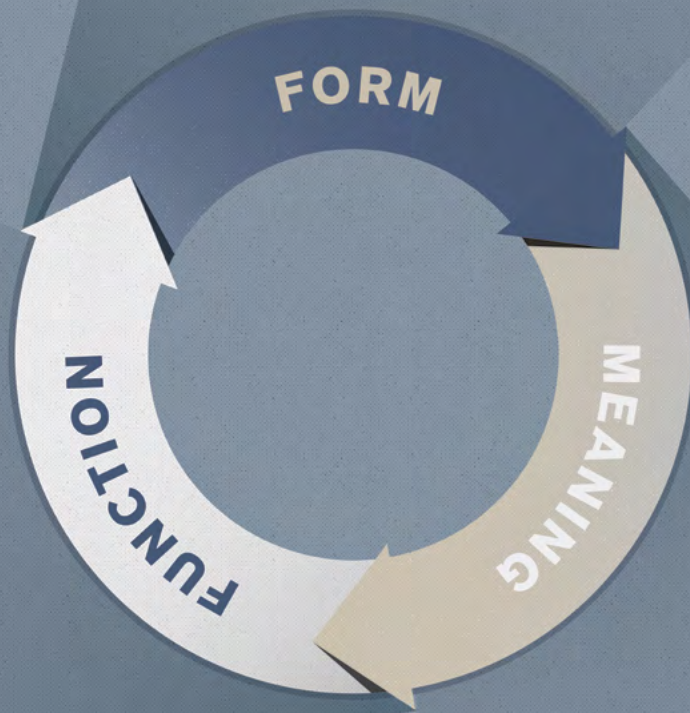


WHITE PAPER

The Amazing Role of Aesthetics in Product Design

by **Monty Montague**



"Each person will make a nude for himself, the kind of nude he wants. With the nude that I will have made for him, he'll put everything where it belongs with his own eyes." —Pablo Picasso

We all recognize the role of aesthetics in design. Or do we? Aesthetics is essential to design, to art, and, one could argue, to life itself. However, aesthetics is uniquely important to product design. Not to mention product purchase, ownership, and use. Beyond the realm of aesthetics in art and nature, the aesthetic qualities of product design bring meaning and joy to people who engage with the product. In this essay I explore the concept of aesthetics and its impact on design.

What is Aesthetics?

Definitions of aesthetics usually refer to beauty and art. But those definitions fall short since contemporary ideas about art and beauty are themselves so hard to define. I prefer a broad philosophical definition. One where we start to see the connection between aesthetics and its value to design. Let's first explore those definitions.

Aesthetics is a manner of experience. It's one of the ways we judge, feel, and "know" the world. I learned from professor Paul Tesar two key parts of an aesthetic experience. In the first part,

aesthetics has an emphasis on form rather than content. In the second part, the means and end are intimately linked.

Consider a sports example. In some sports, the achievement of an end is all that matters, regardless of how awkward the means might be—scoring an ice hockey goal comes to mind. In other sports, such as diving, figure skating, and dressage, the means and the end are inextricably linked. In one, getting it done is all that matters; in the other, getting it done and how you get it done are important. This focus on form, and the link between means and end, is the realm of aesthetics.

To understand aesthetics try looking at the aesthetic aspect as opposed to the pragmatic and theoretical aspects of an experience. Pragmatic is a means to an end. The focus is on use. Theoretical is knowledge. The focus is on understanding—cause and effect. Aesthetics is relations and feelings. The focus is on involvement. The aesthetic experience has immediacy, and stirs us to be absorbed and “present” in the joy of the act.

Form Follows Meaning, Follows Function, Follows Form

So our philosophical definition of aesthetics above gives us a foundation. But there remains a gap in its application to product design. That's because when it comes to the product experience, there is a unique interaction between form, function, and meaning. The pragmatic and the theoretical aspects of a product give definition to the aesthetic aspects, and vice versa.

In product design: form follows function, which follows meaning, which follows form.



Aesthetics is a manner of experience. It's one of the ways we judge, feel, and “know” the world.

It's a circular connection where each leads to the other. The form conveys meaning, the meaning reveals function, and the function drives form.

When we recognize the link between form, function, and meaning, we see how aesthetics plays an essential role in the user experience.

In the 1980's theory of “product semantics” the link between form and meaning was first articulated. Reinhart Butter and his colleagues explained how people experience product meanings in the context of their individual past experiences. “People do not respond to the objective qualities of things, but act on what they mean to them...meanings arise when we see something in the context of its possible uses, and we place our sensations (of form) into the context of the cognitive models we have constructed to cope with similar situations.”¹

Each person brings a set of past experiences and perceptions to any situation. Our unique, personal context creates a lens through which we see and experience a product—in the same way we construct with our eyes the nude we want when gazing at a Picasso painting.

Today the inherent form of many products is both digital and physical. So, what we call “form” should be considered in terms of both physical design—shape, massing, detail, texture, color, etc.—and digital design—composition, navigation, iconography, color, imagery, and sound. And because the engineering of digital products is understood by few users, the word “function” should be seen not as how something works, but what it does. Through physical and digital form we derive understanding about the product, its function and history, and our relationship to it.

The Impact of Aesthetics Along the Product Journey

Aesthetics inspires us to try a product, and influences our adoption of new, unfamiliar products. It reveals content, usage, and function. It provides delight, instills pride, and inspires loyalty. Here are some ways this happens.

Experience Journey

A customer's experience with a product is actually a series of experiences. As product designers, we study each touchpoint—every environment of use, every moment of interaction. The same product may have different meanings to different people based on their context. We try to understand a person's objective behavior and underlying motivations. We consider their actions, thoughts, and feelings. This journey includes the purchase process, so we build visual cues into the design to communicate the best messages at point of sale. Aesthetics impacts every touchpoint along the product journey. Product aesthetics can inspire exploration and play, and can guide appropriate use (and even safety).

Engagement and Adoption

Innovation is by definition new and unfamiliar. People are not immediately drawn to the unfamiliar, and that's where aesthetics come in. Aesthetics compels people to look, touch, and engage with something new, and it fosters adoption of innovation by providing delight and sparking emotional connections. Studies show that consumers rank product appearance as one of the most important traits in purchase. In fact, 85% say that **color is one of the primary reasons** for selecting a new product.

Content and Understanding

Great design is great content. There is rarely just one way to use a product. People grasp usage scenarios based on aesthetics as seen through the filter of their own situation and experiences. Aesthetics helps us understand the product and its content—how it is to be used, how it's made, where it comes from, and where it goes. The subtle curve that guides our hand to the correct location on the product, the material that gives a sense of weight and mass, the texture that clues us in to connection points, the color that speaks to our emotions. These are all examples of aesthetics leading to understanding. The customer experience is directly linked to understanding as revealed by aesthetics.

Delight and Loyalty

The 1st century BC architect Vitruvius laid out his famous theory of architecture with three elements: Firmness, Commodity, and Delight. Today we know that by firmness he meant structure, by commodity he meant utility of space, and by delight he meant aesthetics. Aesthetics in design is a source of delight. Participants in a product journey are delighted by pleasant little surprises. These are the moments of consciousness that give us joy and make us love an experience (and a product). The aesthetic order / rhythm / harmony seen in the components of a chair or a vacuum cleaner, the clever pocket in a bespoke jacket stitched to signify comfort and craftsmanship, the ease with



which the power drill battery snaps into place and its sculpted finger grips providing a visual cue, the graphic reminders my mobile app provides, or my car's dome light switch that's in just the right place for my reach. These pleasant surprises along the product journey delight participants and instill loyalty. Mobile app and game designers know that variable rewards keep users coming back. Like a slot machine, if we receive rewards that vary over time, but we don't know exactly when the reward will happen, we come back again and again.

Emotion and Image

Form evokes an emotional response. It's the immediacy of the encounter that is so inherent in aesthetic experiences. The best product design connects with people on an emotional level. People select products in part because of the image they want to project about themselves. We yearn for products with form that communicates the character, personality, and values that we want to be known for—and having this gives us pride in ownership.

Materiality

Product aesthetics are expressed through materials. Smooth metal juxtaposed with translucent plastic, patterned fabric coyly exposing polished wood grain. Materials imbue products with personality. They position products as unique when compared with competitors. In product design, digital displays and miniaturization have driven the technology of a product beneath the surface. So, the surface—what we hold and touch—is more crucial than ever. Consumers expect perfection. Apple's designers invested untold hours massaging the materials,

finishes, and intricate details to produce the jewel-like surfaces of iPods and iPhones. Interestingly, Google's new digital design guidelines—called Material Design—uses physical materials as a metaphor for its design aesthetic so users can relate digital graphics to physical space and motion.

Brand Language

Aesthetics plays a role in communicating the values of an organization through the visual language of product form. This language is based on the organization's brand, and can be used to tie a disparate product line together for the benefit of the customer and the company. Articulating a brand through product aesthetics helps establish a coherent voice for your company. The aesthetic elements can be standardized in the form of a Visual Brand Language (VBL).

A VBL is a system of product design guidelines used to create a visually coherent family of products, communicate brand attributes, build recognition, and improve efficiencies in innovation cycles. Aesthetics within a VBL can signify attributes like efficiency, safety, and luxury. Highly distinct, ownable “signature elements” help customers recognize your product from across the room. This sort of brand articulation builds brand equity. It feeds on the aesthetic innovation that compels consumer lust for a product.

Aesthetics starts with form. But form, meaning, and function flow from each other in product design. This circular link, and its impact on the user experience, is the essential value of aesthetics in product design.



MEET MONTY

As co-founder of BOLTGROUP, Monty Montague has worked with hundreds of clients in wide-ranging industries, including Fortune 500s like GE Lighting and Herman Miller. His name is listed on over 30 patents, and he has received the highest international design awards, including four Gold IDEA Awards, ID, iF, and MDEA Gold Awards

¹ Reinhart Butter and Klaus Krippendorff,
Where Meanings Escape Functions