclose and set targets for supply chain GHG emissions and RE supply?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Does the company have a Clean Electricity Plan (CEP)?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Does the company advocate Clean Energy Policy?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Greener Products</strong></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• How energy efficient are the companies’ products?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Does the company avoid hazardous substances in products?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>• Does the company use recycled plastic in products?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Does the company document product life cycles?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Sustainable Operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Does the company have a chemicals management and advocacy plan?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Does the company have a policy and practice on sustainable sourcing of fibers for paper?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Does the company have a policy and practice on avoidance of conflict minerals?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>• Does the company provide effective voluntary take-back programs where there are no extended producer responsibility (EPR) laws?</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Source: Adapted from Greenpeace (2014)*
1st empirical chapter: Corporate impression management tactics

Question:
Investigate whether and how Apple, Samsung, HP and Toshiba utilize impression management tactics to legitimize or shift attention away from their harmful social and environmental business practices.
METHODS

**Content Analysis**
For every case, I will analyze and code (2007-present):
1. Corporate annual reports
2. Corporate press releases and press kits
3. Corporate social media (tweets, Facebook),
4. Corporate print and video advertisements (i.e. brochures and corporate YouTube accounts),
5. Website content related to the electronics commodity chain available on the company’s primary website
6. A *Lexis Nexis* search of newspaper articles
7. NGO reports to identify the types of messages used by the firms.

**In-person, semi-structured interviews**
- with corporate representatives at Apple, HP, and the U.S. headquarters of Samsung and Toshiba.
- Aim to interview at least 3 people from each company, for a total of 12 interviews.
2nd empirical chapter: 
NGO perceptions of electronics firms

Question:
How do NGOs working on electronics commodity chain issues perceive the messaging of lead electronic firms?
METHODS

In-person, semi-structured interviews

NGOs to be contacted include:
• The Basel Action Network (BAN)
• Greenpeace International
• Clean Production Action
• Environmental Working Group
• Global Alliance for Incinerator Alternatives (GAIA)
• Cultural Survival
• Health Care Without Harm
• International POPs Elimination Network (IPEN)
• Physicians for Social Responsibility (PSR)
• Toxics Link
• Chintan
• China Labor Watch

Aim to interview at least ~1-2 representatives from each NGO, for a total of ~12-24 interviews
3rd empirical chapter:
Consumer perceptions of electronics firms

Question:
How do electronics consumers perceive the messaging or social and environmental reputations of lead electronic firms?
METHODS

In-person, semi-structured interviews
• Aim to interview at least 20 consumers
• Use as a pre-test for the survey instrument

A survey of U.S. residents (18+) on Amazon’s Mechanical Turk
• N= 500 U.S. Residents
• Statistical significance at p < .05
• IRB approval, pilot sample of 50
What is your overall opinion of the social and environmental reputations of the following electronic companies? Please mark a box for each of the following companies.

<table>
<thead>
<tr>
<th>Company</th>
<th>Very favorable</th>
<th>Mostly favorable</th>
<th>Neither favorable nor unfavorable</th>
<th>Mostly unfavorable</th>
<th>Very unfavorable</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Samsung</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hewlett Packard</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Toshiba</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Sometimes people find it inconvenient and difficult to recycle, do you recycle your plastics, paper, or glass products?

- ○ Always
- ○ Most of the Time
- ○ Sometimes
- ○ Rarely
- ○ Never

Do you recycle or resell your personal electronic products (for example cellphones, computers, tablets, printers, T.V.s and mobile digital media players)?

- ○ Always
- ○ Most of the Time
- ○ Sometimes
- ○ Rarely
- ○ Never

How do you usually dispose of your electronic products (for example cellphones, computers, tablets, printers, T.V.s and mobile digital media players)? Please check all that apply.

- ○ Store them at home or work (in a drawer, bucket, closet or garage)
- ○ Toss them in the trash
- ○ Sell them to someone else
- ○ Take them back to the manufacturer
- ○ Take them back to the retailer where electronic was purchased
Structure of Dissertation (Ch. 1-6)

1. Introduction
2. Theory – Impression Management
3. Corporate impression management tactics
4. NGO perceptions of electronics firms
5. Consumer perceptions of electronics firms
6. Conclusion

<table>
<thead>
<tr>
<th>Data gathering and analysis phases (2014-2016):</th>
<th>Estimated time to completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Content analysis</td>
<td>Expected to take 10-12 months</td>
</tr>
<tr>
<td>(2) Interviews with firms (including analysis)</td>
<td>Expected to take up to a year</td>
</tr>
<tr>
<td>(3) Interviews with NGOs (including analysis)</td>
<td>Expected to take 6-9 months</td>
</tr>
<tr>
<td>(4) Interviews with consumers (including analysis)</td>
<td>Expected to take 3 months</td>
</tr>
<tr>
<td>(5) Survey of consumers (including analysis)</td>
<td>Expected to take 3 months</td>
</tr>
<tr>
<td></td>
<td>*M-Turk surveys can provide data within a week</td>
</tr>
</tbody>
</table>
Thank you!

Questions?

LUCY D. MCALLISTER
mcallis1@colorado.edu
Cooperative Institute for Research in Environmental Science (CIRES)
University of Colorado-Boulder