



# Beyond Aesthetics: Seeing Form and Believing in Function

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KEYWORDS

*Design, Product Form,  
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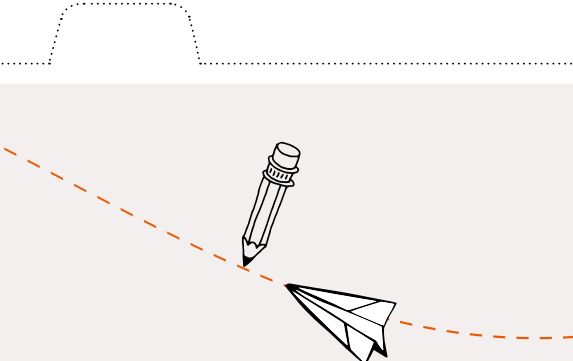
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The design of products has risen from being a mere afterthought in product development to a key driver of success. Good design is primarily associated with aesthetics, beauty and sensory pleasure. Good design charges products with positive emotions and makes them more successful than those that rely on functional superiority only. But apart from the emotional aspect of design, form does also communicate how well a thing might work. Product form is able to influence how consumers evaluate individual product features. And, in some situations, they trust a product's appearance more than factual information on its performance. Seeing can be believing, even if other evidence contradicts the visual clues.

**Appearance and its impact on judgments** /// Perceived functional performance of objects has an interesting parallel in effects of human appearance. It is not only personal attractiveness that impacts our overall judgment of a person. Other physical traits can significantly alter more specific assessments of a person's competence. From particular facial features we assume that the person would possess particular character traits. Researched examples abound: CEOs with a "babyface," characterized by wide eyes and a round face, were considered less responsible for a crisis. Military officers who possessed "dominant" facial characteristics like a high forehead and a square jaw were more likely to be promoted within military ranks than those who appeared less dominant looking. Politicians who were judged as having the appearance of competence were more likely to win congressional elections.



## PITTING PRODUCT FORM AGAINST CONFLICTING WRITTEN INFORMATION

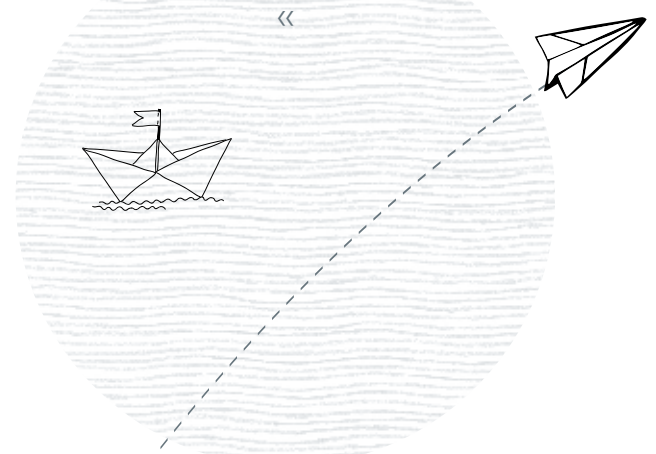
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In our experiments, consumers compared expert reviews of two product options and made relative judgments of functional performance based on the reviews. One brand was always described to be more favorable than the other. This information was either presented alone or matched with different pictures of the product. While the product presentations were tested to be equally attractive, they were different in the extent to which their product form conveyed functional performance.

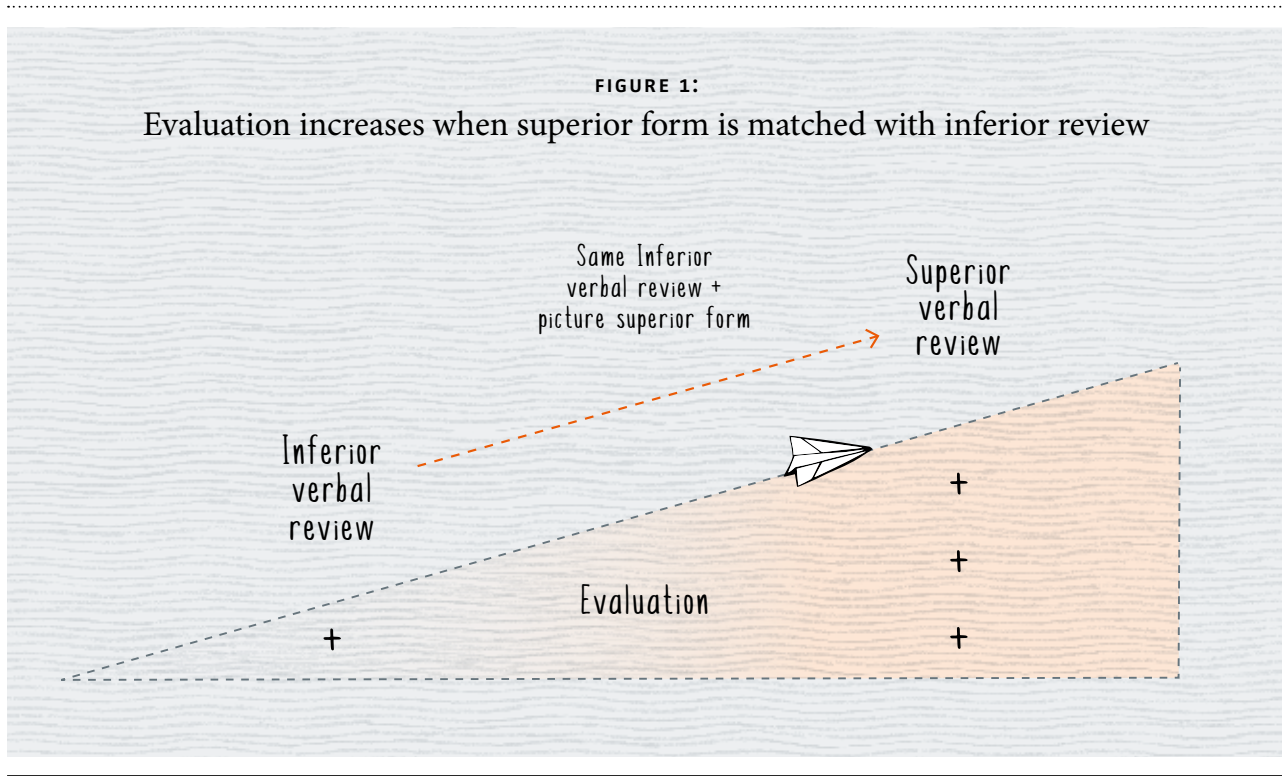
One option had the outward appearance of functioning less well than the other. For some participants the pictures of the product options were mismatched with the written reviews so that the review that communicated high functional performance was paired with the product form that communicated low functional performance and vice versa. Then, participants evaluated products against each other and not in absolute terms because this form of evaluation is the usual one in a typical buying process. They were always instructed to base their judgment on the written expert review to see if product form influences their ability to evaluate objective product information.

The same principle applies not only to judging people but also to products. Their form can create expectations about the functional performance or individual features, such as when construction material implies durability, size signals power or shape suggests aerodynamics. Certainly, in many instances visual design can be a reliable indicator of functional performance. A larger product may indeed be more powerful or a flimsy-looking construction material may, for instance, be less durable. However, product form can also be misleading in other instances, such as when actual product quality is difficult to judge. To shed more light on how design affects the assessment of the performance of products and their features we carried out a series of experiments. Their results have interesting implications for product design and the marketing of products designed to enhance performance perceptions.

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**Design and functional impression** /// Overall the experiments demonstrate an influence of product form that is independent of aesthetic appeal. When a product's design suggests a particular level of functional performance, it can alter consumer judgment, even in the presence of ostensibly more objective written information.

**A high level of functional performances increases evaluation but does not reverse judgment** /// In one setting a shoe with objectively inferior written features was paired with a product form that suggested a superior level of functional performance. We observed that participants' judgments of feature performance were shifted in the direction of the superior-looking shoe. In contrast, there was no shift toward the superior-looking shoe when it was paired with objectively superior written features. It seems that consumers develop expectations about functional performance when they compare different forms. When form and function were consistent, the expectation created by the product forms was simply confirmed by the written information and delivered no incremental advantage.

The same effect was found for the judgment of individual features in four different product categories – cookware,

stereo speakers, in-line skates and electric mixers (figure 2). Design can also operate in a more localized manner, influencing judgments of target features rather than overall perceptions of functional performance. For the target feature, the presence of pictures altered the relative functional performance ratings in favor of the presented designs, but for the non-target features the presence of the picture had no effect. This is evidence that product form can communicate functional performance independently of global attractiveness.

**The order of information presentation makes a difference** /// In addition, we found that functional performance implied by product form exerted an influence only if the consumer had been aware of or interested in particular features first. When consumers saw the pictures before the review and did not know which feature they would evaluate, their rating did not differ from those who received a written review only. They were uninfluenced by the product's form. When, however, they were informed in advance, the picture-first situation had an impact. In this case consumers tended to attend to the target feature when processing the design and their evaluation changed.

**FIGURE 2:**  
Samples of picture/description combinations  
used in the experiments

High performance picture/  
Low performance review



This cookware set includes a large stock pot, three pots, and two frying pans. The pots have well fitting lids that keep heat in nicely and sturdy handles that stay cool to the touch. The set is durable and can be used at the highest heat, even when cooking with a gas stove. Food cooks very evenly because of the flat bottoms that sit squarely on the elements, maximizing heat distribution and minimizing burning. If pans sit out for an extended period, remaining food can be difficult to remove. The lids of the stock pot and medium pot also fit to the frying pans.

Low performance picture/  
High performance review



This cookware has good heat distribution, food generally cooks evenly. The pots and pans have a solid base, durable construction and lids that seal in heat very well. The stay-cool handles are ergonomically designed and comfortable to hold. Very little will stick to these pans, regardless of cooking method, so they can be washed out with dish soap and a cloth; it's rarely necessary to use a scrub brush. The set includes three handled pots of varying sizes with lids, a large stock pot with lid, and two frying pans that fit the lids of the stock pot and mid-sized pot.



These speakers have a straight-line signal path crossover network which divides the signal with minimal processing. Basis response is adequate but not strong, making the speakers perfect fit for a smaller space like a dorm. The sound is clear and accurate, very easy to listen to. You can almost tell the relative position of the different instruments in the recording studio. The balancing technology blends direct and indirect sound almost anywhere in the room, giving the feeling of surround sound with only two speakers.



These magnetically shielded speakers house two angled, full range drivers engineered to generate more air movement from a small enclosure than conventional drivers. They deliver clean, uncolored, realistic sound, which is maintained at higher volumes, provided of course that the accompanying stereo system is adequate. They would be suitable for a home theater system because the direct/reflect system avoids the common problem of a speaker sweet spot and ensures the same quality of sound throughout the room.

**Making the most of designed functionality** /// Research on the effect of design has tended to emphasize the aesthetic dimension of product form and its global, spontaneous and even unconscious influence on overall product evaluation. We were able to demonstrate that design also has the potential to shape perceptions of functionality – of whole products and individual features. Our insights have important implications for design creation and communication as well as for consumers. They highlight the importance of close cooperation between product development, marketing and design.

> **Use design to support performance perceptions** /// Good design provides sensory pleasure and adds emotion even to technical products. For product developers who wish to communicate a high level of performance for a new product, it is important not to overlook the opportunities offered by product form. A design team may be well advised to consider the functional performance communicated by design in addition to design's more traditional aesthetic dimension. That is, when making trade-offs among multiple engineering characteristics and product form, the product developer is not bound by global design and may focus design effort on those features that are driving the buying decision or provide the greatest return on investment.

> **Support design effects with marketing communication** /// Consumers' first experience with a product is often through seeing a picture or the real product itself. To support the effect of form on feature performance perception, consumers should be informed about the elements that are most important and have been reinforced by design. It is critical to direct attention toward relevant target design features to maximize the likelihood that the design efforts to enhance functional expectations have the desired effects. Of course, relative differences in form are on a continuum, and at the extremes consumers would probably notice visual differences in functionality without prior intentions. Nonetheless, with high numbers of firms focusing on product form issues, it is likely that most visual differences in functional performance are not overwhelming and must be emphasized through marketing efforts. Therefore, it is important that marketing communications support the influence of product form on information processing and judgment.

> **Be aware that design-functionality inferences might be misleading** /// From a consumer perspective, the experiments suggest that performance expectations created by product form may be difficult to overcome. Even when instructed to base judgment on the verbal information, the visual clues alter evaluations. For many products, such as those that are used for safety or health, functional performance is far more important than form. If consumers are truly unable to ignore visual information in cases when it is irrelevant, undesirable outcomes may ensue.

## FURTHER READING

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