





"Does design really matter?"

"Design is a fad, so yes."

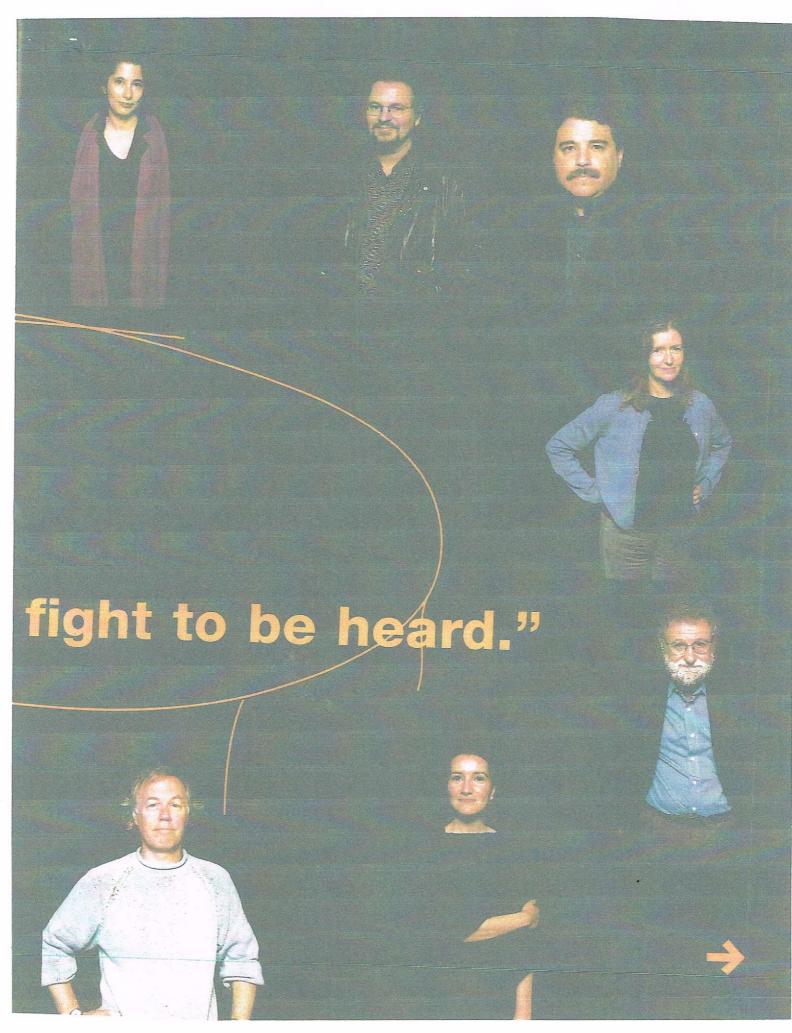
"In other words, intrinsic value follows meaning follows form follows economics follows function follows more economics follows market research."

"There has to be a

Design roundtable:
clockwise from top left:
Paola Antonelli, Tim
Parsey, Bran Ferren,
Chee Pearlman, Bruce
Sterling, Lee Green,
Lorraine Wild, Don
Norman, Ayse Birsel,
Tucker Viemeister, David
Kelley, Ted Selker, Ray
Riley; invisible: Erik
Adigard, Aaron Betsky,
Robert Brunner, Trevor
Creed, Gary Fisher, Andy
Proehl, Ettore Sottsass,
John Thackara, Rick
Valicenti, Richard Saul
Wurman, Susan Yelavich.







A Conversation About The Good, The Bad, And The Ugly

Moderated by Chee Pearlman



Ettore Sottsass (founder, Sottsass Associati): I try

to be as stupid as possible regarding my profession, which means I try to look at as few design magazines as possible. I don't use the word "success," neither do I use the word "failure." Good design needs bad design and vice versa. For me, design is simply that human activity that sometimes – rarely – is able to communicate.¶

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Gary Fisher (founder, Gary Fisher Bicycle Company):

Design is something I can grow old with. It's home, it's me. \

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Erik Adigard (cofounder, M.A.D.): Design is in everything we make, but it's also between those things. It's a mix of craft, science, storytelling, propaganda, and philosophy.

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Bruce Sterling (science fiction writer): Designers talk and think a lot like science fiction writers do, except in a much less melodramatic and histrionic way.¶

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Chee Pearlman (cochair of the Chrysler Design Awards, former editor in chief of I.D. magazine; chee2000@aol.com): In a sense, they're both talking about the future.

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Bruce Sterling: They both have an immediate, almost hallucinatory sense of engagement with commonplace objects. A designer will talk to you for an hour about a fork or a paper clip, and it's a fascinating discourse. It's what science fiction writers call the spearhead of cognition. You've seized on this doorknob, and there's a paradigm of the cosmic experience of doorknob-ness. Once you're exposed to that, you never recover from that layer of hallucination. You never look at a doorknob the same way again. ¶

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Erik Adigard: At a meta level, design connects the dots between mere survival and humanism. Looked at another way, it's a discipline that's been increasingly commodified.

Photographs by David Ash

Bran Ferren (cofounder, Applied Minds): I believe there are three types of design: There's functional design, and in extreme right-wing functional design, aesthetics are considered a disadvantage – you want to make sure that what you make is really ugly. There's fanciful design, and if it actually works, you've betrayed your destiny as a designer – the ideal is a joyful object that accomplishes no real function. And then there's bad design. Every design involves some combination of those three.¶

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Chee Pearlman: What's an example of the right-wing variety of design?¶

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Bran Ferren: Something like the space station, its creators rebel against the idea of aesthetics because they think it trivializes the project.¶

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Bruce Sterling: I think the space station sucks. If you want to know where design has failed technology, that's it. We've got a dead one up there already – the Russian one that's all eaten by fungus. And now we're building the International Space Station to no particular end. It should be reformulated as an orbital urban-entertainment destination. It needs to be done as sort of a Disneyland thing. I mean, why is it so ugly? Because designers didn't create it. A government bureaucracy called NASA did.¶

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Don Norman (cofounder, Nielsen Norman Group, and author of *The Design of Everyday Things*): It's nonsense to say that the space station wasn't designed.¶

Ayse Birsel (founder, Olive 1:1): To say that something is designed means it has intentions that go beyond its function. Otherwise it's just planning.

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Don Norman: The space station was designed. It was

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designed, in fact, by people who took themselves seriously as designers.¶

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Bran Ferren: That's the worst crime of all, Don. Designers who take themselves seriously should be banned!

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Don Norman: As soon as we think that the design profession is something really unique and special, that's where you get these crazy designs that are essentially of no use to anyone except the ego of the designer. The road is littered with that.¶

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Ted Selker (associate professor, MIT Media Lab):

When you give engineers control over the design, you get the effect that Bruce is talking about, where mechanics is aesthetics. What you see is how it works.¶

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Don Norman: Too much of the stuff produced today is technology-centered. My goal is to put the human back into design. ¶

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Ted Selker: But when you give the industrial designers power, they don't know anything about cognitive science – they don't really understand the technology inside. That's why I have a problem with designers.¶

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Chee Pearlman: Are you saying designers are the weak link?¶

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Ted Selker: No, I think that styling is a weak link.¶

Paola Antonelli (curator of architecture and design, Museum of Modern Art, New York): People think that design is styling. Design is not style. It's not about giving shape to the shell and not giving a damn about the guts. Good design is a renaissance attitude that combines technology, cognitive science, human need, and beauty to produce something that the world didn't know it was missing.

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Robert Brunner (partner, Pentagram): In the past, design was generally a veneer added to make something look better. There were clear divisions between design, engineering, marketing, and manufacturing, and the process was very serial.¶

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John Thackara (director, Doors of Perception conference): And now pervasive computing and experience design are accelerating the transformation of what we mean by design. Distinguishing between hard and soft design – the object and the experience – simply doesn't work anymore.

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Bran Ferren: There is a very scary word, which is "complexity." One of the great enemies of design is when systems or objects become more complex than a person - or even a team of people - can keep in their heads. This is why software is generally beneath contempt. One of the reasons software is so terrible is its complexity. The tools we have to build it are completely inadequate. It doesn't scale, so you just put a few hundred more people on it. But you end up with no vision.

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Chee Pearlman: Are you saying that great vision can come only from an individual?¶

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John Thackara: The era of the lone design genius working in isolation is over.¶

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Ray Riley (director of Explore Group, Nike): Individual designers will exist but they're going to be rare. Because when you're trying to build useful, meaningful experiences, you need people with different expertise.

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Tim Parsey (vice president and director of consumer design, Personal Communications Sector, Motorola): Our opportunity, as designers, is to learn how to handle the complexity, rather than to shy away from it, and to realize that the big art of design is to make complicated things simple.¶

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Lee Green (director, corporate identity and design, IBM): Simplify my life, eliminate the complexity, surprise me with magic – these attributes distinguish the breakthrough products from everything else.¶

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Bran Ferren: But the problem is that when a project exceeds a certain scope and scale, the complexity can override creative vision. It ends up being about specifications and requirements.¶

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David Kelley (founder and CEO, IDEO): The trick is to build a culture of innovation, one that lets people flourish. When you have the right team, the technology, marketing, and manufacturing people work together to make something that one person couldn't do alone. It's a sum-of-the-parts thing. There also has to be a kind of tension: It has to be a fight to be heard.

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Ayse Birsel: Design is also about a set of beliefs. And it's not just the designer's beliefs, it's the beliefs of your team and the manufacturer. I don't think it's a repeatable process. Sometimes you're lucky, and sometimes you're less lucky.¶

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Chee Pearlman: It's like that line about pornography:

You can't define it, but you know a hot creative team when
you see it.¶

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Ray Rifey: Even the best creative team won't succeed without a CEO who creates opportunities for design.

Look at Apple: Something like the Cube would never have

The good 10 percent

of American product design comes out of

big-idea companies that don't believe in talking to the customer.

They're run by passionate maniacs

who make everybody's life miserable until they get what they want."

happened at Dell or Compaq, because they don't have a leader who, like Steve Jobs, knows, "If I let these designers go, they're going to bring back something really great." ¶

Bob Brunner: Hasn't Jobs done this cube thing before?¶

Tim Parsey: It is a gorgeous object.

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Ray Rifey: What's so cool is that the designers didn't try to invent a new shape; they focused on the material itself. The flow of the plastic – it's sculpture in its truest form.

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Don Norman: Sure, and look at who's excited by it – designers. But designers need powerful machines, and the Cube doesn't allow you to put a second processor in. It's an elegant device that has nowhere to go.

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David Kelley: Yes, but the important thing about the Cube is that it will set a trend. Other manufacturers will look at the way it opens so easily for servicing and that may lead them to more simple designs. As a design-driven company, Apple has had a lot of influence.

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Ray Riley: Because of the culture Jobs has created.

Don Norman: Apple always had a bunch of really creative people doing really brilliant work. But it was a playground for children – there was no discipline and no way of making those good ideas happen. Then Jobs returned, the tyrannical dictator with millions of flaws and one great virtue: He can make things happen.

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Robert Brunner: Most companies measure success on a spreadsheet. Apple doesn't subscribe to this. A typical PC maker spends \$10 on an enclosure – any more would erode its margin. Apple will spend \$25 to \$50 because it sees the enclosure as an essential part of the package. Brand, experience, technology, and design are integrated.¶

Bruce Sterling: Apple doesn't sell products, it sells
Apple-ness. And that's what it's all about now. The way
forward is not shipping something off in Styro blocks to
the customer, it's about pulling the guy into your tent.¶

John Thackara: Design has been too slow to focus on services rather than things.¶

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Bruce Sterling: The object is an entryway into the continuing relationship with the company. Think of the Palm. 3Com and the so-called user community are always trying to get your attention with some new thrill. You innocently bought a plastic gizmo but it's turned you into an ongoing revenue stream.¶

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Don Norman: OK, this one I can't resist. As your resident curmudgeon, I have a complaint, and given that we have one of the designers of the Palm V here ... ¶

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David Kelley: And it's too bad the Palm V's been so unsuccessful ... ¶

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Don Norman: That's not been its problem. And it is a brilliant design. First of all, its creators avoided feature-itis – they wanted the Palm to do a few things and do those things well. And second, I just love to hold and stroke and look at it. But it has one flaw: those little navigation buttons! When I close the cover, put it in my pocket, and exert any pressure – guess what? – the Palm turns on, and if I'm not careful, I've lost all my data.¶

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David Kelley: One thing to remember is that this is a new-to-the-world kind of product, so there's a steep learning curve. In the next round, we won't make that mistake again. You really have to look at where products are in their evolution.¶

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Tucker Viemeister (executive vice president for R&D, Razorfish): Designing and redesigning is a never-

ending process. There's always room for improvement - even in utopia.¶

David Kelley: We've probably designed 4,000 products at IDEO over my career, and for every one of them I'd like to send a little note with it that says, "I'm sorry that it's in this present state. Given what I know now, if I could start over again it would be a lot better."

Bruce Sterling: You should send that note.¶

David Kelley: My clients really don't want me to. ¶

Chee Pearlman: The question is, When do you freeze a design? How much do you keep refining it?¶

Bran Ferren: That's exactly the question. And the answer is determined by the corporate structure. In a requirements organization, there is a team whose job is to produce a document that completely describes what their product needs to be. They do focus groups, look at prototypes, the whole bit.¶

They produce the document and submit it to senior management, which summarily rejects it because it's too expensive and takes too long. They then revert to "value engineering" - code for "You can't have what you wanted; what can you live with?" Eventually it's approved, and the project goes forward: The document is tossed over the transom to manufacturing, which tosses the product over another transom to sales. This is how 90 percent of products are designed in big American corporations.¶

Chee Pearlman: And the other 10 percent?¶

Bran Ferren: They come out of big-idea organizations. Those are the ones that don't believe in talking to the customer.¶

David Kelley: If you listen to the customer, they can't tell you anything. You have to watch the customer to really learn something. That's how you get at what they think and feel.¶

Bran Ferren: Big-idea companies are run by passionate maniacs who make everybody's life miserable until they get what they want.¶

The challenge is we're reaching a point at which most projects are so complex they require both: You have to start with a big idea - the vision - and then transition to a requirements process. Because when it comes to technically complex machinery, the building process requires so many trades, so many disciplines, and so many vendors. That's the next generation of design.

Ted Selker: At a place like IBM, there's an infinite world of products that you can create. But, too often, management would say, "Great, you big-idea guys, go go go." But then they give all the money to the people who control the revenue streams, the people with the overhead projectors and PowerPoint slides.¶

Lorraine Wild (principal, Lorraine Wild Design):

When you talk about creativity in the corporate world, at a certain point the issue becomes organizational innovation.

Bruce Sterling: I think the intermediating people running the means of production need to be exterminated - a lot of them are basically war criminals. I want to empower designers. I want them walking across the landscape like a colossus.¶

John Thackara: Designing with people, not for them, brings the whole subject of user experience to life. Success will come to organizations with the most creative and committed customers.

Bruce Sterling: I would like to see a direct relationship between the designer and the consumer, and I think that's very likely to happen. Digital networks will make it happen. We have to disintermediate the production process.¶

Bran Ferren: So you're suggesting designers should focus on global domination?¶

Bruce Sterling: That would help! I think designers are being sucked to the fore by a general power vacuum.¶

David Kelley: That could be true. But I think it has to do with technology and the fact that designers are creating things that are new to the world. For years it seemed we were redesigning wastebaskets and toasters. How much attention can you get for that?¶

Paola Antonelli: I think of a Reyner Banham quote about Hispanic-style architecture in Los Angeles. He says it's like the weather. It's discussed only when it's exceptionally good or exceptionally bad, but it's always there. You could say the same thing about design.¶

Bran Ferren: Most products are ugly. The harsh reality is that in many of these markets, form follows funding. And that products go where the market takes them.¶

Erik Adigard: In other words, intrinsic value follows meaning follows form follows economics follows function follows more economics follows market research. ¶

Ettore Sottsass: And when you talk about the market, it's not so much how good the potatoes are, but how

promise, but it looks like a research project from the institute for the aesthetically challenged. 25 years from now it will be a great design."

good you are at selling potatoes. ¶

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Chee Pearlman: So does design really matter to the bottom line?

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Rick Valicenti (design director, Thirst): Design is a fad, so yes. ¶

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Gary Fisher: In the past, the technology was so exciting that looks were secondary. Now, standing out in the marketplace requires design.

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Don Norman: Sony's sales have certainly gone up as a result of the Vaio line.¶

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Ted Selker: And the Vaio is all about design. There's no great engineering inside.¶

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Richard Saul Wurman (director, TED conference):

The first decade of the 21st century will be marked by the new economic value of design – design will be in the driver's seat of successful businesses.¶

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John Thackara: Yes, design matters, but so does technology and the value proposition. All these factors interact in ways too complex to measure financially, so I say that design contributes to the triple bottom line of environmental impact, social quality, and business profitability.¶

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Lee Green: Thomas Watson Jr. once said, "Great design will not sell an inferior product, but it will enable a great product to achieve its maximum potential." Conversely, a lousy design may achieve some success because of excellent marketing or discount pricing, but it seldom achieves greatness.

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Chee Pearlman: What designs have achieved greatness?¶

Paola Antonelli: The Post-it. And the 747. Those are my next two accessions into the MoMA collection.

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Ray Riley: The original Volkswagen Beetle.¶

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Richard Saul Wurman: The New Beetle.¶

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Aaron Betsky (curator of architecture, design, and digital projects, San Francisco Museum of Modern

Art): The new one is a great redesign. But its success had as much to do with marketing as with its actual contours.

Trevor Creed (senior vice president of design,

DaimlerChrysler): The Chrysler Building and the zipper.¶

Susan Yelavich (assistant director for public programs, Cooper-Hewitt, National Design

Museum): The Earnes chair, OXO Good Grips, and those carry-on suitcases with wheels and extending handles.¶

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Andy Proehl (manager, interaction design, Sony Design Center): I admire the Earnes chairs and the Aeron, too. The Aeron's looks don't shout design ... you have to sit in it to know what you're dealing with. The best thing it's done is to banish the idea that bigger and puffier equals important. It dispels the idea that expensive leather or ultrapadded wool are the status materials.¶

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Tim Parsey: It's all about the user and what appeals to them. One of my favorite designs is a three-pronged fork designed by Castiglioni in 1938, and reissued by Alessi in 1990. It's timeless and gorgeous.¶

Don Norman: It's interesting. The Castiglioni fork looks uncomfortable and difficult to use, but guess what – I don't care! That's significant, because I'm known for harping on usability. But this fork is something I really do take pleasure in just holding.¶

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Lorraine Wild: Don, I was waiting for you to debunk the fork, and I'm glad you didn't, because history is full of consciously designed consumer objects that, however flawed, convey poetry and inspire delight. Our challenge, at least one of them, is to transfer those qualities of beauty, personality, laughter, and even surprise to the more

complex design problems we now face.¶

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Bran Ferren: My list of extraordinary designs starts with evolution – a process that allows things to design other things that are more complex than they could understand.

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Paola Antonelli: Is that design?¶

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Bran Ferren: It's an anti-entropic process: Rather than driving from order to disorder, the process converges toward systems that work. You can call it a grand design, but it's a grand design different from that of the universe. And I think that the Internet 25 years from now will be a great design. Although the Internet of today has staggering promise as a storytelling and communications device, it looks like a research project from the institute for the aesthetically challenged. In the same category, I'll add the computer, or what we now refer to as computers. The stuff is embarrassing.¶

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Don Norman: The computer has reached this monstrosity stage, where it's impossible to make it better because it's hoisted on its own petard. You can't get rid of the history.

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Lorraine Wild: It's so much easier to make lists of things that are godawful. And a lot of them have to do with the processes attached to products that are part of branded systems. Think of the experience of commercial airline travel.¶

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John Thackara: I tend not to like any all-encompassing experience that has been designed for me – airports, shopping malls, theme parks.¶

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Susan Yelavich: My worst-design list starts with aging, buggy computers. Then comes SUVs, pomo shopping malls, and condo complexes.¶

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Trevor Greed: I have a fairly long list, and at the top I'd put the Pontiac Aztek, the AMC Pacer, interior plumbing, Las Vegas, and the strip mall. I also have issues with wireless communications. The technology is wonderful but cell phones are difficult to use while driving – the very place they're most likely to be used.¶

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Richard Saul Wurman: The fundamental failure of most graphic, product, architectural, and even urban design is its insistence on serving the God of Looking-Good rather than the God of Being-Good. Think of postmodern architecture (all of it!), 95 percent of all product-instruction books, all VCRs, and CD packaging with its unopenable shrink wrap.¶

David Kelley: I don't have anything on my worst-design list, because design is evolutionary: A product is bad now, but it's going to get better. I prefer to have a bunch of

crummy products in the world and improve upon them, rather than lay back and intellectualize to the point that nothing gets to the market.¶

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Tucker Viemeister: Think of the potato peeler. For thousands of years, cavemen ate the skins, then they scraped them off with a rock, then a knife. The modern peeler was invented about 100 years ago. Then came the big rubber OXO Good Grip. And in time, we'll look back at that and think it stinks!¶

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Paola Antonelli: Most of the Internet exemplifies bad design – there's no balance between means and ends. And then there's another example of *really* bad design: Target. I don't like the way they use designers' names. They took Michael Graves and made a big fuss a lot of products that are really traditional with a lot of dimples and colors added to them.¶

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Chee Pearlman: Many people point to Target as a symbol of design for the masses – as evidence of a revolution. But you're cynical?¶

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Paola Antonelli: Yes. That's not a design revolution, that's a marketing revolution.¶

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Bran Ferren: There's also the manufacturing revolution. Rapid prototyping represents a fundamental breakthrough in the way designers think about their work. Now you don't have someone saying, "Oh, we can't visualize this. We can't make that mold." Computers offer the promise of dynamic clay that executes itself all through the process.

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Bruce Sterling: "Dynamic clay that executes itself!" Thank you, Jesus!¶

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Bran Ferren: The world is changing, and it's truly extraordinary to experience this after living through the '80s, which were so fucking boring that I couldn't believe it. We are on the threshold of fundamental insight in areas like biology and nanotechnology – the idea that, as a designer, you can build with components the size of particles.¶

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Ted Selker: Carbon nanotubes are so full of promise now, just as the laser was in the '60s. Researchers have made a one-atom transistor!¶

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Bruce Starling: Over the decades, there have been many, many industrial designers with ambitious plans, to rebuild the surface of the Earth. I think designers are closer to that kind of grail than they've ever been before. It's like one hard push through that glass screen, and it could break loose.¶

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Ted Selker: This is going to be a lot of fun.