Walking down a residential street in the evening, you might find yourself glancing through the brightly lit windows of the houses you pass. As you peek inside, you take stock of the occupants’ selections: the mahogany chaise lounge with the curved armrests in one house, the sleek leather couches and minimalist paintings in another.

Each person’s aesthetic taste seems distinct, and yet that perception belies a large body of shared preferences. Our team at the University of Vienna, among others, has sought to unravel the patterns and principles behind people’s emotional reactions to objects. Although trends drive certain design decisions, scientists have identified fundamental properties of the mind that consistently dictate which products people tend to like and dislike. Psychologists are now better equipped than ever to explain how you came to choose your belongings in the first place. They can also begin to decipher why you continue to love certain purchases long after they have lost their initial shine, whereas others land in the trash.

Not only are our preferences predictable, they are also flexible. Using simple manipulations, researchers can watch you revise your aesthetic judgments in minutes. The essential idea surfaced in the late 1960s, when the late psychologist Robert B. Zajonc, then at the University of Michigan at Ann Arbor, proposed the mere exposure effect: seeing something repeatedly—be it a couch, a car or a coffeepot—boosts its attractiveness. But with repetition comes boredom, recent research suggests, and thus our appreciation for new or different designs. We can largely lose our interest in an object’s appearance, even if we once assumed that looks were everything.

Big and Round

Product designers have long wanted to know what visual features have the power to draw us in or turn us away. Scientists probing the question have identified a handful of guidelines that serve as a starting point. For example,
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Humans gravitate toward rounded forms over sharp edges, perhaps because such objects—like those found in nature—create a sense of psychological comfort. A study published in 1988 in the journal *Nature* by psychologists Bar and Matalon found that people prefer rounded edges over sharp ones. In a 1992 study published in the *Journal of Experimental Psychology: Applied*, researchers found that people prefer rounded edges to sharp ones, which are perceived as more comfortable and visually appealing.

**FAST FACTS**

**Looking Good**

1. People prefer big objects to small ones, round forms to sharp ones and complex designs to simpler renditions.
2. Observers often pick a prototype as prettiest, but these “average” examples of a face, coach or pattern can be an expert or even someone in a good mood.
3. After a month of using a product, the object feels generally more important than how it looks.

**The easier the object was to recognize, the better the participants liked it, the researchers found.**

Be the first to recognize the object was to recognize, the better the participants liked it, the researchers found.

**People prefer complex patterns to simple ones.** They also see beauty in symmetry. Thus, subjects liked the complex, symmetrical design (upper left) the best of these four.

**Comfort Zone**

A more subtle factor influencing our aesthetic judgments is our natural tendency to seek out beauty. A study published in 1992 in the *Journal of Experimental Psychology: Applied* found that people prefer rounded edges to sharp ones, which are perceived as more comfortable and visually appealing.

**Studies suggest that most individuals choose designs that bear a hint of originality, but are built on a classic form.**

**The Author**

HELMUT LEDER is a professor of psychology at the University of Vienna in Austria, where he studies psychological aesthetics and cognitive ergonomics.
Subjects who were repeatedly exposed to the drawings adjusted their preferences toward the innovative interiors.

The Car That Stares Back

Leonardo da Vinci noticed facial imagery in objects, seeing eyes-on-mouth combinations emerge from the contours of a wall. You may have made this human visage in a cloud, tree or other inanimate feature of the environment. Because our brains are wired to recognize faces, we can imagine them anywhere almost anywhere. Some car designers take advantage of this phenomenon by deliberately stressing the front of cars so that they bear specific "expressions." Some cars seem to smile, whereas others shun an aggressive stare. Faces elicit far stronger emotional reactions than nonliving objects do, embedding "faces" in consumer products is a way to draw people to these items in a uniquely powerful way.

This tactic now has some scientific backing: we have recently found that people process the face of certain cars just as they do human faces. In 2010, along with my University of Vienna colleague anthropologist Senia Windhager and others, we reported tracing the eye movements of 25 men and 25 women while they viewed side-by-side photographs of a face and of a head-on view of a car. We discovered that people scanned the car using the same pattern of eye movements as they did the face—first, directing their gaze to the headlights, as the car's "eyes," and then to the rearview mirror, which resembles the mouth. When asked to compare the eyes, nose, mouth and ears (ideally) between a face and a car, people moved their eyes among the corresponding features, glancing from the headlights to the eyes, the radiator grille to the nose (or some) times, the mouth, and so on, indicating that they interpret these car parts as elements of a face. What is more, just as people tend to focus on the eyes of others more than on any other feature, the test subjects were most frequently drawn to the headlights, fixing their eyes on them the greatest number of times. These results suggest that people's anthropomorphic assumptions guide their behavior in the manner in which they process information about the front of a car.

Chiropractor Claus-Christian Carbon, now at the University of Bremen in Germany, and I found some support for the idea that seeing some particular product numerous times increases the likelihood for more novel, innovative instances of it. We presented 32 people with nine drawings of car interiors representing a range of classic and innovative designs. In each case, we asked a viewer to rate how much he or she liked the interior and how innovative it seemed on a scale of 1 to 7. To control repeated exposure, half the subjects looked at each drawing another 12 times, each time judging the degree to which it reminded them of a different adjective—dignifying, engaging, hegemonic, enjoyable or ornamental. Meanwhile the other participants got a break from the drawings, instead answering unrelated questions about geography. Then we asked everyone again how well he or she liked each design.

In the first round of ratings, we saw that the more classic services were the most popular, a finding consistent with our previous work. When we asked subjects to judge the pictures a second time, those who had seen each car just once before were far more critical of its initial impressions. In contrast, the individuals who had been exposed to the drawings of innovative cars adjusted their preferences toward the more innovative designs. The classic forms had lost their allure. This effect occurs fairly rapidly—after only about 20 minutes of exposure.

For consumers, these findings suggest that a well-designed household product may be enhanced by a brief exposure to a product before committing—perhaps by test-driving a new car a couple of times or walking around in a new pair of shoes. Even a relatively short experience with a new technology or a new product can alter your preferences better than your initial responses will, and the extra time invested in may in turn turn your eye toward more innovative and fun products. For those part, designers may want to concentrate on adding unique features to those major purchases that customers will own for a long time.

The Smell of Disappointment

Experience effects not just our desire for novelty but also our readiness for complexity. In our 2009 study Talk and I also found that exposure to complex products—on this case, viewing detailed black-and-white designs—tends to reduce effect. After repeated exposure complex patterns, participants judged simple ones to be prettier; equivalently, massive exposure to simple patterns rendered people partial to complexity, making it the overriding factor in their judgment of attractiveness. Symmetry, on the other hand, still was an important factor for simplicity—participants consistently liked the symmetrical designs.

The influence of long-term experience is not limited to how we see things. Contrary to the main focus of designers—and most scientific studies—body parts are not always paramount. In a 2010 study Heldker and psychologists Anja Fekker and Hendrik N.J. Schifferstein, both at Delft, asked 245 graduate students to report on their experience with a previously purchased product—say, a pair of shoes, a printer or a coffee machine—while buying it and then after the first week, the first month, and the first year of owning and using it. The students reported how much each of their senses contributed to their interactions with the product.

Averaging across 83 different products, the investigators found that an object's visual impact was strongest at the moment of purchase. After a month of using the product, however, it left the touch became more important than its appearance, and after a year the look, feel and sound of the product were valued equally. "To avoid consumers' disappointment, ..." the authors conclude, "retailers should think of ways to demonstrate the securial properties of products at the buying stage (e.g., a computer mouse feels, what kind of noise a coffeemaker makes, and so on)." Of course, the role of these securial value-impact with the product—after a year bearing dominated for high-tech products, whereas for shoes their feel and look were equally important.

The large influence of our aesthetic judgment might seem to make it difficult to predict our eventual happiness with a purchase. But the research suggests easy guidelines for consumers to follow. We should consider the feel, sound or smell of something when we are deciding whether to buy it, for example. We should think about our mood at the time. Did it influence your choice of the old-fashioned look over the modern one? We might also perseverate a little over a potential purchase if it concerns a product we plan on owning for a while. And when buying for a friend, be mindful that you plan to use it as a money—taste-impact item than you do if he or she experience differs greatly from your own. So the next time you find yourself discretely setting up the neighbor's decor—and wondering about the practical objects that populate it—remember that, contrary to the old saying, there is some accounting for taste.

(Further Reading)

- This Design & Emotion: www.designedemotion.com