Extraordinary products seduce the casual user, as well as the paying customer. Software is no exception, as long as it fulfills its promises.

Seduction is an aspect of the growing field of captology, the study of how technologies persuade. This view of seduction is derived from interactions with many products and experiences and can be used to create software that is more enticing and valuable for its users. But be aware that the process of seduction is highly subjective, not measurable in the same ways other forms of software development are measured. That's why we include theory and not experimental data here.

We all know someone who has been seduced by technology—a friend who was first to own a Palm Pilot, who had to have a Bang and Olufsen stereo, who proudly owns a limited-edition 20th Anniversary Macintosh, or who worships a Porsche Boxter as if it were a minor deity. Extending beyond the range of mere technology, the seductive power of the design of certain material and virtual objects can transcend issues of price and performance for buyers and users alike. To many an engineer's dismay, the appearance of a product, or the way it feels physically, can sometimes make or break the product's market reaction, as in the case of Apple's iMac (positively) and IBM's Peanut (negatively).

Audrey Hepburn's black dress in the movie Breakfast at Tiffany's, the classic computer adventure game Myst, and the Broadway version of The Lion King are all examples of seductive experiences going beyond beauty and efficiency. What they have in common is the ability to create an emotional bond with their audiences, almost a need for them. Except for some computer games, software is generally absent from lists of seductive products. It could be that software applications traditionally emphasize features and functions, but we suspect that developers simply don't understand the mechanics of seduction in the same way designers of video games, industrial products, and fashions understand them. Seduction also plays an important role in automobile design, architecture, and entertainment—fields that can offer insight into how seduction works. Therefore, the two most important questions for software designers concerning the use of seduction are: How and why is it effective? and What does the answer mean for the future of technology?
**What Is Seduction?**

Seduction is an adjective most people would not associate with a computer interface, but whether they realize it or not, most people have been seduced or targeted for seduction by almost every form of media. However, successful seduction is a careful art not easily mastered or invoked.

Seduction has always been a part of product design, whether graphic, industrial, environmental, or electronic. For many, "seduction" immediately connotes sex appeal or sexual enticement. But the sexual aspect is less the essence of seduction's meaning than are enticement and appeal. While a standard Webster's dictionary defines "seduction" as "the act of leading aside or astray," we feel seduction should not be viewed in such a negative way. Webster's does a bit better with the word "seductive" as "having alluring or tempting qualities." This is far closer to how seduction relates to design, although it has come to mean more than that.

Most important, the design of a successful seductive product or experience is not simply visual or functional. Seduction involves a promise and a connection with the audience or user's goals and emotions. Everyday objects, like French industrial designer Phillipe Starck's juicer (see Figure 1) and Japanese fashion designer Issey Miyake's fashions, go beyond mere visual innovation to spark human emotions—especially curiosity, surprise, and imagination. One way these objects do so is by going beyond the obvious and the efficient, being not only original but more of everything than they need to be. Whether elaborate or simple, seductive objects need to promise to be more than what is expected of them. They stimulate the imagination on many levels and seem to espouse values or allude to connections with what a person wants to have or to be. The customer's imagination is where the first connection is made.

**How to Seduce**

Seduction, like all emotions, is a process. It has a beginning, a middle, and an end. And while the first and last step are momentary, the middle can be drawn out almost indefinitely. The first step is enticement—the initial contact attracting a potential customer or user. This contact may be through advertising (as in the original Apple Macintosh television ad), which establishes the product's tone, mood, and message. But at some point, the initial experience with the product itself needs to entice the viewer, customer, or audience. The key to enticement is first to get the audience's attention, then to make a promise. This attention-getting device—the interface itself—may be loud, soft, beautiful, or ugly, but it has to differentiate itself from both its competition and its surroundings, or environment. Only by going to an extreme of some kind can the product get itself noticed to begin with.

Immediately afterward, the product has to make a promise of some kind to hold that attention. It might be a promise to be interesting, exciting, or beautiful, but the more closely the promise connects with the goals and emotional aspirations of its viewers, the more deeply it begins to seduce. This connection, by the way, is how brands are built, and promises are the cornerstones of branding. Being loud or diverting attention momentarily is not enough. If the promise doesn't hook the customer, the product won't have an opportunity to play out its message.

Worth noting here is that because seduction works through emotions and personal goals—which are different for everybody—effective seductive experiences are tailored to individuals or, at least, to groups sharing a similar culture. No seduction works on everyone without modification. The first three basic steps toward seduction are:

- **Enticement.** Grab attention and make an emotional promise;
- **Relationship.** Make progress with small fulfillments and more promises, a step that can continue almost indefinitely; and
- **Fulfillment.** Fulfill the final promises, and end the experience in a memorable way.

The next and ultimately most important step is to reward the attention given and a reason to invest more emotion into the experience, or the audience will simply leave. This step is where the quality of interaction design in a product is most critical, when visual design will have become tiresome, unlikely to be able to differentiate itself or be new anymore. Instead, the product itself has to fulfill based on its function and feel. The longer it can do this, drawing the experience out over time, the more successful it will be.

Think of long-running television shows, like "M*A*S*H," "Seinfeld," and "The Young and the Restless"; they survive by continuing the emotional engagement, making good on past promises, and making new ones for the future. Many automobiles do this (so people love them so much they name them and won't part with them). Some clothes, like lucky hats, winning jerseys, favorite shoes, and many other types of products achieve this status in their customers' lives, because they continually reflect back desired attributes and performance. They
acquire this status chiefly through quality design, while focusing on the parts of the experience that matter most to their performance—the feel of a fabric, the fit of a garment, the strength of a handle. In contrast, it's difficult to think of a software product so enduring you couldn't part with it once it was superseded by a new version, or so elegant and wonderful to use you could barely wait to use it again.

Growth is another common theme in seductive relationships. As long as the user is growing emotionally or intellectually in some way due to the experience, the product or experience will be viewed as valuable, even if the experience is essentially unchanged during the lifetime of the product. Repetition of this sort is not always a concern. Consider how often many people reread a favorite book or watch a movie (Titanic is a recent example). As devoted audiences of opera have long understood, just because you know what happens doesn't mean the experience is no longer fun—as long as the experience keeps delivering on its promises. If the experience constantly makes and delivers on new promises, all the better.

In order to identify a seductive experience, ask yourself whether the product you are using or are developing:

- Entices you by diverting your attention;
- Surprises you with something novel;
- Goes beyond obvious needs and expectations;
- Creates an instinctive response;
- Espouses values or connections to personal goals;
- Promises to fulfill these goals;
- Leads the casual viewer to discover something deeper.
- Delivers on these promises.

### Seductive Quality

<table>
<thead>
<tr>
<th>Seductive Quality</th>
<th>Philippe Starck's Juicer</th>
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<tbody>
<tr>
<td>Entice by diverting attention</td>
<td>It is unlike every other kitchen product by nature of its shape, form, and materials.</td>
</tr>
<tr>
<td>Deliver surprising novelty</td>
<td>It is not immediately identifiable as a juicer, and its form is unusual enough to be intriguing, even surprising when its purpose first becomes clear.</td>
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<tr>
<td>Go beyond obvious needs and expectations</td>
<td>To satisfy these criteria—of being surprising and novel—it need only be bright orange or all wood. It goes so far beyond what is expected or required, it becomes something else entirely.</td>
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<tr>
<td>Create an instinctive response</td>
<td>At first, the shape creates curiosity, then emotional response confusion and, perhaps, fear, since it is so sharp and dangerous looking.</td>
</tr>
<tr>
<td>Espouse values or connections to personal goals</td>
<td>It transforms the routine act of juicing an orange into a special experience. Its innovative approach, simplicity, and elegance in shape and performance creates an appreciation and desire to possess not only the object, but the values that helped create it, including innovation, originality, elegance, and sophistication. It speaks as much about the person who owns it as it does about its designer.</td>
</tr>
<tr>
<td>Promise to fulfill these goals</td>
<td>It promises to make an ordinary action extraordinary. It also promises to raise the status of the owner to a higher level of sophistication for recognizing its qualities.</td>
</tr>
<tr>
<td>Lead the casual viewer to discover something deeper</td>
<td>While the juicer doesn’t necessarily teach the user anything new about juice or juicing, it does teach a lesson that even ordinary things in life can be interesting and that design can enhance living. It also teaches to expect wonder where it is unexpected—all positive feelings about the future.</td>
</tr>
<tr>
<td>Fulfill these promises</td>
<td>Every time it is used, it reminds the user of its elegance and approach to design. It fulfills these promises through its performance, re conjuring the emotions originally connected with the product. It also serves as a point of surprise and conversation by the associates of its owner—and is another chance to espouse its values and have them validated.</td>
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The final step in a seduction is to end it, although doing so is not always necessary. However, when the experience is ending, the seduction should not leave the audience with a bad or worthless feeling, or it will tend to caution them against allowing themselves to be seduced in the future—unless, of course, that was the promise all along. Ending a seduction successfully is like parting from a romantic relationship on good terms. It should always be viewed as a positive, worthwhile experience—if the creator of the product wants a chance at seducing the same customers again or being held in high regard for having created the experience in the first place. Leaving the customer with a good feeling is important for developers and manufacturers for whom customer retention and brand strength—that is, their future—are important, as in Figure 1.

**Seductive Software**

What all this means for software developers is that there is a base level of experience on which to draw for improving the seductive qualities of the software they develop—where appropriate, of course. Imagine choosing software at a store (online or physical) offering more than the obvious in both its...
experience and its outcome. Such software would create a seductive experience by integrating functionality with a visual and interactive design. People often assume quality in visual appearance, audio design, or other sensory traits translate into quality in performance. Software developers can learn these techniques from other design fields to increase user satisfaction and create something more than is expected by both their potential users and their competitors. However, the most important ingredient—and a unifying element in all seductive products, no matter which medium—is that the products’ creators dared to care about their products and their customers to the extent that they willingly spent the extra time and energy needed to create something extraordinary.

Unfortunately, this perspective is rare, as most developers are concerned more with features, cost, and schedules than quality, let alone extraordinary qualities. Two examples of seductive software are the classic Russian-developed game Tetris and MetaTools’ KPT Bryce 3D terrain-generation software for digital artists. Each represents more than its product category or descriptions would suggest, and each has succeeded largely due to its seductive qualities, not merely its features and abilities. Each also has loyal followers who exhibit emotional attachment to the software (see Figure 2).

In the initial phases of developing software, we recommend taking time to consider the possibilities and value of building in seductive elements, not merely to enhance the visual or interactive experience but to enhance the product’s value to customers and the place it occupies in their lives. In that process, it’s a good idea to follow six steps:

• Get to know your audience. You are developing software for others, not for yourself. Discover what appeals to them already—not only what they buy, but what they wish they could buy and experience.
• Search for the “aspirational” possibilities in your software product, that is, the opportunities to build meaning and emotional connections to the software.
• Correlate these possibilities with the possibilities you find in your audience. These are your priorities for developing the seductive aspects of your product.
• Immerse yourself in examples of seductive design, allowing them to serve as inspiration for more.
• Involve a visionary designer or developer. Only a developer who sees larger issues and expects more meaningful experience can help guide a product in these directions.
• Make quality and amazing characteristics priorities among development team members. Extraordinary products do not invent themselves without management support.

**Wonderful vs. More of the Same**

Seduction is not necessarily an element in a successful product or experience, but it can certainly enhance its chances. More than delivering success in terms of sales, it can be a key element in making a product memorable and spectacular. While many types of software may simply not be intended for personal use or to be lifestyle oriented, all forms of software can adopt these techniques to differentiate themselves from their competition. Seduction becomes ever more possible and important as interfaces become richer and more lifestyle-, entertainment-, and consumer-oriented.

While seduction is a form of persuasion, it is the personal, intimate, and emotional that make it more controversial, more powerful (when done well), more culture-specific, and more focused. Seductive experiences are often multisensory and use broad, rich sensory media. They often include mystery and subtle suggestion and may apply more to personal objects and environments than to public or impersonal experiences.

While seemingly elusive, seduction can be achieved through the careful integration of functionality and visual design to create products that go beyond a user’s expectations for the task at hand. By focusing on such seductive qualities from the beginning of a design process, interaction designers can learn from the world of physical product design, architecture, filmmaking, and almost every other medium to take software development to the next level. The challenge for software (and hardware) developers is to celebrate computer technology by creating new seductive experiences that have no physical counterpart.

Moreover, this being a new approach to software development—with little, if any, prior art—we feel this is the moment to begin rigorous development of deeper hypotheses and test them to derive a less abstract and more empirical understanding of the phenomenon of seduction.

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The aim of the paper was to explore the experiences of people with gastrointestinal cancer within the first year following their diagnosis. Thus, the present study seeks to understand the relationship between adolescents’ Facebook use and their experience of a developmental construct, Imaginary Audience. Using survey data collected from 260 participants between the ages of 9 and 26, results suggested a positive relationship between Facebook use and Imaginary Audience ideation.