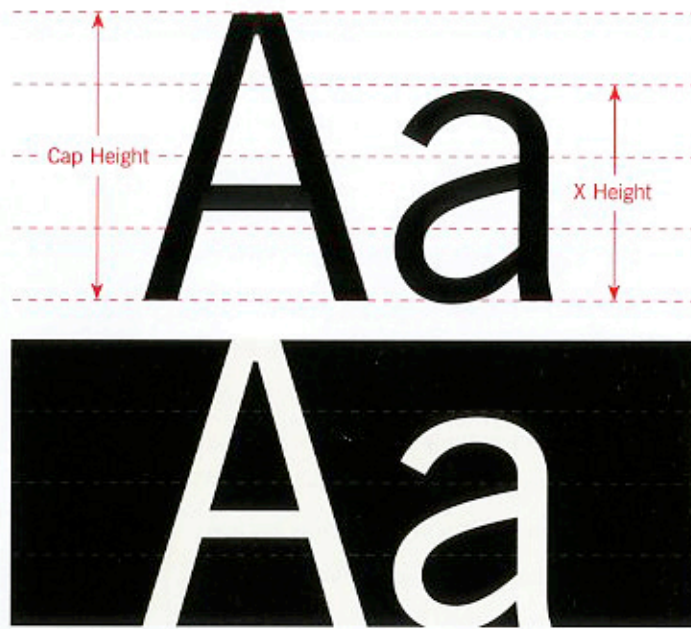


Can You Read Me Now?

Bad signage contributes to more people getting lost than a poor sense of direction. Consider the times that you failed to see a sign because it was too small or obscurely placed. Or stood baffled before a directory that was illogically organized and badly lit. In the realm of graphic information, wayfinding systems abide by their own set of rules. Many typefaces that are easy to read on a printed page are frustrating to make out in signage. The same goes for colors. This is why some designers and their clients are chagrined to find that the system that looked so stunning in miniature mock-up failed miserably when installed at actual size. Offered here are a few basic rules of thumb to keep in mind – they all apply to interior signage and viewing in optimum lighting conditions. A recommended source is “Wayfinding: People, Signs and Architecture” by Paul Arthur and Romedi Passini (Focus Strategic Communications Inc.).

Rule of Thumb #1: “X” Height and Reverse Type

Research has shown that the most legible type for signage is black on white, with lower case type having an “x” height that is in a 3:4 ratio with capital letters. When type is reversed, white on black, the letters tend to look 10-12% bolder. A drawback of white-on-black is the optical halo that forms around words. Also, when using these backgrounds in combination, adjust the type so they will look consistent in size.



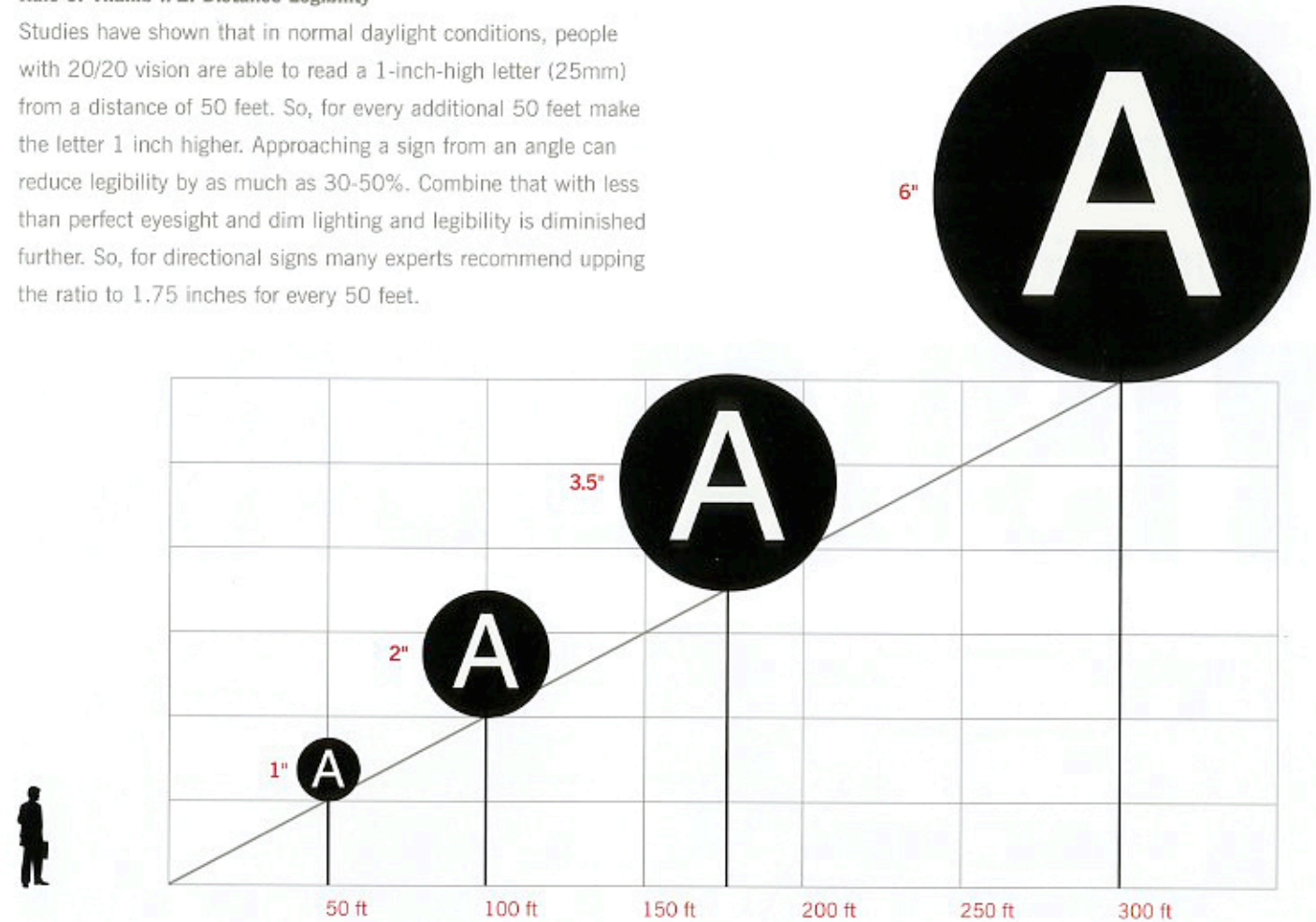
Rule of Thumb #3: Directories

Information on a wayfinding directory should be limited to six items, which is about as much as a person can take in quickly when walking by. Information should be organized by direction, not listed alphabetically or according to what looks graphically interesting.



Rule of Thumb #2: Distance Legibility

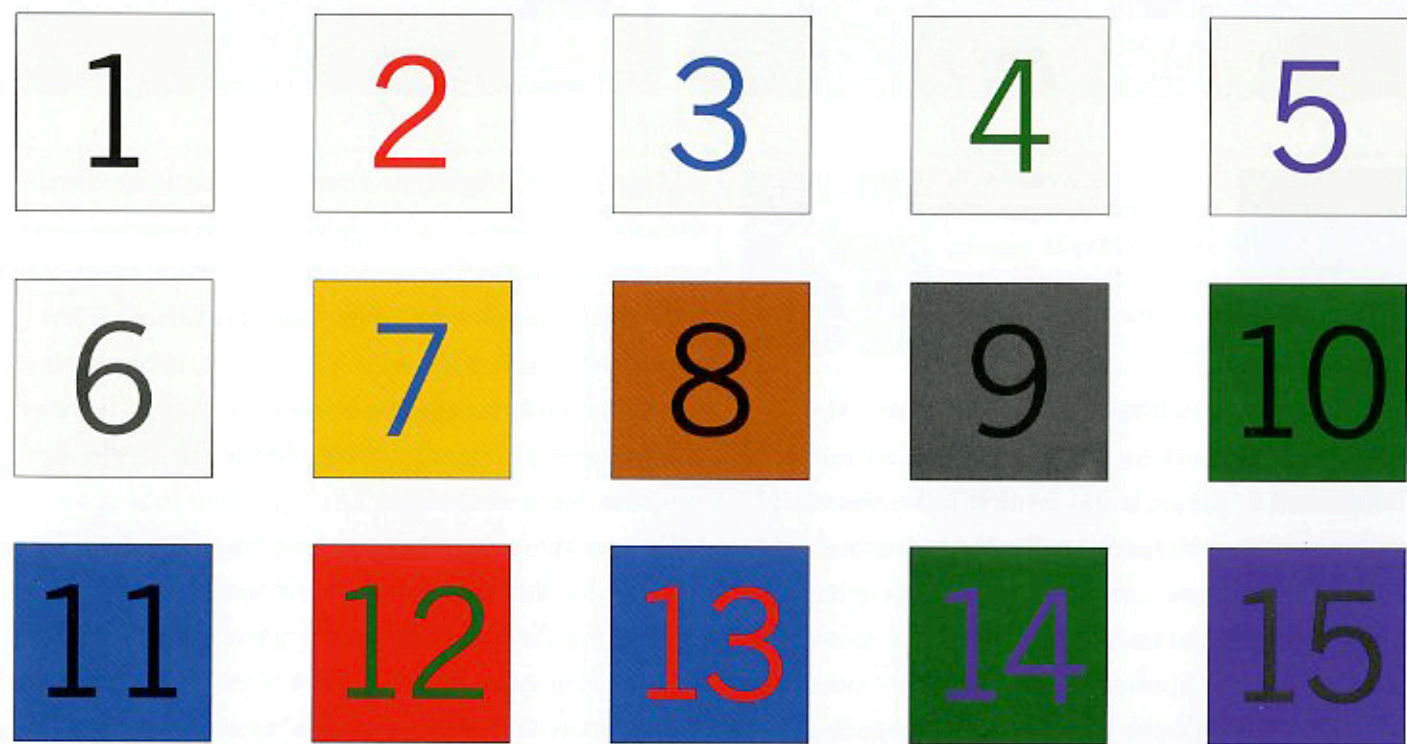
Studies have shown that in normal daylight conditions, people with 20/20 vision are able to read a 1-inch-high letter (25mm) from a distance of 50 feet. So, for every additional 50 feet make the letter 1 inch higher. Approaching a sign from an angle can reduce legibility by as much as 30-50%. Combine that with less than perfect eyesight and dim lighting and legibility is diminished further. So, for directional signs many experts recommend upping the ratio to 1.75 inches for every 50 feet.



Rule of Thumb #4: Color

Wayfinding signs are not the place to feature subtle corporate colors or the latest fashion palette. When using a combination of colors, the higher the contrast the easier the sign can be read.

These boxes show a range of legibility with black on white (1) being the easiest to make out and gray on purple (15) being one of the hardest color combinations.



Creating a visual brand language did more than bring structure to the many brands of household appliances within the Whirlpool family; it allowed the company to

VISUAL BRAND LANGUAGE



David L. Swift, Executive Vice President, North American Region, Whirlpool Corporation Benton Harbor, MI
Before accepting his current position at Whirlpool in 2001, David Swift was president of Eastman Kodak Company's Professional Group.

Back in the mid-1990s, Whirlpool's then-CEO David Whitman noted a troubling consumer trend that showed a lack of brand loyalty in the household appliance sector. Research indicated that two-thirds of appliance shoppers entered the retail store without a specific brand in mind, a clue that consumers had come to view appliances as commodity products. Little wonder, since the brands all tended to look alike – generic and white.

This sent Whirlpool on a mission of creating visual brand distinctions, beginning with differentiating their own many brands. The world's largest manufacturer of household appliances, Whirlpool markets products under Whirlpool, KitchenAid, Brastemp, Bauknecht, Consul and other major names in more than 170 countries. It also is a significant supplier to Sears, which owns the Kenmore name.

To execute its brand-focused strategy, Whirlpool wooed Chuck Jones away from his position as head of design at Xerox to take on the job of design chief. At first, Jones dismissed the idea of moving from a cutting-edge technology giant to "a rust-belt kind of industry," but an interview with Whitman convinced

increase the speed of new product development, foster futuristic user-friendly innovations, and improve the rate of product introductions into the marketplace.

him of senior management's sincerity in elevating the role of design in Whirlpool's transformation, a commitment that continues under current CEO Jeff Fettig.

Whirlpool's reputation during its 94-year history was that of a very strong engineering manufacturing culture. Design was viewed as an appendage of the engineering discipline. "Products would get thrown over the wall to design, and they'd have a week to make it look good," Jones recalls.

In evaluating how to bring innovation to the forefront, Whirlpool came to recognize that design had to be a key element. "It's not all about product features; it's about how the consumer perceives your product," says David Swift, Executive Vice President of



Charles L. Jones, Vice President of Global Product Consumer Design Whirlpool Corporation, Benton Harbor, MI
Charles Jones joined Whirlpool from Xerox in 1995. He oversees Whirlpool's global multi-disciplinary design team.

Whirlpool North America. "This was viewing design in a different way than we had perceived it before."

Swift adds that Whirlpool's acceptance of design as an innovating force freed Jones to "hire people who understood color, space, the psychographics of interfacing with products, and ergonomics." While these issues had been discussed within the context of engineering before, now the customer experience was considered from a broader perspective.

Jones' first job at Whirlpool was running a program called Advanced Product Concepts – a unit charged with turning conceptual innovation research into products that could actually be taken to market. This led to the formation of a new organizational structure in which human factors and usability experts worked side by side with Whirlpool industrial designers worldwide and, ultimately, became an entity renamed Global Consumer Design, headed by Jones.

It also paved the way to establish a strategy to speed up new product introductions. "If we were going to

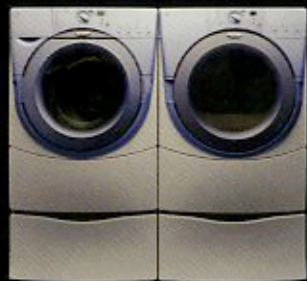
continue being the leader in our industry, we needed to have an overall brand architecture that we could then inject with new innovative products that fit within a specific brand family," Swift says. "The design group was able to take our customer data and data from our branding organization to create what we call a Visual Brand Language, VBL, and then translate that into a brand architecture. Anything that was KitchenAid, Whirlpool, or our other brands – you could tell by

seeing the product that it would fit within that family. That then enabled us to come out with products at a more rapid pace and do it more cost effectively."

Jones compares VBL to a pyramid with the brand's core values at the base, the visual positioning at the next level, design principles at the third level, and signature elements at the top. "The focus of VBL is to differentiate itself from the competition and our sub-brands by leveraging the power of the brand itself to develop distinct and appropriate visual personalities for each of our 28 global brands," he explains. "In the past, independent Whirlpool product teams started from scratch with regard to what a product should look like with every new project, a practice that was costly, wasteful, inefficient and eroded any kind of visual equity for the brand – everything was 'one off'." The

Duet Washer Dryer

Daring for its single-unit washer/dryer design, bold colors and pedestal base, the front-loading Duet met with controversy during consumer market previews – 30% of those surveyed flatly rejected the design, the other 70% were "passionate, up out of their chairs." For Jones, that was a good sign. "If 100% of consumers love a design, it probably means that you haven't stretched far enough," he says, and the result would be "a sea of white, with everything basically looking the same."



KitchenAid



Standing Mixer

A brand favored by serious home cooks, KitchenAid adopted a visual brand language that communicates the kind of rugged durability of appliances that are normally found in commercial kitchens. The types of products in this line – such as the espresso machine – acknowledge this consumer segment's sophistication and confidence in the kitchen.



Coffee Grinder



Waffle Maker



Espresso Machine

Whirlpool



Combination Oven

The Whirlpool brand is targeted to a segment the company calls "active balancers," busy young mothers who do not want any more complexity in their lives. Whirlpool's Gold Kitchen Suite features sleek lines, integrated controls and innovative time-saving details that facilitate ease of use and cleaning.



Wall Oven

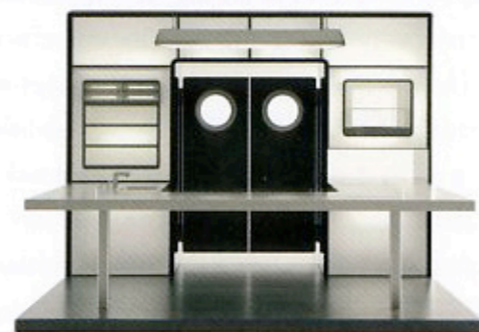


Electric Cooktop



Microwave Oven

Concepts



Kitchen Theater

Whirlpool's concept studies examine ergonomic, aesthetic and technological approaches, exploring a broad range of innovative new products, including dishwashers that have a special zone to clean heavily soiled pots, refrigerated ovens that keep food cold until remotely prompted to bake, and microwave clothes dryers that can dry wet jeans in 60 seconds.



Kitchen Equipment



Cooking Island



Refrigerator

result was a tangle of schizophrenic product lines that missed the opportunity to build brand equity through coherent appearance and operation.

That visual coherence allows consumers to replace appliances and still maintain a single look in their kitchens. It also helps retailers anticipate how to effectively merchandise new Whirlpool products because the units already have a design aesthetic that fits with what retailers have on the floor.

Swift uses the company's various kitchen brands to explain the influence of VBL. The Whirlpool brand primarily targets the needs of busy women, "active balancers" who look for cooking appliances that produce the best quality of meal for the least possible effort. That contrasts with the company's KitchenAid line designed for the "home enthusiast" who is passionate about cooking and would rather have total control over the experience than ease through automation. A Whirlpool microwave has one button for popcorn which does the whole thing in a single step, while KitchenAid has a butter-melting button for coating popcorn, but can also be used in the preparation of other dishes.

"Visual Brand Language is an architecture that is more than just appropriate for today. It has legs into the future," says David Swift.

Whirlpool's most dramatic success linking design and innovation through VBL was the global launch of the company's entry into the front-loading washer and dryer market, introduced as Duet in the U.S. and Dreamspace in Europe. For Whirlpool, Duet was a breakthrough in design, ease of use, energy efficiency and low-water consumption. The solution propelled Whirlpool from a 0% share in front loaders to 40% share within the product's first year on the market. Whirlpool introduced the machines with a distinctive point of difference: a pedestal option that raises the

drum height and thus reduces strain from bending and stooping. The optional pedestal, with space to store detergent and bleach, adds an extra \$200 to the cost of each unit. "What it does for us as a company is provide a whole separate stream of revenue," says Jones.

The attractive design of the units also changed another industry paradigm. Prior to the launch, about 20% of consumers bought washers and dryers in pairs. After Duet, that number immediately rose to 80%. "Through the use of design, color, finish and material, we've now even driven certain sub-models within the front loader family up to almost 98%," say Jones.

Duet, begun in 1999, illustrates the change in the way Whirlpool now views design as a combination of both science and art. Jones expanded the talent base at his global design organization: Before initial Duet concepts were even considered, small teams of usability anthropologists, industrial designers, engineers and marketing people went into consumers' homes to watch how they do their laundry. Whirlpool also has created "living labs" where the company installed working kitchens so Jones' team can video-

tape consumers interacting with Whirlpool products.

Jones, himself, anonymously goes on Whirlpool service calls to observe consumers. "There's this one lady in Indiana that was talking about how [Duet] was like a Ferrari. She wished it was in red," he recalls. "Who would have thought a consumer would be equating their washing machine to a sports car? There is that kind of intelligence we pick up. Some of this work has spurred additional development around the pedestals. That is unexplored real estate that is ripe for further exploration."

Indeed, Whirlpool's current design innovations underscored by VBL are already having impact on the company's future.

"VBL is an architecture that is more than just appropriate for today. It has legs into the future," Swift concludes. "We have twice as many innovations in our pipeline today than we did three years ago, and the time to develop them has been cut in half. We're getting twice as productive with half the time to develop. Design architecture and the VBL work have been enablers of that."

In-Sink Dishwasher

Ideal for small loads, KitchenAid's Briva is an in-sink dishwasher. The stainless steel lid opens onto a cavity that can easily wash five place settings and flatware and uses 50% less water than a full-sized dishwasher.



Detergent Dispenser

Analyzing the steps that people go through to complete their laundry led Whirlpool to introduce a number of innovative conveniences, such as a detergent dispenser drawer built into the Duet and Kenmore washers.



Fabric Freshener

The revolutionary Fabric Freshener is a portable appliance that removes odors and relaxes wrinkles in clothes without chemicals or detergents, completing the task in just over a half hour.



Control Panel

Whirlpool used color to highlight key steps on the Duet's control panel and organized information in an easy-to-understand manner and described cycle choices the way people think of their laundry.

