The Laptop Crusade

The mission: Create a $100 computer for millions of poor kids around the world. Now designer Yves Béhar just has to figure out the details.

By Douglas McGray

Yves Béhar sits at a wide worktable on the lofted second floor of fuseproject, his San Francisco design studio, surrounded by windows and whiteboards and nearly a dozen foam laptops. He is tall and tan, with a surfer's mess of curls and the quiet, easy manner of someone who just woke up from a nap. "There are two types of projects," he says. "There are the stylist projects – the ones you sign with your signature. Then there are the ones that are going to be difficult." He looks at his pile of discarded ideas, none of them much alike, and smiles.

For nearly a year, Béhar has been at work on the most visible and most controversial project of his career. His client, a nonprofit offshoot of the MIT Media Lab, had dreamed up a radical new computer. Depending on who you asked, it was either soon-to-be-legendary vaporware or a shortcut to modern education for tens of millions of poor kids around the world. The plan called for a garage full of experimental technology: radio antennas that network computers up to 10 miles apart without satellites or towers; a dual-mode display that switches to monochrome in bright light; a power scheme that lets the computer run indefinitely without an electrical outlet. But nothing worked together. Media Lab cofounder Nicholas Negroponte was looking for someone to puzzle together the technology – someone to make it bright and iconic, rainproof, dustproof, heatproof, drop-proof, spillproof, and intuitive to a Thai or Nigerian child who had never seen modern technology. Negroponte would offer the laptop to governments who would commit to buying at least a million computers each;

it promised to outsell every other laptop in the world in just a few years. Oh, and one more thing: The machine would need to cost one-fifth the price of the cheapest laptop at Wal-Mart. The Media Lab dubbed the project One Laptop per Child, but everyone else knew it simply as "the $100 laptop."

Béhar was skeptical at first. And who wasn't? After Negroponte announced the plan at the World Economic Forum in January 2005, the critics descended: Most scientists said a $100 laptop was unbuildable, many development experts said it was out of touch with the needs of poor communities, and a good number of educators wondered about giving computers to kids who go without modern textbooks. Steve Jobs dismissed the idea as "a science project." Intel's chair, Craig Barrett, called it "a gadget." Bill Gates mocked the idea of its battery-charging crank. Béhar saw their point. "I grew up as a designer in Silicon Valley," the Swiss-born Béhar says, "but I'm not one who sees computing as the remedy for everything."

There was something about the project that appealed to him, though, something that almost sounds like nostalgia. "Computers were supposed to be a democratizing tool. You used to see that boundless optimism from Silicon Valley hardware companies. I'm not sure it's still there," he says. "One Laptop per Child is the first thing I've seen in many years that is in line with the original goal of the PC."

Now it just has to work.

Béhar got involved in the laptop project when a Media Lab alum invited him to present ideas on next-generation computer concepts. He focused on pragmatism over high art. "This is a product that has to go into the field," he says. Meantime, the design firm Negroponte originally hired to create the prototype, Boston-based Design Continuum, had run into some trouble. "We got stuck and could not rethink the basics," Negroponte says. So he turned to Béhar: "Yves brought us a fresh look."

Most star designers have a signature style. Whether the product is a motorcycle or a toilet brush, they use a distinctive color palette, curve, material, or texture. "They suffer from an almost obligatory style," Béhar explains. "Their work has to be like what they have done before, because that is how the product is marketed."

Béhar's work is different. His massive chandelier for Svarowski – a loose tangle of organic curves hanging at JFK airport – hardly seems imagined by the same guy who fashioned Aliph's noise-canceling Jawbone headset with its hard metal angles and a line of bouncy rubber clogs for Birkenstock. There is a unity to Béhar's work, but it isn't about colors or materials or even genres of design. "He takes minimalism and has fun with it," says Joseph Rosa, architecture and design curator for the Art Institute of Chicago. And often that means subtle, even invisible use of experimental technology. A simple cashmere hoodie for the New York fashion house Lutz & Patmos appears almost undesigned, until you discover that it is water-resistant (Béhar had each cashmere fiber coated with Teflon). Or take Béhar's Leaf light, which Herman Miller released this summer. The LED bulbs along its bright face remain startlingly cool to

the touch, thanks to a novel network of vents and a heat sink that took nearly four years to engineer. All that science means you can direct your light source simply by grabbing it – an interface that humans mastered a few million years ago.

As soon as they accepted the challenge, Béhar and a handful of his 28 staffers began a stretch of late nights at the studio, sketching shapes on tracing paper. They reviewed 20 or 30 models that other designers had proposed at various points in the project. They gave special attention to Design Continuum's original version, a boxy green laptop with a prominent power crank.

"There were too many parts flapping around, too many open places. It wasn't realistic," Béhar says. "It should be compact and sealed, like a suitcase. And it should really look and feel different. It shouldn't look like something for business that's been colored for kids." (That's more than an aesthetic concern: An unmistakable, childlike design will be the laptop's only real defense against theft and resale.)

"My temptation as a designer was to explore a lot of options," Béhar says. He looked into electronic ink displays, which run on very low power and could allow for smaller, lighter batteries. (The laptop must be light, since kids are meant to carry it everywhere.) He liked the idea of a soft keyboard, connected to the screen with something called a living hinge (think of the way a cap attaches to a shampoo bottle), which would be cheap and practically indestructible. But E Ink technology is not mature enough, and kids who have no desks at school would find a floppy hinge awkward to balance in their laps. Besides, the laptop was supposed to roll off an assembly line at Quanta, the world's largest laptop manufacturer, by the end of 2006. He had to move quickly. "A lot of concept ideas I eliminated pretty early on," Béhar says.

- View Special Offers
- View All Titles
- Allure
- Architectural Digest
- Bon Appétit
- Brides
- Condé Nast Portfolio
- Condé Nast Traveler
- Cookie
- Details
- Domino
- Elegant Bride
- GQ
- Glamour
- Golf Digest
- Golf World
- Golf For Women
- Gourmet
- House & Garden
- Jane
- Lucky
- Men's Vogue
- Modern Bride
- Self
- Teen Vogue
- The New Yorker
- Vanity Fair
- Vogue
- W
- Wired