Integrated package design: an interdisciplinary approach to package design that benefits consumer experience and brand perception

Todd Timney and Peter Chamberlain

University of Cincinnati, USA

ABSTRACT

It is perplexing that Package Design has traditionally been taught as a course isolated in either Graphic or Industrial Design programs. To develop a truly unified brand narrative, package design necessitates an interdisciplinary, human-centered, and collaborative approach, which expands on the knowledge of each discipline and reaches into other areas of expertise. Communicating a brand message extends beyond the information and visual content applied to a package. The package’s physical structure, materials, finishes, and interactions can also strongly influence the consumer’s experience and subsequent perception of the brand. As a result, the effective communication of a brand’s message requires a symbiotic relationship between the languages of two- and three-dimensional form. This paper presents case studies of successful integrated package design projects produced through an interdisciplinary studio course with 30 undergraduate design students from Graphic Communication Design and Industrial Design. The experience challenged students and professors to negotiate the intersection between disciplines while clarifying their own areas of expertise. Industrial Design students applied their knowhow of materiality and form development using digital 3D software to support the structural packaging dimension of the studio, while Graphic Communication Design students shared their informed perspective on brand messaging and 2-dimensional communication. This paper reflects on innovative new methods employed in the studio, the lessons learned, and the impact on future interdisciplinary collaborations in Package Design.

KEYWORDS

Interdisciplinary; design education; consumer experience; branding; packaging

1. Introduction

Successful package design leverages the whole pack—applied graphics and structural form—to effectively communicate a brand’s core values. Despite this, package design has traditionally been taught as a course isolated in either Graphic or Industrial Design programs. This segregated approach typically produces two types of results: 1.) An advanced use of materials and explorations of structural form with an unrefined sensitivity to applied type, image, and information hierarchy, from Industrial Design-centric courses; 2.) Cardboard structural forms typically derived from templates, with a strong understanding of two-dimensional compositional space, visual communication, and printing technologies from Graphic Design-centric courses. Until 2013, this too was the approach to package design at the University of Cincinnati’s College of Design, Architecture, Art, and Planning (DAAP). Two separate courses, each with the same core philosophy and approach, were taught in different disciplines. A fateful and unexpected conversation between the two faculty members responsible for teaching these respective courses, Peter Chamberlain (Associate Professor, Industrial Design) and Todd Timney (Assistant Professor, Graphic Communication Design) uncovered this redundancy and became the catalyst for the planning of a new, innovative approach to package design based on interdisciplinary collaboration.

Two significant logistical obstacles—course schedule alignment and course administration—were overcome with the introduction of a progressive revision to the School of Design’s curriculum. In the fall of 2012, a curriculum overhaul resulted in the introduction of several experimental studio courses dedicated to the concept of interdisciplinary collaboration. Running simultaneously, these courses were opened to Year 4, junior-level (DAAP is a five-year program as a result of a robust cooperative education component to its curriculum) across the three disciplines in the School of Design: Graphic Communication Design, Industrial Design, and Fashion Design.

An interdisciplinary, collaborative approach to package design for Graphic Communication Design and
Industrial Design students, co-taught by professors from each respective discipline was a natural fit for this new opportunity. Issues such as form & communication, branding, interaction, and sustainability engage the two groups alike, leading to important considerations for the appropriate use of type and image, color and finish, 3-dimensional form, semantic interaction cues, and materiality. Each discipline brought with it the particular expertise of the major, as well as an interest to learn more about a holistic, integrated and symbiotic approach to the topic.

This paper presents case studies of integrated package design projects resulting from a recently concluded studio course (Fall 2014) involving students, from Graphic Communication Design and Industrial Design, and several International Exchange students at the University of Cincinnati’s College of Design, Architecture, Art, and Planning. The course challenged students and professors alike to negotiate the intersection between disciplines while clarifying their own areas of expertise.

2. Understanding the evolution of branding: more than a mark

From the ranch-owners and cattlemen in the Wild West to the producer of consumer goods, branding has always been—at the most basic level—about asserting ownership. To the cattlemen, a “brand” was simply a mark, communicating a clear message to others which stated, ‘hands off, this is mine.’ Today, a brand is so much more than just a mark. It has grown to include additional tangible design elements—a name, symbol, typography, image or some combination, which still serve to facilitate identification. However, it’s meaning has also expanded to include the “intangible values” associated with a product, service, or company. When enough arrive at the same gut feeling, the company can be said to have a brand” [6]. To think about a brand not as a name or logo or graphic mark, but rather as a set of ‘intangible values’, is to start to think about branding in a more sophisticated and powerful way. Marketing professors and researchers, Van Rompay, Pruyn, and Tiecke consider this holistic and seamless product congruence as having a positive affect on consumers, likely helping them to arrive upon positive impressions [10].

Successful brand builders understand and embrace this evolution in meaning. They understand that to build a sustainable, long-term relationship with consumers these values must be defined, communicated, and managed across a network of touch points (Figure 1), and with multiple stakeholders who are invested in the brand, and influential in the packaging design process. According to Gavin Ambrose and Paul Harris in Packaging the Brand, “Packaging is often the first point of contact that a consumer has with a brand, so it is hugely important that it initially draws their attention and also quickly conveys messages that both present and support the brand” [1].

In the beginning of a brand’s life—while the organization is still asserting ownership of it—brand strategists, designers, and members of the organization’s leadership team collectively define what values they desire consumers to associate with their product, service, or company. But there comes a point in a brand’s life when ownership is subtly transferred to the consumer. According to Paul Southgate, “Beyond this point, perception becomes reality. The brand’s values are no more and no less than what the consumer believes them to be” [8].

3. Defining the relationship between the brand and package design

Frequently, the package is the first point of contact that a consumer has with a brand. Therefore, it is incredibly important that it actively works to both quickly capture their attention and communicate the values that support the brand. Despite the proliferation of data that demonstrates how a strong brand benefits a company’s bottom line, many still view a brand like the cattle ranchers, as simply a name, logo, or mark, which can be slapped on anything to denote ownership. Surprisingly, many companies still do not consciously and deliberately use packaging design to encapsulate and communicate their brand’s set of values. Instead, they take a passive approach, focusing first and foremost on the functional necessities of the container (product protection, raw material conversion costs, filling efficiency, distribution, etc.) while patiently (and frequently fatally) waiting for the package to absorb values from a plethora of other communication channels such as advertising.

In this scenario, any package design could sufficiently do the job. Over time, it would take on those extrinsically generated meanings even if they were far removed from anything inherent in the design of the package itself. Unfortunately, time is rarely a luxury in the retail world as manufacturers feverishly compete for shelf space. So why not design the pack to work actively for the brand to communicate the very values which it is intended to symbolize rather than serve as a passive receptacle for them?

4. The integrated package design philosophy

For too many, packaging is still viewed simply as a container to hold a product with a surface upon which to use text, images, and other communication devices to articulate the attributes and benefits of a product to customers. This oversight diminishes the potential for the whole package to work actively towards presenting and supporting the brand’s narrative while establishing a strong, emotional relevance. Branko Lukic, cofounder of Palo Alto based product and brand design firm Nonobject summarizes the importance of this last point, “Beyond satisfying functional needs, at the end of the day, no matter what we tell ourselves, emotions determine what resonates with us.” Despite the immense opportunity afforded by a holistic view to package design, industry and academia all too frequently reinforce brand fragmentation through the isolated development of the package’s structural design and graphic design.

Two notable industry exceptions are Chicago-based Kaleidoscope (thinkkaleidoscope.com) and Cincinnati-based Haney (haneyprc.com) whose capabilities include Brand Strategy, Industrial & Engineering Design, Brand & Package Design, and Prototyping/Mock-up—all housed in a single location—to create, “a streamlined, informed path to market based on critical disciplines working collaboratively toward the feasible, from initial concepts to on shelf and at every stage in between.”
An integrated approach is about using design to communicate not just product features, but brand values and personality as well. It’s about moving beyond just the applied visual content and using every aspect of a brand’s package (three dimensional form, structure, materials, textures, color, type, image, interactions) to create a memorable and distinct identity that deliberately and actively establishes, communicates, and reinforces its set of ‘intangible values.’ It is about setting forth an empathetic connection with both a consumer’s mind and heart to deliver a culturally sensitive, user-friendly, and complete sensorial experience (Figure 2). An integrated approach to packaging design engages the consumer’s sense of touch as well as the senses of sight. As Gavin Ambrose states in *Packaging the Brand*, “The physical materials used for packaging products also importantly contribute to the overall brand narrative. A brand cannot be positioned, as a high quality or luxury product if its packaging is fragile and low quality. There has to be a direct correlation between the packaging’s physical attributes and the messages that the brand seeks to project.”

Businesses are frequently reluctant to invest in structural package innovation considering its reputation for being expensive, extraneous, and ephemeral. Given the potential rewards, and without ignoring the traditional structural packaging considerations of cost, product protection, and filling efficiency, it’s imperative to also consider the value afforded by different shapes, materials, and textures in terms of what they communicate — on a multiplicity of levels — about the brand. In the future, the most successful brand owners will be the ones who think holistically about packaging as the embodiment of their brand’s identity.

Leveraging the expertise of two disciplines, Graphic Design and Industrial Design, an integrated approach to branded package design seeks to explore the symbiotic relationship between two distinct parts: its physical form and its applied graphic elements. The form concerns its structure, materials, and ergonomics, while the applied graphic elements serve to inform, explain, entice and persuade. This “integrated capability” works to tell a unified brand story and deliver a desirable user-experience to the target consumer (Figure 3a).

5. The studio course approach to integrated package design

The Integrated Package Design studio course has served for the past three years as an experiment to investigate the potential benefits of interdisciplinary collaboration amongst students and professors across a shared area of interest and need. Inspired by the professional business models of Kaleidoscope and Haney, this studio course has functioned as a laboratory for a small-scale mimicry of their holistic, interdisciplinary, and collaborative approach to branded package design. As such, it has sought to maximize students’ exposure to new ways of thinking and working which combines the unique knowledge, perspective, and capabilities of Industrial Designers and Graphic Designers, while also uncovering new areas for growth and collaboration outside of these design disciplines.

Divided across two class periods, the studio course met for six hours each week for a total of 15 weeks. Approximately 30 total students, with an even mix of Graphic Communication Design and Industrial Design, formed seven interdisciplinary teams. Several International Exchange students were also enrolled in the course.
providing an unexpected, but welcomed richness to class discussions in regards to “cultural appropriateness” by not only sharing details of how people interact with packaging in their home countries, but in fostering a sense of cultural empathy among the American students who had not yet realized that they had been considering only an American market that was comfortably familiar to them.

During the students’ first exercise “field assessment”, they were asked to “observe, immerse, and discover” in order to develop an awareness of the various market sectors and their corresponding conventions. Within market sectors, there are sector cues that a designer needs to become familiar with, that define or suggest where the parameters of audience expectations lie in relation to a particular product category. These cues are made up of conventions and shared visual language that have become established about a given product over time, and their presence partly explains why packaging for products within any one sector often look familiar. The existence and power of sector cues frequently results in shared aesthetics being adopted within the same product categories, which then become common visual currency for the presentation of competing products within the marketplace. Therefore, innovative packaging design often has to strike a balance between fitting in and standing out from the generally accepted norms and cues present in a given product sector. For many students, this introduction to established visual cues within market sectors and the corresponding influence it has on a consumer’s perception of a product category is enlightening. The strategic objective to differentiate—the brand and/or the package’s structure was now confronted with potential constraints! Too much disruption at the point-of-purchase could result in a negative consumer experience. Despite what may be initially perceived as a limitation on their creativity, students were instructed that they should not be restricted by these cues, but should be aware of them in order to have a deeper understanding of consumer behavior.

The second course exercise introduced student teams to a novel method for better understanding shortcomings in, and benchmarking the relative success of, user perception and interaction with packaging structures. Unboxing II (UBII) places the designer in the seat of the consumer, as they “unbox” a product while video records their play-by-play reporting of the experience [4]. The designers then watch the video and score the experience in a matrix of variables to illuminate relative areas of success and needed improvement. Symbols are deliberately used to stress that the exercise is meant to function as a qualitative tool for clarity, rather than a specific and prescribed quantitative tool. Across the three variables of 3D form, Graphics/Text, and Materials, are the columns of: Affordance—provision of an understandable and usable interface; Function—performance of 2D and 3D components which make the packaging “work” to achieve its necessary role in protecting, containing, dispensing, theft protection, etc.; Extended Function—any secondary use of the packaging which either supports the product experience, or which can provide additional value to the user in some other way; Communication—whether or not key brand and usage information is communicated effectively to the consumer; Brand Messaging—overall cohesiveness of brand look, feel, and identity across the experience (Figure 3b).

UBII builds off of YouTube phenomenon, which places packaging in the leading role. Since 2010, the number of YouTube clips with “unboxing” in the headline has increased 871%. Last year alone, 2,370 days, or 6.5 years, worth of unboxing footage was uploaded to the site. To package designers this phenomenon is extremely interesting as it introduces a need to consider an all new phase in the life cycle of a package. For many, the useful life of a package comes to an end when the goods have left the store, and the structure has met its objectives of on-shelf engagement and protecting the product. However, for the savvy package designer these videos demonstrate an interest in what comes next—the out-of-box experience of removing the product from it’s container. A well-choreographed experience can increase the perceived value of a product and brand. “Good packaging design sets the expectations about a product,” says Brett Wickens, partner at Ammunition, the San Francisco firm who was recently listed as #1 on Fast Company’s list of “The World’s Top 10 Most Innovative Companies of 2015 in Design. “We’ve always really studied the out-of-box experience and made sure it was a very well-understood process from a user’s point of view.”

Informed by the outcomes of field assessment and unboxing exercises, each team proposed three, and settled on one opportunity for the course’s core project. The project’s objective was to “create a distinctly new packaging solution which may take one of two approaches: 1) A meaningful repositioning of an existing brand, or 2) The establishment of a new brand (with a corresponding strategy and identity). The results should be a symbiotic expression of the brand which leverages the vast potential of both two- and three-dimensional form to effectively communicate on a rational and emotional level with target consumers.” Proposals were instructed to consider the basic objectives of structural package design and brand strategy while also addressing any specific design problems, which may have been uncovered during their preliminary research. Preliminary research methods included: Environmental Observations, Artifact and Brand Analysis, Competitive Benchmarking,
SWOT Analysis, Unboxing II, Perceptual Mapping, and Persona Modeling.

The findings of these methods were summarized in the form of a Project Brief that outlined meaningful consumer insights, brand positioning, a statement of design opportunities (goals) and criteria (objectives) to be used to evaluate the relative success of prototypes and the final proposed solutions.

Project development was supported by a group of local industry professionals in the areas of branding and identity design, package design and engineering, material supply and manufacturing. Industry professionals participated in midterm presentations—which focused on strategy and concept development—and final presentations. Overall, the course was structured to maximize students’ exposure to new ways of thinking in all phases of a user-centered design process.

Project evaluation was equally weighted on Process and Results. This approach has proven to increase student’s investment in and appreciation for the design process. In addition, it also creates a “more even playing field,” where those who work hard and demonstrate a sustained commitment to process but may not arrive at optimal results may meet the same level of achievement as those who produce exemplary results with little effort or rigor. Participation was also an important factor in each individual student’s final course grade. Participation was evaluated through instructor observations and formal peer reviews which were collected during weeks 5, 10, and 15. The strategic inclusion of peer review evaluations during early, mid, and end points of the course provided valuable insights into team dynamics.

6. Case studies

The work of two interdisciplinary teams is highlighted in the case studies. Each team was composed of four members, two Industrial Design students and two Graphic Design students. Teams were tasked with summarizing their initial research into succinct project strategies and generating a minimum of three preliminary concepts for the mid-term review. Based on feedback from packaging industry professionals, faculty, and representatives of the target audience, teams synthesized their explorations and narrowed them down to one for additional development and refinement.

6.1. Example 1: Starbucks Pronto [Colleen Butler (GD), McKenzie Finchum (GD), Robin Lee Held (ID: Int’l Ex), Emily Nimrick (ID)]

Ethnographic observation methods uncovered a new opportunity to move the powerhouse brand into a new market. Through repeated visits to several local Starbucks, (beginning with observation sessions and evolving to interviews with patrons and employees) this team discovered an increase in the number of coffee drinkers who were asking for specific, customized coffee flavors. These flavors were dispensed in the form of syrups by baristas from large containers residing behind the coffee counter to alter the taste of the patron’s hot coffee. Already familiar with Starbucks’ foray into the “on-the-go” market through its Via instant coffee packs, the team identified an opportunity to develop a new product sub-brand which could provide Starbucks’ customers with a convenient “on-the-go” beverage supplement/enhancement experience. The name “Pronto” aligned seamlessly with “Via” and the product descriptor “flavor shots” provided an appropriate edge to the youth-driven, beverage supplement market.

Foundational research led to the development of focused persona models where customer “wants” and “needs” were highlighted. These included, “a strong alignment with the Starbucks parent brand”, “convenient for an on-the-go lifestyle”, and “one-handed operation.” Qualitative research revealed that a “strong alignment with the Starbucks parent brand” meant an unobstructed visual connection to the primary brand mark and a continuation of its brand values: Quality, Premium,
Simplicity, Innovation. In addition to gaining an understanding of the target consumer, the team sought more information on the competitive landscape for beverage flavor supplements. Competitive Benchmarking revealed the relative strengths, and weaknesses of parallel and tangential markets while also revealing new opportunities to improve the customer experience through design. These opportunities were synthesized into focused design objectives that served as the catalyst for the ideation phase where new brand images and packaging structures were explored. Rather than taking the “divide and conquer” approach that capitalizes on individual strengths, team members were encouraged to remain in constant dialogue and contribute across areas traditionally considered discipline specific. Graphic Designer’s participated in brainstorming sessions and contributed (rough) sketches on possible structural forms. Industrial Designer’s contributed to brand identity discussions and the development of compositions using type and image (Figure 4). Simple sketches evolved into more detailed, developmental renderings. Stronger concepts were translated into new packaging forms, first through rough and quick “dirty models,” sculpted by hand from pink foam, clay and/or found materials. These models contributed to informative discussions about ergonomics and the definition of appropriate amounts of space for graphic applications. Rough models were later rendered digitally using 3D modeling software.

Simultaneously, team members were generating elements towards the definition of a new visual language which would communicate the appropriate “look and feel” desired by the Pronto sub brand (mobile, artistic, contemporary, interpretive abstraction). Additional considerations included category appropriateness, functional messaging, and the need to leverage the equity established by the Starbucks parent brand’s primary identifier. Two dimensional brand expressions were integrated with three-dimensional forms to assess the overall brand communication.

One advantage teams discovered with an integrated approach to package design was the ability to constantly evaluate the relationship between graphic applications and structural forms. As ideas are generated, they can be efficiently integrated with other elements that contribute to the brand narrative. Major or minor adjustments are easily made leading to a more symbiotic relationship between languages of two- and three-dimensional form.

The team’s final proposal promptly establishes a strong association with Starbuck’s through a clear association with the “siren” brand mark while also introducing a new word mark for the Pronto sub brand based on bespoke hand painted signage, a nostalgic reference to lettering commonly found in environments also associated with product additives, and specifically syrups, like ice cream stands. This was contrasted with an abstract, geometric triangular pattern whose downward movement alludes to the product’s flow while in use. Distinct color ways were developed to distinguish between various flavors. The structure stores comfortably in a purse or pack, melds seamlessly with the human hand, and contains an easy-to-open cap which facilitating one-handed use. Between the cap and the container is a thin membrane that seals in the syrup and prevents leaks. A dosage mechanism was designed to dispense the same amount of product with each “click” assuring a consistent user-experience each and every time. The “click” also contributes a sonic cue that also helps users remember their preferred dosage and contributes to a complete, sensorial brand experience. Finally, the tagline, “Pop it, Click it, Sip it” references the ease and enjoyment of the new product and packaging solutions use.

6.2. Example 2: Northern Lights flashlights
[Christopher Lefke (GD), Rebekah Leiva (GD), Tommo Walter Brickner (ID: Int’l Ex), Brad Clary (ID)]

An assessment of the existing packaging and product along with a critical analysis of the brand led this team to reposition the Northern Lights brand of flashlights. Qualitative research revealed little brand loyalty towards Northern Lights or equity in any elements composing its visual identity. In addition, the use of a generic, hard to open, plastic clamshell structure communicated a “cheap and environmentally insensitive” image and immediately lowered the consumer’s perception of the product’s value. This despite the fact that interviews with avid outdoor enthusiasts revealed Northern Light’s flashlights contained numerous features found in similar products at higher price points.

Communication audits of brands which have a loyal following in the camping, hiking, biking, kayaking,—“outdoors activity” markets—were conducted through online research and store visits. Perceptual Mapping diagrams were developed to better understand the relative positioning of outdoor brands across various product offerings and price points. Based on these findings, a new brand character was established that more closely aligned with the values of the repositioned brand’s core consumer: authentic, active, technically aware, and environmentally sensitive. The defined design objectives were to create a packaging solution that had: a stronger, more unique visual identity; a cohesive brand narrative; a
clearer information hierarchy; and increased the perception of the product’s value.

The final solution is a strong example of how an integrated approach benefits package design. The whole package actively works towards presenting and supporting the brand’s narrative while establishing a strong, emotional relevance with the target consumer. The structural form provides an unobstructed access to the product while maintaining point-of-purchase theft prevention. Plastic was eliminated, reducing the use of materials down to just an uncoated, natural cardboard stock requiring only a single die and no adhesives for construction. Soy-based ink is specified for all graphic applications. These decisions strongly align with the desired brand values and promote recycling. In addition to the use of the raw, natural cardboard stock, the new visual language is composed of a fresh color palette that references colors traditionally found in nature but with a contemporary twist. The inclusion of lifestyle photography quickly establishes a connection to the target consumer by placing their tribe in the environments where they and the product are most likely found together. The redesigned primary brand signature combines a new brand mark which references the aurora borealis, the sun/moon, and mountains in a graphically impactful, technical aesthetic with clean, unobstructed typography that increases the legibility of the brand’s name. Product features have been illustrated in a technical, diagrammatic style. The proportions of the colors composing the brand’s palette are rearranged to create distinction and easy identification amongst the various product skus defining the new Northern Lights brand of flashlights.

7. Conclusion

Interdisciplinary collaborations are challenging. They can also be incredibly rewarding. 2014 was the completion of our third attempt to conduct an interdisciplinary, collaborative, educational experience for our students around the topic of package design. Each attempt has resulted in new lessons to be applied in subsequent years. This past fall, for the first time we were (finally) able to control the number of enrollees from each of the two disciplines, and assure a more balanced ratio of students. This accomplishment alone was the biggest benefit in year three as it afforded every student the opportunity to team up with a peer from the other design discipline and have a truly interdisciplinary, collaborative experiences which broadened the intellectual horizons of each participant. The third year was also an opportunity for us, as instructors tasked with co-teaching a single course, to refine our approach and build on the momentum established in year two. Clarifying some of the objectives of an integrated approach to package design was a focus which led to stronger results. Also, inviting our packaging industry professionals to participate at the mid term, in addition to the final reviews provided each of them, and our students, with a more meaningful experience where strategies could be influenced and feedback could be more easily considered and integrated as the projects evolved. Heading into 2015 we are looking forward to introducing more exercises that explore the relationship between visual form and the human perception of value, in addition to strengthening the connection between visual form and a unified brand communication strategy.

ORCID

Todd Timney  http://orcid.org/0000-0002-7790-6316
Peter Chamberlain  http://orcid.org/0000-0002-3031-8154

References