DESIGN MANAGEMENT INSTITUTE

ARTICLE REPRINT

Design Management Review

Inventing Brands: Opportunities at the Nexus of Semiotics and Intellectual Property

James G. Conley, *Center for Research in Technology, Kellog School of Management, Northwestern University*
J. Duncan Berry, *Applied Iconology, Inc.*
Laura DeWitt, *Iaga*
Mark Dziersk, *Industrial Design, Iaga*

Reprint #08192CON58
This article was first published in *Design Management Review* Vol. 19 No. 2

Building Brands at the Intersection of Design and Business Strategy
Copyright © Spring 2008 by the Design Management Institute℠. All rights reserved. No part of this publication may be reproduced in any form without written permission. To place an order or receive photocopy permission, contact DMI via phone at (617) 338-6380, Fax (617) 338-6570, or E-mail: dmistaff@dmi.org. The Design Management Institute, DMI, and the design mark are service marks of the Design Management Institute.
www.dmi.org

Inventing Brands: Opportunities at the Nexus of Semiotics and Intellectual Property

by James G. Conley, J. Duncan Berry, Laura DeWitt, and Mark Dziersk

Organizations seek brands that yield sustainable differentiation as they resonate with consumers and stakeholders. The team of James Conley, Duncan Berry, Laura DeWitt, and Mark Dziersk examine how a clear understanding of the messages and power inherent in the visual dimension of a brand can be linked with patents, copyrights, and other unique content to extend the range and competitiveness of offerings in the marketplace.




James Conley, Clinical Professor, Center for Research in Technology & Innovation, Kellogg School of Management, Northwestern University

J. Duncan Berry, PhD, Principal and Founder, Applied Iconology, Inc.

Laura DeWitt, Research Director, laga

Mark Dziersk, Vice President, Industrial Design, laga

A central challenge of modern design management is to create a product or service that stands out in the marketplace. This strategic view flows from the logic of a business that seeks competitive advantage through branded differentiation.

In this article, we explore how strategic differentiation intersects with the logic of brand messages. To make the design connection, we explore convergences drawn from research in neuroscience, semiotics, and intellectual property management. We introduce a brand inventions theory framework for enhancing effective design management and the dynamic co-ownership of brands by manufacturers and consumers. We examine that co-ownership in terms of value creation and meaning, and offer observations about future possibilities.

A neural basis for brand invention theory

Today's innovators in strategic brand growth explore the intersection of consumers' emotional investments and a brand's seemingly intangible visual equities in order to create an enhanced sense of meaning, a clearer perception of value, and a more refined sense of desired ownership and property. Tapping the consumer unconscious opens up new vistas for marketers who need to step outside the norm if they expect to achieve growth. Accessing a brand's "soul" requires sensitivity to consumers and especially brand lovers who are passionate advocates of a chosen brand. Embedded within their stories is a wealth of clues to uncovering the symbols and messages that define established brands. Eliciting these stories, their subthemes, and visual elements are the tactical foundations of brand invention theory.

Over the past decade, neuroscience, or the scientific study of the human nervous system, has made noticeable inroads into our daily affairs. One of its key insights is that the assumption of rationality as the exclusive basis for making choices in the marketplace is flat-out wrong.[1]

Suggested in Ernest Dichter's writings of the 1950s and '60s—and central to the insights of behavioral economics in the wake of Nobel Laureate Daniel Kahneman's pioneering work—the notion of consumer "irrationalism" has been largely regarded with disdain by mainstream economists, planners, and marketers.[2] To accept the reality of consumer irrationality implied the shortcomings of equilibrium theory and econometric thinking, and their application in quantitative consumer research.

Emotional processing underlies and supports rational processing. In fact, there can be no reasoning without a pre-existing emotional investment of some kind. Can we truly say that our last major purchase (home, auto, appliance) was driven solely by a cost-benefit analysis? The chances are high that once we settle on a budget (which again, involves an allocation of emotional energy that is shored up by a rational "alibi"), affective factors influence, if not outright determine, the final choice.

More than a decade ago, Antonio Damasio and Joseph LeDoux both penned popular books that laid out the biological reality of how our "emotional brain" colors even our most cherished rationalizations.[3] These insights are now the foundation of neuroeconomics, in which risk and reward (as they appear on the fMRI screen) are plotted like the scatter patterns of mold spores.

Neuroscience suggests that brand loyalty may indeed be irrational, but it is also logical. We are unable to inductively predict the course of future events on the basis of reports of past activity, but we can deduce with axiomatic certainty that consumer emotions combine in clear, repeatable patterns. This kind of a priori reasoning follows a different validation process than conventional, econometric modeling—more like the operations of geometry than physics, but no less rigorous. Methodically charting the semiotic declensions of specific emotional themes is the basis for a more robust model of innovative design practice and management.

The logic of business strategy

"The essence of strategy is choosing to perform activities differently than rivals do… A company can outperform rivals only if it can establish a difference that it can preserve."

—Michael Porter[4]

In the age of the fast follower enabled by sophisticated reverse engineering tools, well-designed, innovative offerings will be quickly emulated. How then can brands act strategically to protect and sustain the valuable differentiation embodied in proprietary innovations?

Intellectual property is part of the answer. But anyone can hire a lawyer to go out and file for patents, copyrights, or trademarks. It is not

1. Colin Camerer, George Lowenstein, and Drazen Prelec, "Neuroeconomics: How Neuroscience Can Inform Economics," *Journal of Economic Literature*, March 2005, pp. 9-64. For an even more recent survey of the neuroeconomic basis of this claim, see Jason Zweig, *Your Money and Your Brain* (New York: Simon & Schuster, 2007). For an engaging tour of related arguments, see Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007).

2. Cf. Ernest Dichter, *The Strategy of Desire* (New Brunswick, NJ: Transaction Publishers, 2002[1960]) and *Handbook of Consumer Motivation* (New York: McGraw-Hill, 1964), as well as Thomas Gilovich, Dale Griffin, and Daniel Kahneman (eds.), *Heuristics and Biases: The Psychology of Intuitive Judgment*, 2nd ed. (Cambridge: Cambridge University Press, 2002).

3. Cf. Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: G.P. Putnam's Sons, 1994), and Joseph LeDoux, *The Emotional Brain: The Mysterious Underpinning of Emotional Life* (New York: Simon & Schuster, 1996).

4. Michael Porter, "What Is Strategy?" *Harvard Business Review*, December 1996.

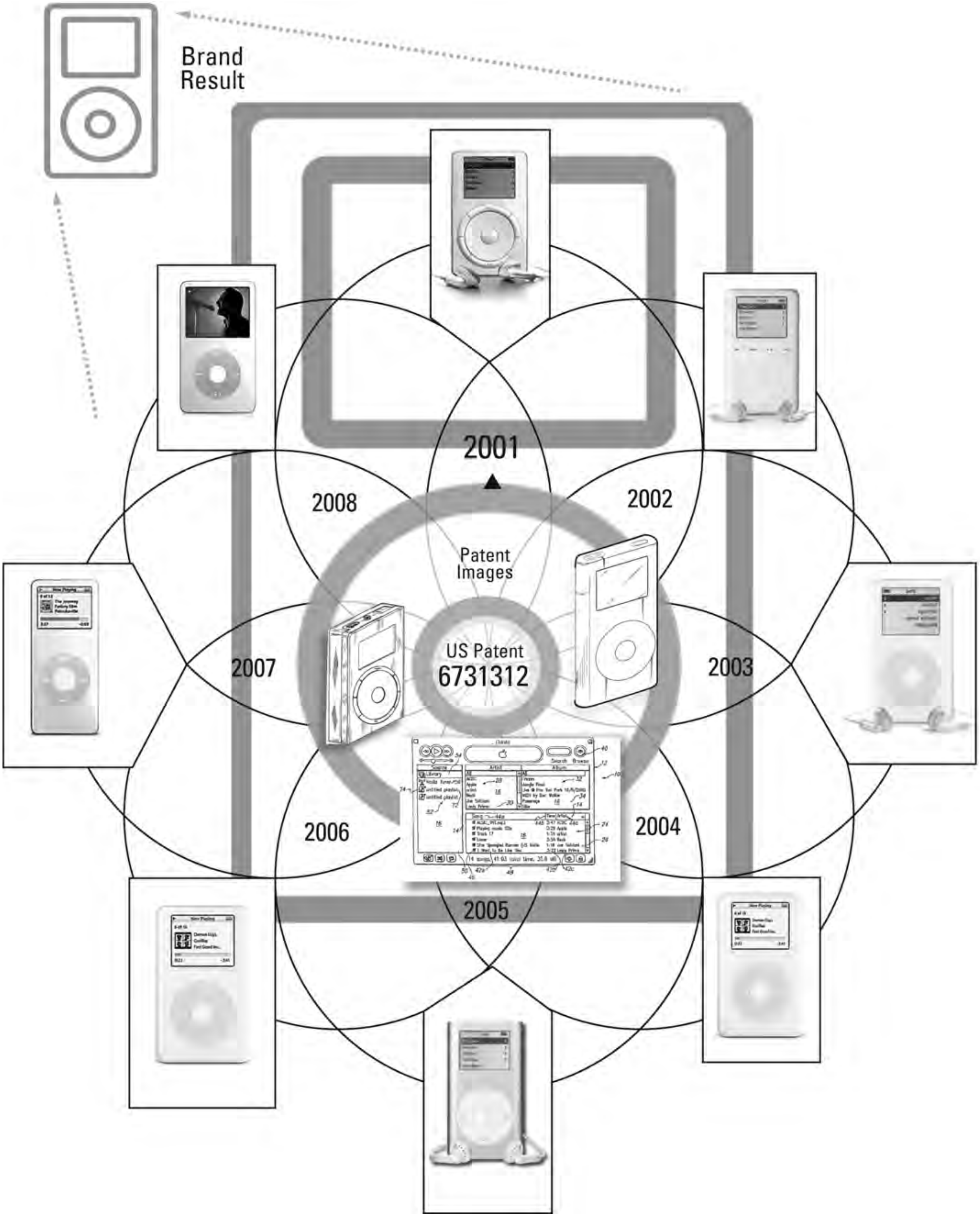


Figure 1. Although the innovation that initially differentiated the iPod from its competitors was iTunes (function protected by utility patent 6731312), this benefit was complemented by unique ornamental designs (also patented). The basic device design of a media player with a rectangular screen above two concentric circles (click wheel) became the visual equity that represented the iPod user experience and user-friendly, indexical software navigation. Each new media player of the same basic design reinforces the brand power of the design. Successive model introductions integrate with the media message of a personal music experience. Through visual consistency, a semiosphere of music experience is built around the basic design.

which form of property is chosen to preserve the difference, but rather how we pursue the properties and reconcile them with existing visual equities. That is, strategy must consider the interplay between the physical attributes of a brand (its visual equities), the legal protocols that establish proprietary uniqueness (intellectual property), and the neural correlates of brand identity among consumers (its semiotic viability).

The advantage of the intangible visual equities relative to inventions (patents) and/or original expressions (copyrights) is that they can be indefinite forms of advantage when secured by registered trademarks. That's right—trademarks never expire if they are used properly. They have the potential for being, therefore, the infinite asset.[5] Hence visual equities should form the basis of a strong, powerful brand and/or the cognitive touch-point for an enduring, unique user experience. Consider Tiffany's robin's-egg blue—the hallmark of a business that has been in operation since 1837; the uniqueness of the color is secured and sustained by a host of registered trademarks!

That's right, trademarks never expire if they are used properly.

Before we contemplate the framework of how enduring advantages are "baked" into a brand's visual equities, it is necessary to reconcile the intellectual properties in the context of why we procure (motivation). The central reason for any purchase is that one expects the offering to correct a perceived negative situation—physical, social, or emotional, or any combination thereof. Commercial transaction and exchange offers an anticipated benefit, a reward. For example, going to the movies provides entertainment, while buying lunch satisfies hunger and induces satiety.

The logic of what we decide to purchase has, in part, to do with how we regard the resolution of often emotionally saturated concerns. If the material benefit is unique and hence from a sole source, the provider of that benefit can patent the associated inventions or keep it as a trade secret. This works if properly enforced to slow down the fast followers until they properly design around the patents or until technology moves beyond the invention. It also works to create an aura of value around scarce commodities, experiences, and the multiple benefits that accrue to form enduring constellations of consumer value.

Advertising extends a brand's identity to a desired market space; visual mnemonics establish an alignment between discernible uniqueness (patent/secret) and brand (trademark). The iconic properties of advertising imagery fuse offering to meaning, thus suggesting a chain of rewards in acquiring and/or consuming the good. Brands envelop both message and meaning to signify a direct link between product and benefit. Figure 1 displays these braided strands of image, meaning, and property in the context of the Apple iPod. Note how the emotional, visual elements of the brand (®'s) surround the design and systemic solutions that were the original benefit of the iPod music experience. Design management that traverses from inside to out in the image is building a portfolio of intellectual properties that sustain the brand. Traversing from the outside in allows the emotional component of the brand to be reconciled in the property estate.

Premeditated reconciliation of the intellectual property regimes with temporal market dynamics to build and sustain competitive advantage has been the subject of a number of articles.[6] Moving the advantages of patented functional uniqueness into the enduring, subliminal advantages of trademark or brand is sometimes called value transference. This methodology, if practiced appropriately, can sustain and help to articulate the competitive advantages of one product generation into new successive offerings (value translation) or new markets for future offerings (value transportation).

To explore how the visual equities can be the

5. Sam Hill and Chris Lederer, *The Infinite Asset: Managing Brands to Build New Value* (Boston: Harvard Business School Press, 2001).

6. Cf. James Conley, "The Competitive Edge: Using Brand Identity to Reinforce Market Value," *Innovation Journal of IDSA*, December 2005: http://www.idsa.org/webmodules/articles/articlefiles/Conley_winter05.pdf; Gideon Parmacjhovsky and Michael Siegelman, "Toward an Integrated Theory of Intellectual Property," *Virginia Law Review*, 2002; James Conley and John Szobscan, "Snow White Shows the Way," *Managing Intellectual Property*, June 2001.

agents of value transference, we need to introduce semiotics as described by neuroscience.

Brands and semiotics

Semiotics, from the Greek word for sign, is the study of signs and sign systems. Its modern history commenced about a century ago in the thinking of Ferdinand de Saussure (1857-1913), a Swiss linguist, and Charles Sanders Peirce (1839-1914), an American scientist and logician.[7]

Semiotics has emerged from its cloistered existence in the academy as a choice methodology to treat products of popular culture (advertisements and movies) with the same rigor that is applied to objects of high culture (such as frescoes, poems, buildings, and symphonies).

Semiotics, from the Greek word for sign, is the study of signs and sign systems.

As the definition of a brand has evolved into a three-part entity that exists as an embodied signifier, an associated performance, and a constellation of meanings in the mind of the consumer connecting the signifier to the performance, marketers have come to realize that semiotics presents a potent, straightforward and practical method of working this triadic relationship. Returning to their Peircean roots in logic, semioticians can furnish disciplined and valuable insights into the nature of brand equities that lead to strategic cues for evolving the meaning, relevance, and position that brands can ultimately play in the lives of consumers.

Brand Invention Theory (BIT), the understanding of how symbolic entities, such as brands, assume form, acquire value, grow, mutate, and live in "semiospheres" of evolving meanings, can create immediate advantages for marketers, including:

- Precise anatomical knowledge of the meaning mechanisms of house and competitive brands, from concept to messaging to shelf pack design
- Brand and consumer insight based on the internal logic of the discourse at shelf—literally, a graded map of the embedded messages in the consumer space
- Strategic insight into the "white spaces" opportunities and logical "meaning gaps" in the marketplace
- Semiotically conceived, visual design briefs driven by message content (as opposed to intuitive platforms), with clear performance criteria
- High-altitude brand counter-design strategy

Semiotic instruments offer a robust hedge against the distraction of information overload. For designers, it presents a conceptual crowbar that separates form from content, summoning a clear rationale to remove or redesign visual equities in order to restore distinctiveness.

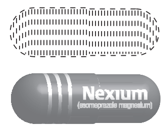
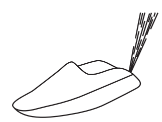
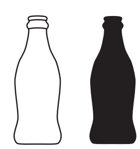
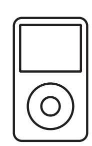
The notion of allowing content to drive design provides strategic desiderata to clarify design briefs and establish explicit standards for design performance. Knowing that reducing a package's word count enhances emotional connection, for instance, offers a neuroscientifically validated, semiotically rigorous basis for crafting robust formulae for innovative high-stakes visual communications platforms.

Design strategy that clarifies these logical relationships offers competitive advantages. This is especially true when brand navigates the aforementioned intellectual property regimes to enliven functional inventions (patent) or original expressions (copyrights) and leverages associated market advantages into the brand semiosphere (trademarks). BIT proposes seeing these discrete components as part of an additive chain uniting marketers, IP specialists, and designers.

The framework is a conceptually supple procedure that unites the often idiosyncratic qualities of successful offerings. Under BIT, these offerings are arrayed in a matrix marketers conventionally regard as prioritized from left to right (see table at right).

With BIT, however, marketers can reconsider conventional wisdom and instead proceed from right to left across the matrix. To do so, all

7. For a reasonably comprehensive overview in one volume, see Winfried Nöth, *Handbook of Semiotics* (Bloomington, IN: Indiana University Press, 1995).

	CONVENTIONAL APPROACH		BRAND VISUAL EQUITY	PROPOSED APPROACH	
PRODUCT	PATENT	TRADEMARK		SEMIOSIS	EMOTION
Pharmaceutical preparations for GERD and heartburn, ppi	US Patent 4255431 on omeprazole WO patent 94/27988 on esomeprazole	® on color purple on pill and containers there-of ® on Prilosec, Nexium		Purple as symbolics of dependable magic	Distress resolution, fear reduction
Artificial, low calorie sweeteners	US Patent 3475403 and others	®'s on swirl and Nutrasweet		Peppermint candy and hypnotic wheel	Low-grade enjoyment
Family friendly entertainment	US Patent 2,201,689 and others	Disney's 2000+ TM's and ®'s		Character as personality icon for theme identity	Middle-intensity enjoyment, interest
Personal watercraft	US Patents 5511505 on personal watercraft	®'s on Yamaha Waverunner name and dynamic spray of rooster tail		Roostertail as index of speed (and, thus, fun)	Surprise, fear, high joy
Herbicide & seeds	US Patent 4405356 on glyphosate Patents on GMO high yield seeds	®'s "Round-up" ®'s "Round-up ready" corn	Roundup ORIGINAL HERBICIDE	Protection from without; concentric growth from within	Anger removal, fear reduction
Soft drinks	Trade secret on formula	®'s on shapes and silhouettes of the bottle		Victorian feminine figure; indexically unique	Distress reduction, anger avoidance, enjoyment
Digital music	Patent 6731312 on iTunes and US Patent D548746 of iPod	®'s shape of the iPod, iTunes, iPod, iPhone		Indexical software navigation	Enjoyment, excitment
CE sound enhancement	US Patents 4490691 on A, B,and C type NR	®'s on Dolby and DD		Stereophony, letter, and protected ears	Enjoyment, distress/anger reduction

Brand Invention Theory (BIT): A Framework. Conventional value transference driven by manufacturers proceeds from function (patent) to brand (trademark). With the BIT framework, marketers can also proceed from emotion to brand with the help of semiotics. Hence the producer meets the customer at the nexus: brand equities. Converging on the brand equity simultaneously builds brand resonance.

brand communications must start with a consistent, coherent message about the nature of the desired emotional benefit. Second, offerings that address these motivations need to communicate effectively on a purely optical, pre-verbal level. Third, visual elements that embody or depict resonant emotional formulas must have direct and demonstrable visual continuities with the existing brand identity. And fourth, future evolutionary options (brand or line extensions) should vector from the three core propositions by extending these visual equities in logical, incremental phases toward new, well-defined, emotionally resonant strategies. In this right-to-left framework, consumer motivation and consumer perception is privileged and benefits drive the shaping of offerings. It is a deeply considered rationale for pull, or demand, marketing.

Consumers *deconstruct the brand's visual elements into stimulus sets to tell the brand story from their point of view.*

Market research to the rescue

Because the consumer stands at the center of the brand universe and ultimately shapes the brand's deployment, visual language research can access and explore brand triggers.

In our methodology, a stock of visual stimuli is created to facilitate the rendering of brand aspirations and meanings prior to consumer interaction. In carefully moderated qualitative sessions, consumers are then guided through the process of sharing their experiences of the brand's meaning. Consumers deconstruct the brand's visual elements into stimulus sets to tell the brand story from their point of view. These sets establish a visual basis for creative elaboration. The outcome is a rich landscape of visual storyboards that reveal the semiotic nuances of the brand and track back to consumer emotion.

This process uncovers the elasticity of a brand's potential meanings and imagery by systematically eliciting responses that articulate more clearly and more effectively at shelf than the interpretation of verbal self-reports. This visual language process validates a given semiotic hypothesis concerning operative and precognitive responses to unique brand signifiers.

The body of evidence

Our framework is informed by multiple examples given in the table on page 63. In applying the framework, the context of the marketplace is decisive.

We begin with pharmaceuticals. In the late 1980s, a new compound known as omeprazole was introduced to the prescription drug marketplace by what is now AstraZeneca (AZ) to combat the symptoms of gastro-esophageal reflux disease (GERD). Known as a proton pump inhibitor (ppi), omeprazole was a dramatic improvement over earlier treatments (antacids) because it inhibited excess acid production in the digestive system and thus mitigated the need for antacids. The functional advantage of the molecule was patented through 2001. The compound known as Prilosec was secured by a wordmark.

When the FDA rules for direct-to-consumer advertising were relaxed, the brand focus of the AZ campaign switched to "the purple pill." The media messages in the advertising built an equivalence between the functional advantages of Prilosec and the purple color of the pill. Note from the table that the pill's color is meant to denote the dependable "magic" of its unique utility and to promote the emotion of relief from GERD.

By 2001, Prilosec was a blockbuster worth $6.2 billion a year. With patent expiry and cost base competition from generics imminent, AZ introduced a similar, slightly improved ppi compound, branded as Nexium and advertised as "today's purple pill." The visual equity in the color purple thus served as the agent of identity that moved Prilosec's brand-loyal population over to Nexium. Prilosec as a branded prescription medication was phased out.

Eight months after the generics started to cost-compete with omeprazole, AZ managed to take the Prilosec brand over the counter, selling the nonpurple version in a distinctly purple box and pricing Prilosec OTC at a fraction of the cost of the generics. By extending the Prilosec name and the purple visual equity into the OTC category, AZ tapped into the huge, growing population of uninsured GERD patients. As such, they leveraged the visual equity at both ends of the market. Through 2006, AZ maintained the sales volume of $6.6 billion in the ppi category—five years after the patent expired. The unique visual equity, strategically marketed, expanded the AZ GERD franchise in the face of cost-based competition.

A similar phenomenon has been at play in the family entertainment business. The innocence of youth is captured in Disney's original animation of the princess Snow White. All Disney venues go to great lengths to marshal the symbolic power of creative animation to suggest the simple, honest, and direct human virtues that even children can grasp and share. Honesty, fantasy, curiosity, and innocence are semiotic themes carried from the drawing board and computer screen of character animators to the design of theme zones, restaurants, hotels, and conference centers.

The image of Show White for example, originally secured by a patent on the animation method and a copyright on the film, has been trademarked, and hence its value has been transferred. The transference is facilitated by Disney's persistent, consistent media messaging. Thus secured, the family-friendly visual equity and all that subsequently accrues to it will be the property of Disney indefinitely. The revenue stream is secured by the premeditated character registration as a trademark (more than 2,000 at last count in the US alone). Indeed, Mickey Mouse, Winnie the Pooh, Nemo, and their colleagues will never be free… securing the revenue stream for future generations of Disney stockholders. Disney as it exists today is the epitome of brand-based business strategy in the entertainment category.

Disney as it exists today is the epitome of brand-based business strategy in the entertainment category.

Similar logic is at work in the sweetener and crop seed categories. As described in Daniel Charles's *Lords of the Harvest*,[8] Robert Shapiro is the architect of "food ingredient branding." His path up the learning curve started with aspartame, a patented low-calorie sweetener developed by Searle that displaced the once-maligned saccharin. Shapiro used favorable contractual terms to encourage customers to place the well-recognized Nutrasweet® red swirl on their packaging to denote the presence of the low-calorie sweetener. The swirl—at once suggesting a peppermint hard candy and a hypnotist's wheel—makes an immediate affective connection. The association to an iconic candy form, as well as to the strictly neural reward of the desired sweet hit, elegantly compresses the emotional function in one tidy, circular formula. The Searle advertising messages reinforced the equivalence between the novel compound and the Nutrasweet mark denoted by the red swirl and, thus, value transference in the food category was born.

Shapiro managed the same transference when he became the CEO of Monsanto in 1995. There, a wondrous, functionally unique herbicide known as glyphosate was dominating the marketplace in the early 1990s. Monsanto's glyphosate was branded as Roundup® and given a unique visual equity (see the table on page 63) that hinted at its "inside out" style of weed control.

Growth, in Shapiro's mind, was not to be found in herbicides but rather in the economically complimentary category of crop seed. With a rapidly expanding global population and a quest for alternative fuels, it was only a matter of time before higher-yield crops became the difference that makes the difference to the farmer. Hence Shapiro began to strategically procure foundation seed companies in the US during the second half of the 1990s. In parallel, he used biotechnology to create novel crops that would thrive in the presence of Roundup. Seeds for these crops carried a brand that extended the visual equity of the powerful herbicide (see table) as "Roundup-ready®" corn, soybeans, oilseeds, and cotton, among others.

Ten years later, Monsanto reappears as a transformed company dominating the agricultural marketplace, with 80 percent of its revenues coming from seeds. Shapiro's strategy leveraged the visual equity and semiotic signifi-

8. Daniel Charles, *Lords of the Harvest: Biotech, Big Money and the Future of Food* (New York: Perseus Books Group, 2002).

cance of the patented herbicide into an entirely new business with dramatic success.[9]

Looking more closely at the table, we can see differentiated products and services from multiple market contexts (personal watercraft, sound enhancement, carbonated beverages, music) whose competitive advantage is sustained by a semiotically anchored visual equity. Design activity as espoused through value transference and other mechanisms traditionally moves from left to right.

BIT suggests that the spark of innovative brand creation could also proceed from the revealed emotional insights of what actually animates consumers' engagements with a given category, product, or brand. This could be the leading consideration in driving changes through the innovation process. As we have indicated in the exhibit and table, we suggest driving meaningful change from right to left, allowing affect and imagery to shape a firm's offerings and intellectual property pursuits. Using such constructs calibrates the intellectual property of an offering to the semiotic logic of a brand, with visual equities defining the nexus.

Under brand invention theory, brand power is realized by integrating neuroscience and semiotics with consumer insights and intellectual property.

9. Brian Hindo, "Monsanto: Winning the Ground War," *BusinessWeek*, December 6, 2007.

Summary

In this work, we have attempted to reconcile the logic of strategy, intellectual property, brands, and semiotics to inform design management. We presented a framework that finds visual equities at the intersection of strategy and brand meaning.

In our examples, functionally novel aspects of the products or experiences provide the difference that establishes difference in the consumer's mind. Branding and semiotic significance evolve out of functional considerations, essentially moving from left to right in our table of examples. This difference can be based on actual or perceived benefits. The benefits themselves may be utilitarian or emotional. Either way, the visual equities of the brand carry the messages about the differentiation and/or benefits that drive purchase behavior.

BIT suggests the opposite approach, in a methodology that does the reverse—that is, identify and isolate the emotional engagement that one seeks to elicit, then proceed from right to left across the table to determine which function, novel or generic, to exploit. ■

Reprint #08192CON58

About the authors

James Conley is a clinical professor in the Center for Research in Technology and Innovation at the Kellogg School of Management, Northwestern University. His research and teaching focuses on the subjects of innovation strategy and intellectual property management. Beyond Kellogg, he serves as a visiting faculty member at the WHU in Germany, the Schulich School of York University in Canada, and other Kellogg partner institutions. His academic interests are informed by a professional practice of developing, patenting, and licensing technologies to multinational firms across the globe. His research and teaching materials are distributed through the United Nations World Intellectual Property organization in Geneva and HBS Publishing.

J. Duncan Berry, PhD is principal and founder of Applied Iconology, Inc. Berry works with global brands to develop resonant emotional strategies that are brought to life visually with a unique form of commercial semiotic analysis. These strategies can be employed to connect more effectively with customers and consumers, whether through enhanced package design, advertising, or mobile messaging. An engaging speaker, Berry also maintains an international reputation as an art historian, publishing and lecturing widely in the United States and Europe. He lives on Cape Cod with his daughter and can be reached at jdb_at_applied-iconology.com.

Laura DeWitt is research director at laga, a research and innovation design firm located in Chicago, Cincinnati, and New York. She brings more than 20 years of research experience to laga, having worked with clients including Kraft Foods, The Quaker Oats Company, UNext.com/Cardean University, and Leo Burnett. In addition to her experience on the client side of the business, DeWitt spent more than half her career as a moderator and research director managing global research efforts with the Maya Group and laga.

DeWitt received her Bachelor of Arts degree in Communications from Simmons College in Boston, completing part of her studies at the University of London. Over her career, she has completed extensive training in moderating skills/analysis and has received her Master Moderator Certificate from the RIVA Training Institute in Bethesda, Maryland. DeWitt has been actively moderating in the US and Canada and overseeing international work for her clients for more than 10 years. She is also a CPSI trained facilitator/teacher. She counts running, knitting, and world travel among her favorite hobbies, but above all, enjoys the company of her friends and family—especially her two spirited daughters, Caleigh and Olivia.

Mark Dziersk recently joined the laga design firm as vice president for industrial design. Dziersk is a Fellow of the Industrial Designers Society of America, of which he is a 20-year member and has held several leadership positions, including president of the organization. He has also served in various council and board positions for the Association of Professional Design Firms.

Throughout his career, Dziersk has earned more than 100 US product design and engineering patents and garnered numerous awards, among them the Industrial Design Excellence Award, *ID* magazine's Annual Design Review Design Distinction, and the Appliance Manufacturer's Excellence in Design. Dziersk is a frequent commentator on design trends, innovation, and the strategic value of design in the national media and has served as a lecturer at events, conferences, and universities worldwide. Currently, he is an adjunct professor for the Master of Product Development Program at Northwestern University in Evanston, Illinois, and was a founding member of the Design Council of the School of the Art Institute of Chicago.

Center for Research in
Technology & Innovation
at the Kellogg School of Management

Kristen M. DaRosa
Communications Manager
Phone: (847) 924-2630
Fax: (847) 467-5505
Email: k-darosa@kellogg.northwestern.edu
Website: www.kellogg.northwestern.edu/research/tech