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**Design  
Management  
Review**

# Packaging and the Environment: A Cross-Cultural Perspective

Scott Young, *President, Perception Research Services*

Reprint #08194YOU42

This article was first published in *Design Management Review* Vol. 19 No. 4

## Green Design

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# Packaging and the Environment: A Cross-Cultural Perspective

by Scott Young

*Awareness and perceptions have a big impact on being able to move the green design agenda forward. Scott Young has done extensive international research in this arena with respect to packaging. His findings reveal different attitudes in different countries. More significantly, they highlight why changing people's attitudes about sustainable packaging has been and will remain a major challenge.*



Scott Young, President,  
Perception Research  
Services, International

The environment is an issue that has received increasing attention over the past five years, driven by mounting evidence of global warming—and of health concerns tied to air pollution in China, India, and other developing countries.

Growing environmental awareness has clearly been reflected in marketing, as seemingly every multinational company has developed advertising or public relations to highlight its initiatives in this arena. It has also had a major impact in the packaging world, at least partially because packaging is often cited as a source of waste. Wal-Mart's introduction of its Sustainable Packaging Scorecard program has galvanized the industry, leading nearly all suppliers to begin developing more environ-

mentally friendly packaging systems in order to remain on retail shelves.

Not surprisingly, the environmental tide has also produced a backlash of sorts, with increasing reports of shopper skepticism in the midst of environmental claims (that is, green-washing). Marketers have expressed similar doubts, as reflected in this recent comment by Bart Becht, CEO of Reckitt Benckiser: "At the end of the day, it's the consumers' decision, and they are not doing anything about it."

At Perception Research Services (PRS), our focus is on understanding shoppers' and end users' reactions to packaging systems. Thus, in light of all this activity, we've been interested in understanding the consumer perspective on packaging and the environment.

Specifically, we address two primary questions:

**Do they know?**

*Do shoppers know which packaging systems are better for the environment?*

**Do they care?**

*Do environmental considerations have an impact on their packaging preferences and purchase decisions?*

In addition, there is an intriguing cross-cultural component to this research; we wanted to see how environmental awareness and perceptions varied across regions. For example:

*Would Europeans live up to their reputation—and prove more knowledgeable and environmentally conscious than Americans?*

*How would the intense air pollution in China—and the recent effort to reduce pollution for the Beijing Olympic Games—affect perceptions of packaging and notions of environmental responsibility?*

*How do perceptions of individual responsibility (versus that of companies) differ across cultures?*

To explore these issues, PRS recently conducted parallel studies in four major global markets: the US, the UK, Germany, and China. Within each country, we spoke with a minimum of 100 shoppers via in-person interviews that allowed each person to touch/hold physical packages. Broadly speaking, the study contained two primary components:

*A series of questions regarding packaging and the environment (to gauge awareness/attitudes/perceptions across product categories)*

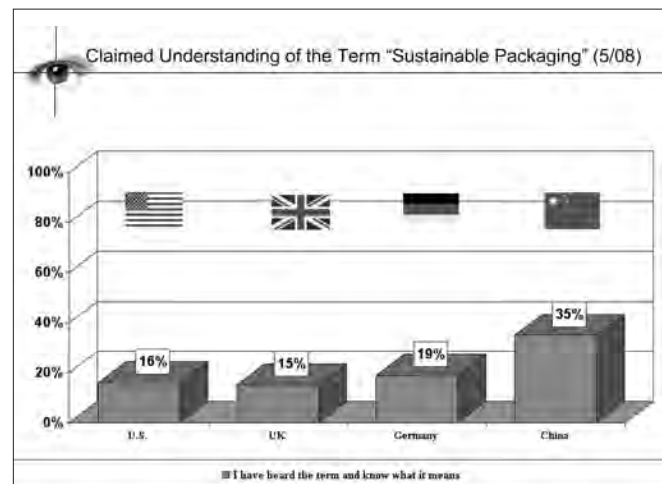
*Exposure to individual unbranded packaging structures (to gather reactions to specific packaging systems and materials—and uncover the importance of environmental factors in driving packaging preferences)*

The first component allowed for the most direct comparisons across countries and consistently revealed far more commonalities than differences in shopper perceptions.

## Sustainable packaging?

An initial question clearly illustrated an important terminology gap between the industry and the consumer. When shoppers were asked about their awareness of the term sustainable packaging, fewer than 20 percent (in the US, UK, and Germany) claimed to know what the term meant—and this figure was only somewhat higher in China (35 percent). What's more, there is reason to believe that these figures are inflated. When US shoppers were probed further, we found that fully half mistakenly interpreted sustainable to mean durable. As one woman mistakenly put it, "Sustainable means the package is not biodegradable and stays with us forever."

Thus, while marketers, designers, and engineers may think and speak of sustainability, it is important to remember that this is not consumer language in Beijing, Birmingham, Bonn, or Boston.



## Environmentally friendly = recycling

When asked what makes a packaging system environmentally friendly, shoppers around the world consistently offered a one-word answer: recycling.

In all markets, a clear majority of shoppers cited "made from recyclable materials" as the primary factor they used to determine if a package was environmentally friendly. Interestingly, this magic word appears to trump other considerations, including quantity of packaging material used (that is, use of primary and secondary packaging). In addition, separate research by PRS suggests that most shoppers do not distin-

guish between “made from recycled materials” and “recyclable”—although the two are often mutually exclusive.

### **Social responsibility: Shoppers vs. marketers**

A related set of questions explored shoppers’ perceptions of their role/responsibility as it relates to the widespread use of more environmentally friendly packaging.

First, we asked if shoppers should be willing to pay a small amount more (5 to 10 cents in the US; comparable amounts globally) for packaging that is environmentally friendly.

Interestingly, the percentage of shoppers who agreed was highest in the US (67 percent), comparable across the UK and Germany (48 to 50 percent), and lowest in China (only 23 percent). This may be a reflection of varying societal attitudes regarding individual responsibility.

Despite the low Chinese response, however, when the same question was phrased in the context of *personal* willingness to spend more for environmentally friendly packaging, more than 80 percent of Chinese shoppers claimed that they personally were willing to spend more (as opposed to approximately two-thirds in the other countries).

We phrased a similar question in the context of manufacturers’ responsibility—and uncovered a very different perspective.

In all four countries, more than 80 percent of the consumers we interviewed agreed that it is the manufacturers’ responsibility to produce more environmentally friendly packaging, without passing along costs to shoppers.

Taken collectively, these responses suggest a similar outlook across countries: While shoppers accept some responsibility, they view their obligation as secondary to that of the manufacturer. This is consistent with a larger pattern that we’ve seen across studies, in which shoppers generally believe that:

The government’s job is to make recycling widely available/accessible.

The manufacturers’ job is to make environmentally friendly (recyclable) packaging affordable.

The shopper’s job is to recycle, provided that the other factors are in place.

### **Reactions to packaging across cultures**

The second component of the study varied somewhat across countries, because the packaging structures seen and assessed differed from country to country. (We tested packaging systems that were native to each country-specific market.) However, the research did reveal several interesting patterns across cultures.

Within each product category, shoppers saw two packaging structures. They were asked to choose the one they preferred and give their reasons for that choice. Across all four countries, this exercise revealed that environmental considerations are not a primary driver of packaging preference. In the US, only 26 percent of shoppers cited environmentally friendly as one of their top three considerations, as opposed to approximately 40 percent who cited functional considerations (such as easy-to-open and re-sealable). In addition, the ability to see the product (through the packaging) emerged as a primary driver of packaging preference in the US across a wide range of categories, including orange juice, cereal, and bandages.

In the UK, Germany, and China, even fewer shoppers (only 19 to 22 percent) cited environmental factors as a primary driver, and functional considerations (ease of transport, disposal, and storage in the home) were paramount.

After discussing their preferences, shoppers were asked to evaluate the environmental friendliness of each package on a 1-to-10 scale (with 10 signifying that the package was very environmentally friendly). These ratings revealed somewhat different perceptions across cultures, as Chinese scores were generally higher (more favorable) than those in other markets (a mean of 7.2, as opposed to approximately 6.5 in the other countries). What’s more, virtually no

Chinese shoppers perceived individual packages to be extremely bad for the environment (at 1-3 on the scale), as opposed to approximately 15 percent who did so in the UK and US.

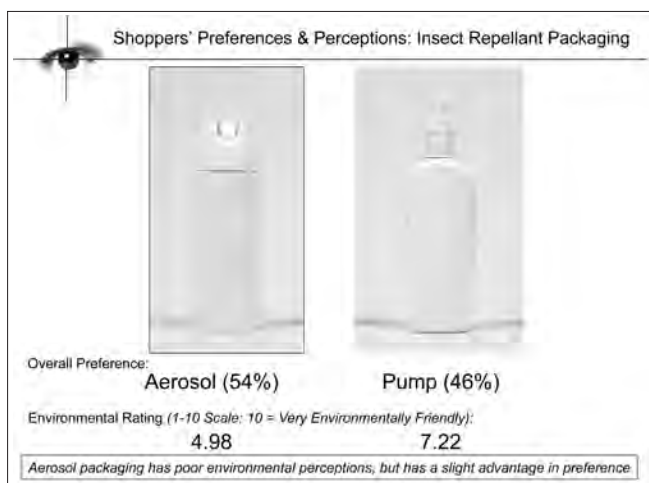
Perhaps more telling, we did not find a consistent linkage between perceived environmental friendliness and overall packaging preference. Across markets, shoppers' preferences were driven by functional needs (product protection, ease of use, portability, and so forth), as opposed to perceived environmental impact.

### Examples—and misperceptions

A look at individual examples reveals some common misperceptions regarding the environmental impact of the alternative packaging systems.

In the US, the widest gap in environmental perceptions came in the insect repellent category, where “pump” packaging was rated as extremely environmentally friendly (7.22), most likely due to its juxtaposition with aerosol packaging, which received the lowest rating (4.98). These low ratings were driven by outdated associations of aerosols and their negative impact on the atmosphere, specifically on the ozone layer. Despite this, however, overall preference actually leaned toward the aerosol (54 percent), due to perceived functional advantages.

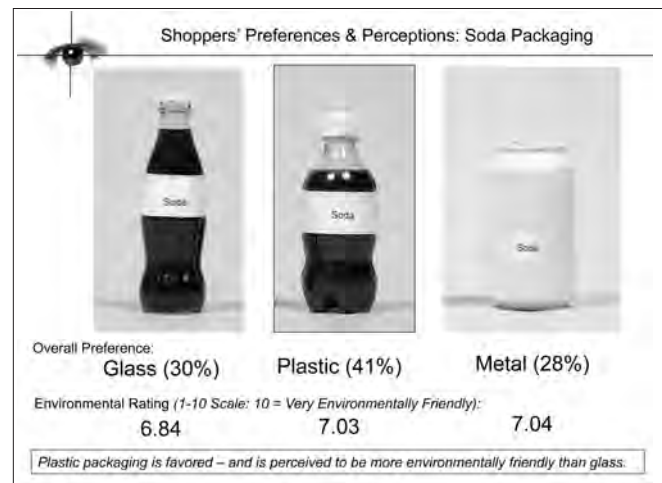
In the soft drink category, plastic packaging (7.03) was mistakenly perceived to be more environmentally friendly than glass packaging



In the US, “pump” packaging was rated as more environmentally friendly than aerosol, probably due to outdated associations of aerosols and their impact on the ozone layer. However, overall preference favored the aerosol, due to its perceived functional advantages.

(6.84). This appeared to be driven by shoppers' greater certainty that plastic can be recycled. In fact, subsequent research revealed that more than 90 percent of Americans perceive that plastic can be recycled, as opposed to only 74 percent who consider glass to be recyclable.

In the UK, overall preferences and environmental perceptions appeared to align in terms of shoppers' reactions to gum packaging. The card-



A majority of US consumers believe that plastic is more environmentally friendly (i.e., more recyclable) than glass.

board packaging for gum was favored on an overall basis relative to plastic (58 percent versus 42 percent), due largely to perceived ease of opening and superior portability. Although relatively few shoppers cited environmental factors as driving preference, the cardboard was also perceived to be more environmentally friendly (7.31 versus 6.20).

In China, a transparent shampoo bottle was perceived to be better for the environment than an opaque bottle (7.30 versus 7.13). Follow up



In the UK, cardboard gum packaging was favored over plastic, due largely to perceived ease of opening and superior portability; cardboard was also perceived to be more environmentally friendly.

questions revealed that this finding was driven by greater confidence that clear plastic could be recycled—and the perception that it used less material than the opaque bottle, which was larger. As in other markets, environmental advantages did not correlate to overall preference, as the options were exactly even on this dimension, with preferences driven by perceived ease of opening, dispensing, and storing the bottle in the home.

### **A starting point: Implications for further research**

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Clearly, this global research represents only a beginning in terms of understanding the consumer's perspective regarding packaging and the environment—and that this issue must be tracked over time as environmental awareness increases and packaging evolves.

In particular, there is a need to better understand attitudes and perceptions across specific product categories. In the US and UK, we've found significantly higher sensitivity to environmental considerations in categories with single-serve packaging (such as bottled water and beverages) and in categories associated with larger safety concerns (such as insect repellent and cleaning products). Thus, it is logical that companies such as Clorox and Poland Spring have been among the most aggressive in introducing and promoting environmentally friendly brands/products (such as Clorox's Green Works cleaners) and packaging systems. Moving forward, it will be interesting to see if these category-specific dynamics are global in nature, or if they are tied more directly to sensitivities within individual countries.

In addition, given its primacy in shoppers' minds, it will be important to explore the understanding of recycling across cultures (which materials can be recycled, how to confirm that a package can be recycled, and so on). For example, we recently found that more than 75 percent of American shoppers assume that all plastic packaging can be recycled, and make no distinction between different forms of plastic in this respect.

On a broader level, it is clear that foundational research of this nature has its limitations. While it can help to guide the development of more environmentally friendly packaging systems (by identifying primary considerations, guiding pack messaging, and so on), marketers will clearly need to understand and test new systems within individual product categories—and to address issues (such as shelf visibility and impact on brand imagery) not covered in this particular study. In fact, we've conducted many "on-shelf" studies of new environmentally friendly packaging systems over the past two years, and findings do indeed vary widely by product category. However, in cases where new systems have performed poorly, there have been two consistent drivers:

The new packaging systems have involved significant trade-offs on one or more functional dimensions (such as product protection).

The new packaging systems have turned off shoppers on a visceral level and detracted from product perceptions and brand imagery (that is, they have simply looked inappropriate or cheap).

We've also seen that, without the benefit of package claims that explicitly tout environmental benefits, shoppers have not consistently recognized these new systems as better for the environment. In other words, it is not enough to simply put a more environmentally friendly package on the shelves. If the goal is to drive preference or justify a price premium, the environmental benefit needs to be conveyed.

### **Answering our questions—and guiding sustainable packaging development**

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Looking across countries, this study did provide initial answers to our underlying questions, and uncovered several realities to help guide packaging development.

*Do they know?* Without question, this study revealed that consumers simply don't know enough to make informed decisions about packaging and the environment. Clearly, as an indus-

try, we have a long way to go in educating shoppers about environmentally friendly packaging. This is particularly critical given the growing clutter of environmental messaging (greenwashing) and the confusion that we've seen in consumers' minds between "good for you" items (healthy, organic, and so on) and "good for the planet" products, which may also include references to sourcing (fair trade, and so on).

Overall, the implication is that along with the development of sustainable packaging systems, a parallel effort needs to go into conveying environmental benefits on packaging in a clear and

**Environmentally-Friendly Products & Packaging:  
Breaking Through the Clutter & Confusion**

- ❖ Among shoppers, there is significant confusion/blending in terms of environmental perceptions:
  - Is the Packaging Environmentally Friendly – or the Product?
  - Is the Product "Good for You" (organic, natural, etc.) – or "Good for the Planet" (environmentally friendly, safe, fair trade, etc.)
- ❖ There is also growing cynicism regarding environmental claims (i.e. "greenwashing")

*To break through, it's best to link sustainable packaging to a larger environmental brand proposition.*



compelling manner. Aside from references to recycling, we've found that claims linking to tangible impacts (for example, "one-third less plastic," "saved one million trees") are far more compelling than more-abstract references (to post-consumer materials, sustainability, and so on).

*Do they care?* Of course, the answer to this question is far more complex. On the one hand, a majority of shoppers in each country expressed personal willingness to pay a bit more for environmentally friendly packaging. However, the research also uncovered a lack of knowledge (cited above) and confirmed the fact that environmental considerations are secondary in driving packaging preferences. Thus, while Bart Becht's comment ("They aren't doing anything about it...") is largely accurate, this reality is most likely driven by a lack of knowledge and awareness, rather than intent.

Overall, this study—and additional

research—appears to support the perspective voiced recently by Len Sauers (vice president of sustainability for Procter & Gamble):

*"There is a very small niche of consumers (5 to 10 percent) who are willing to accept some trade-off (for instance, higher-cost, lesser performance,) in order to purchase a product that claims environmental benefits. The vast majority of consumers (50 to 75 percent) feel that environmental issues are important but are not willing to accept such trade-offs. However, they will choose a product with environmental benefits if it meets all their other needs."*

On a cross-cultural level, we've discovered more commonalities than disparities in terms of shoppers' limited environmental awareness with respect to packaging. Despite their reputation for being more environmentally conscious, Europeans appear to be as uninformed as Americans in terms of packaging materials. In China, there was some evidence of heightened sensitivity, but this did not necessarily translate to greater knowledge or perceived personal responsibility.

From a packaging development standpoint, the implication is clear. Sustainable packaging systems can't involve fundamental trade-offs. Instead, they must meet consumers' higher-level functional needs, as well as support product perceptions and brand imagery. Fortunately, these twin goals—of reducing environmental impact and serving consumers' primary needs—are not mutually exclusive. An example comes from Kraft, which recently introduced salad

**Does More Environmental Packaging Need to Involve Trade-Offs?**

**Environmental Benefits**

- ❖ 19% Less Plastic per Bottle
- ❖ 3.4 Million Pounds of PET Saved Annually
- ❖ Improved Transportation Efficacy by 18%

**Marketing Benefits**

- ❖ Addressed Shoppers' Desire to See Product (Clear Packs)
- ❖ Increased Competitive Differentiation & Shelf Visibility
- ❖ Enhanced Product Perceptions (Wholesome, Natural, etc.)



dressing in new clear bottles that reduced the amount of plastic used (by 19 percent) and improved transportation efficiency by 18 percent (as a result of the ability to transport more bottles per truckload). What's more notable, this change (which is expected to save over 3 million pounds of PET annually) actually improves impact and appeal at the shelf by creating visual contrast with the product category—and also comes down in favor of consumers' underlying desire to see the product.

Success stories of this nature, and the global commonalities we've found in consumers' priorities and perspective, provide grounds for optimism. While there is a definite need to educate people globally about packaging and the environment, there is also reason to believe that companies can adopt more earth-friendly solutions without losing shoppers along the way. In fact, companies that invest in understanding the consumers' perspective—and in learning to convey environmental benefits effectively—are likely to be well-rewarded at the shelf. ■

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