

# METROPOLIS

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## Aerons Apparent

By Dan Ferrara

Two very different chair manufacturers position themselves to inherit the upscale office throne.

There are people for whom a chair is just a thing to sit on; people for whom an office chair is just a thing to sit on at the office.

David Gresham isn't among them. "A chair is magical and wonderful because it can be sort of an icon of intent, an icon of vision," he says, growing happy and intense. "At its best, it transcends being just two physical planes in relation to each other, which you then perch your buttocks on to take X amount of load off your legs. A chair becomes an outlet of self-expression; it becomes about our perception of ourselves."

He *really* isn't among them.

Nor is Niels Diffrient, though Diffrient is a more reserved man than Gresham, and his ruminations are more pragmatic. "You cannot come up with the perfect chair," he says. "That keeps us all striving."

Gresham and Diffrient aren't just two people who feel a certain way about chairs—they're also the hopeful fathers of a couple of new ones. Gresham directs the design efforts of Steelcase, the largest manufacturer of office furniture in the world. His chair, eight years and \$35 million in the making, is called the Leap. Diffrient works with a small, ambitious company called Humanscale. (Humanscale's total sales last year were about \$1 million less than what Steelcase has invested in the Leap alone.) His chair, which really is *his* chair—you'd have to judge its cost in hours of Diffrient labor—is called the Freedom.

With these chairs, Gresham and Diffrient are pointed toward the same customers (big companies, the bigger the better) and the same approval from the design community. Their chairs come in at the same price point—about \$800 for the basic unit. And the two designers definitely have identified, and will some-

times even acknowledge, the same leader in terms of market and design: Herman Miller's Aeron. A spidery, striking statement of ergonomic

intent, the Aeron changed the face of the task-chair category the moment it was introduced in 1994. Steelcase and Humanscale are hoping to do the same.

**It makes sense** that right now, in an information-based economy that puts many people in front of computers all day

long, the focus of office furniture would be on seating. And as computing has become sexier, the chair-as-hardware has had to keep up. The sensual appeal of the Aeron is not unlike that of the blackest, sleekest cell phone or laptop or digital camera. It's an electronic aesthetic that has trickled down to analog office items like the Aeron and is probably a major factor in the chair's overwhelming success.

The Aeron has given Herman Miller, the maker of the Eames lounge chair and the Nelson bench, among other classics, a design icon for this decade. It also produces a lot of money—the company won't reveal

how much but will say that Aeron sales have increased an average of 57 percent year to year since its introduction. (Herman Miller as a whole brings in a relatively unthreatening \$1.7 billion a year in sales compared to Steelcase's annual \$3 billion.) Before this chair, designed by Bill Stumpf and Don Chadwick, came along, there was no evidence of a mass market for a chair whose hard lines and ergonomic orientation stood front and center. It took nerve, in 1994, to suggest that a CEO ought to perch his expensive suit not in a big, plush, upholstered chair, but in a lean, mesh-covered, complicated machine for sitting.

The status of the high-end office sitting machine as established by the Aeron is precisely what both Steelcase and Humanscale are counting on. Based in Grand Rapids, Michigan, Steelcase, a company with a reputation as solid—or perhaps stolid—as its name, doesn't want to cede all that hip Aeron territory to half-its-size Herman Miller. Hence the Leap. As Steelcase is at pains to point out, it was way back in 1991 that the company began commissioning studies—11 total, involving four different universities and 17 scien-



Clockwise from top: Herman Miller's Aeron, Humanscale's Freedom, and Steelcase's Leap

tists—about the human back and how it moves when the body is seated. The conclusion was that a good chair is one that moves along with the person sitting in it, providing constant support as that person leans forward or back; talks on the phone or types; shifts and fidgets. Steelcase's experts began developing specific points of view on matters of the spine, with the aim of building a supremely ergonomic chair that incorporated everything it was learning.

While all this was going on, Herman Miller introduced the Aeron, which reflected many of the same beliefs about movement. What could the scooped Steelcase do? It made every effort to out-Aeron the Aeron. It spent another four years, and the rest of that \$35 million, designing the Leap.

In the last two years of the project, the company hired (or rehired, because he had worked for Steelcase some years earlier) David

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Gresham as director of design. Gresham is a man who has a collection of 120 pieces of twentieth-century seating in his two houses and one apartment. His intention for the Leap was to announce to everyone, not least of all the design community, that there's a new Steelcase in town. "At the end of

the day," he says, "our goal was to provide some level of delight, some level of *I want*."

If any chair looks like \$35 million, the Leap does. It's beautiful in a sort of coiled way; it wants to get to work. Like the Aeron, it is explicitly exoskeletal. The central feature is what Steelcase calls the "live back," a plastic back piece with horizontal perforations that allow it to change shape as the spine does. The arms of the chair move both up and down and in and out. When the sitter leans back, the seat doesn't rise in front, but instead stays level and slides forward, in the interest of keeping the user's eyes at a constant level. There is just about no end to the explaining that can be done about this chair, though Steelcase's largest and most extravagant piece of sales literature on it, a chunky spiral-bound book called "Why Leap?," spends a lot of time simply adoring it. One page has a sensuous photo of the chair and a single word: "lust." Steelcase, you can't help thinking, is not a company that has often, if ever, tried to sell lust.

**And, before the Freedom,** Humanscale was not a company that had ever tried to sell chairs. Until its president, Robert King, met up with Niels Diffrient in 1997, King was running a kind of gourmet-ergonomic business based in New York. Then called Neutral by Design, King's company designed and sold variations on three basic computer products: keyboard trays, little landing pads for mouses, and extending, swinging arms for holding monitors.

King decided that his specialized company was ready to make a chair. Diffrient had one. King drove to Diffrient's studio

in Connecticut to see the chair—already in an engineering prototype—and it was not long before the two men understood how much they had in common. Diffrient's chair reflected King's sensibility so thoroughly and elegantly that King didn't just strike a deal to produce the chair. He renamed his company for Diffrient—or, more precisely, for Diffrient's seminal work *Humanscale 1-9*, a three-volume collection of data on human dimensions and movement that was first published in 1974 and still sells through MIT Press.

The essence of the link between King and Diffrient is a pair of simple premises. First, that difficulty inhibits use. In other words, if it takes any special effort to adjust a piece of equipment, users just won't adjust it. And second, following from the first, that although it is more difficult to make things easier for the user, that is exactly what the designer must do. The best way to allow for adjustments would be to make a mechanism so easy, so smooth, and so intuitive that the user is essentially unaware of it. (Steelcase, in contrast, opts for a lot of awareness paired with a lot of education; the company has an instructional video on CD-ROM for the Leap and encourages Leap-owning companies to post the video on the Web for employees to consult when they have questions.)

The Freedom has something in common with both the Leap and the Aeron. "I've exposed the bones," says Diffrient, whose four decades as a design professional include an internship with Eero Saarinen. "I hate the idea of hiding things under covers. I knew it was going to be an exoskeletal design from the start."

But on the most basic level, the Freedom departs from its forebear and its contemporary. The Aeron and the Leap are overtly, even proudly, complex; one feels tempted to count the levers, paddles, and dials. The most sophisticated thing about the Freedom is its unassuming simplicity. While the Leap, in particular, is distinguished by its this-that-and-the-other-thing adjustability, the Freedom has just three of what Humanscale calls "fittings" to customize seat height, seat depth, and backrest height. There are no tension controls; rather, the chair's mechanism senses the sitter's weight and provides an appropriate level of resistance. To adjust the height of the arms, you just take hold of the end of the armrest and give it the slightest upward twist, like you're hitting the throttle on a motorcycle, and the arms float up or down.

So where the Leap is powerful and direct, the Freedom is graceful and subtle. If the Leap is a machine, then the Freedom is an athlete.

Ultimately, what both Steelcase and Humanscale want to do is what Herman Miller does with the Aeron: Use design oohs and ahhs to move product. Make a statement and make money. "We're saying that we think this will be the best-selling chair ever," says Ken Tameling, Steelcase's product manager for the Leap. "I have no intention of being a niche player," says Robert King.

These are chairs we're talking about. This is serious.

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