

Impact of Design

Design for Impact



DESIGN METHODS

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Discussion Objectives

- Build an understanding of how design has evolved over time as a practice and an industry, including the principles and movements that influence design today.
- Discuss how design will continue to evolve into the future.
- Consider how design can be used to create business, individual, and social impact.



IMPACT of DESIGN

DESIGN for IMPACT

Evolution of Design

Craft Design

Industrial Design

Human-Centered Design

Design Thinking

Business Design

Systems Design



Industrial Design

Industrial design (ID) is the professional service of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems for the mutual benefit of both user and manufacturer.

Industrial designers determine the way a product looks, feels and how well it functions



Industrial Design





In the past twenty years, design has branched out in new directions, galvanizing young practitioners, sparking novel business models, and attracting worldwide attention. A designer today can choose to focus on interaction, interfaces, the web, visualization, socially minded infrastructure, immersive spaces, biodesign, sustainability, video games, critical scenarios, and, yes, even products and furniture. Outstanding examples of this vitality and diversity are on display here, ranging from a mine detonator powered by the wind to the immortal spatial puzzle Tetris. Tetris is one of the first video games to enter MoMA's collection, selected with thirteen others as a pillar of interaction design—one of the most important and oft-discussed expressions of contemporary design creativity.

One of design's fundamental tasks is to help people deal with change. Designers stand between revolutions and everyday life: they make innovations manageable and approachable, so that they can be embraced and assimilated. For this reason, in the years to come, designers will increasingly be at the nexus of culture, politics, and society. Like physics, design will be loosely divided into the theoretical and the applied. Theoretical designers will be exquisite generalists, but ready to roll up their sleeves. Applied designers will continue to make objects, never forgetting functionality and elegance. Objects, however, will not always be physical; they will often be shared, not owned; they might be starters that people will complete and customize at home using 3-D printers and other on-demand services; or they will be tools that allow scientists, policy makers, and citizens to visualize and manage complex systems.

Design is not only about making things, people, and places pretty. Like the artifacts of applied design on view here, it is sometimes ugly, but it is always meaningful, and it encompasses all facets of human activity, including science, education, politics, and even war.

The exhibition is organized by Paola Antonelli, Senior Curator, and Kate Carmody, Curatorial Assistant, Department of Architecture and Design.

MoMA

The Museum of Modern Art

There are still people who think that design is just about making things, people, and places pretty. In truth, design has spread to almost every facet of human activity, from science and education to politics and policymaking, for a simple reason: one of design's most fundamental tasks is to help people respond to change. A designer today can choose to focus on interactions, interfaces, the Internet, visualizations, socially minded infrastructures and products, 5-D spaces, bioengineering, sustainability, video games, critical scenarios, and yes, even furniture.



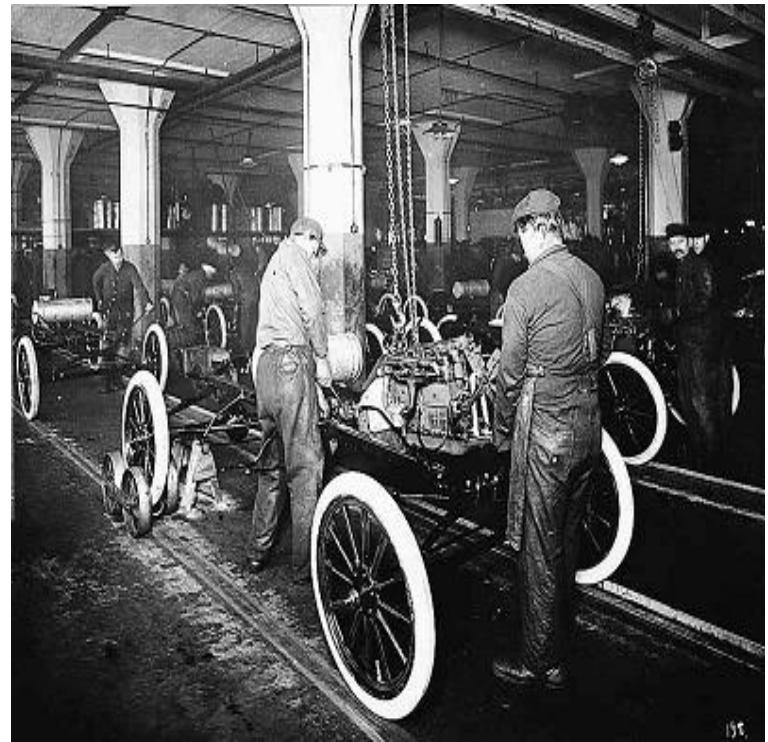
craft > manufactured



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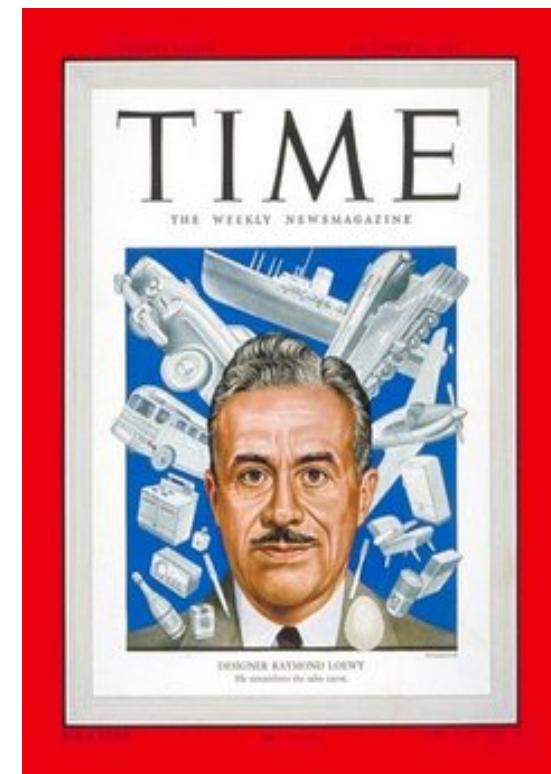


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Raymond Loewy



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“Most advanced, yet acceptable” –
Raymond Lowey









Norman Bel Geddes

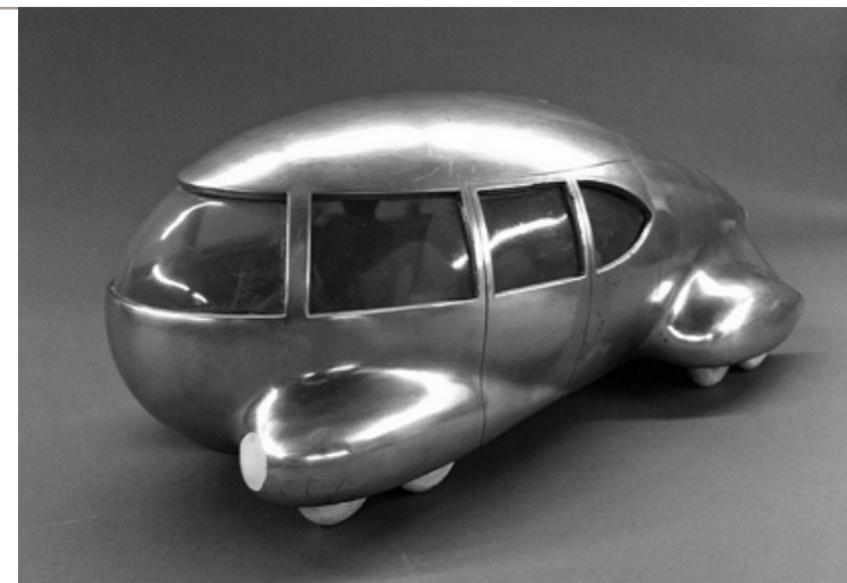


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“A free-flowing movement of people
and goods across our nation is a
requirement of modern living and
prosperity.”

— Norman Bel Geddes





I Have Seen the Future: Norman Bel Geddes Designs America

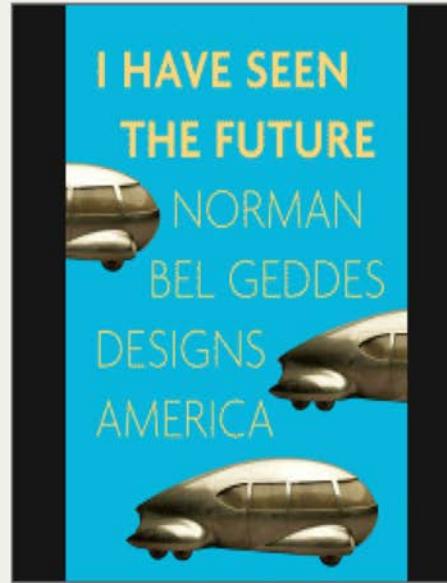
SEPTEMBER 11, 2012 – JANUARY 6, 2013

When you drive on an interstate highway, attend a multimedia Broadway show, or watch a football game in an all-weather stadium, you owe a debt of gratitude to Norman Bel Geddes (1893–1958). Geddes was both a visionary and a pragmatist who had a significant role in shaping not only modern America but also the nation's image of itself as leading the way into the future. Geddes was a polymath who had no academic or professional training in the activities he mastered—designing stage sets, costumes, and lighting; creating theater buildings, offices, nightclubs, and houses; and authoring prescient books and articles.

Geddes believed that art, as well as architecture and design, could make people's lives psychologically and emotionally richer. He influenced the behavior of American consumers and helped make industrial and theater design into modern businesses. Believing that communication was key to shaping the modern world, Geddes popularized his vision of the future through drawings, models, and photographs. Of his utopian predictions, Geddes's best-known project was the Futurama exhibit in the General Motors "Highways and Horizons" pavilion at the 1939–1940 New York World's Fair. It was an immense model of America, circa 1960, seen by 27,500 visitors daily who exited with a pin proclaiming "I Have Seen the Future."

I Have Seen the Future: Norman Bel Geddes Designs America explores the life and career of this complex and influential man and is organized into five thematic sections.

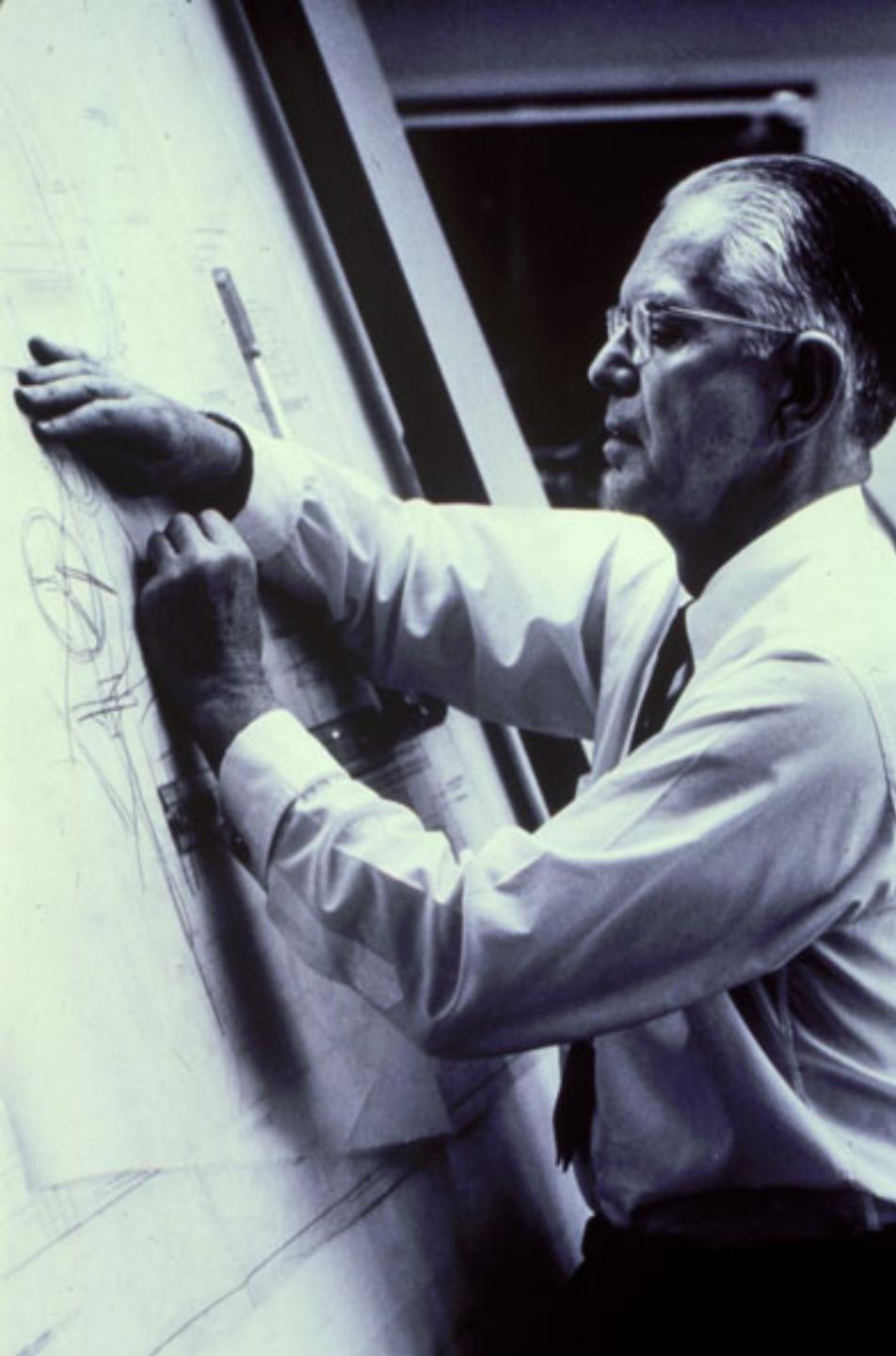
Setting the Stage: 1916–1927



HARRY RANSOM CENTER
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Henry Dreyfuss



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“If people are made safer, more comfortable, more eager to purchase, more efficient, or just happier, the designer has succeeded.”

– Henry Dreyfuss

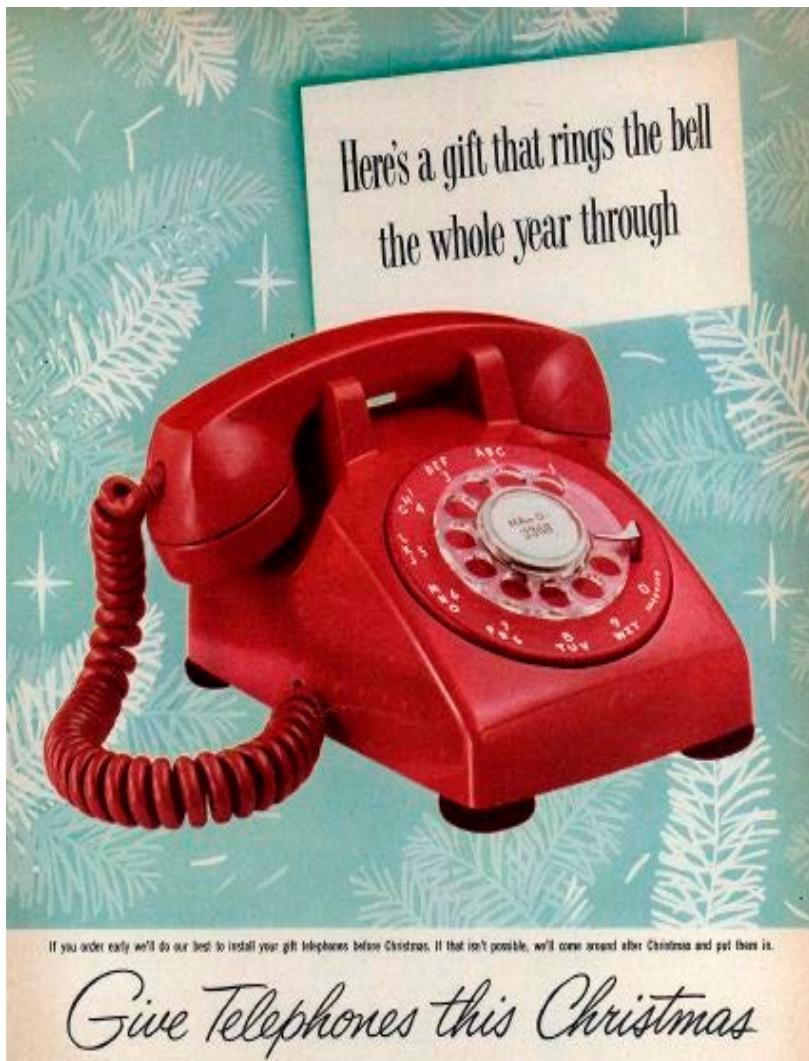




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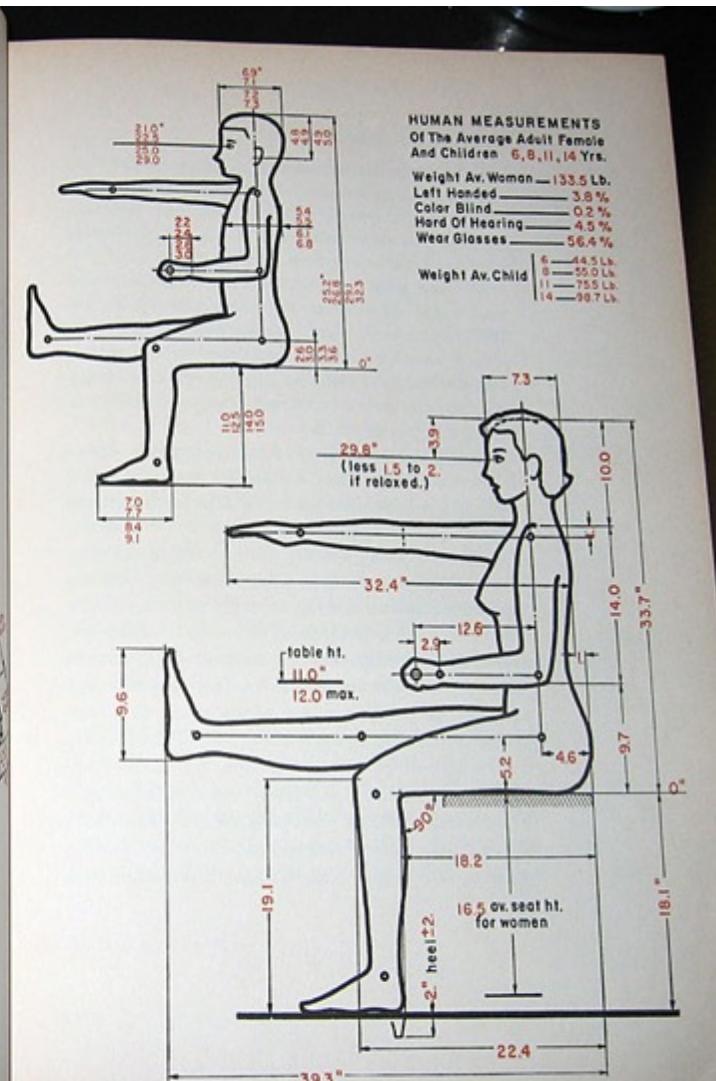
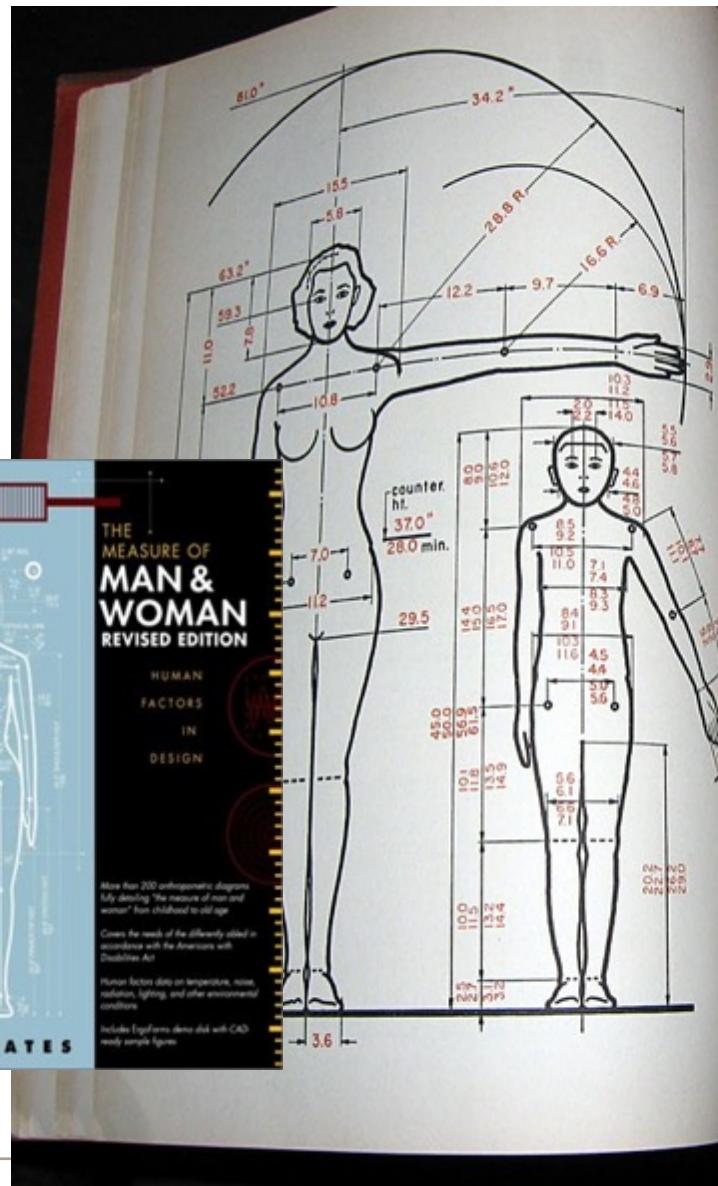
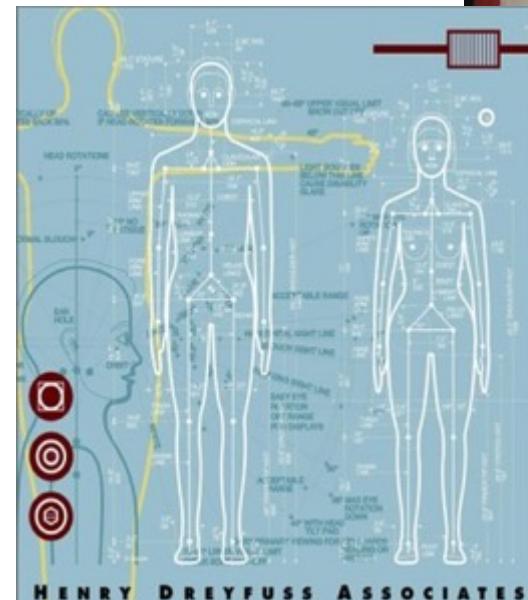


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Anthropometrics



A black and white photograph of Eero Saarinen, a Finnish-American architect and designer. He is shown from the chest up, wearing dark-rimmed glasses and a dark, textured suit jacket over a light-colored shirt and tie. He is seated at a desk, looking down intently at a large, white, flared vase he is holding in his hands. A small model airplane is visible on the desk to his left. The background is slightly blurred, showing what appears to be an office or studio environment.

Eero Saarinen



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“Always design a thing by considering its next larger context — a chair in a room, a room in a house, a house in an environment, an environment in a city plan.”

- Eero Saarinen





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Charles & Ray Eames



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“Design is a plan for arranging elements in such a way as best to accomplish a particular purpose.” – Charles Eames









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iss-produced leg splints, splint packaging, and action is being applied to secure the k...



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Joseph Eichler



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Honor-award house:

A wonderful world of your own

By JOSEPH B. MASON
BUILDING CONSULTANT

Protected terrace and open-sky inner court blend indoor and outdoor living without sacrificing privacy. The price (including land): \$24,950 for this four-bedroom house with two bathrooms, family room, dining room, and a 12-by-20-foot living room

Don't underestimate the importance of your surroundings when you serve meals to your family and friends. Here the family room, kitchen, and dining room extend across the rear of the house to produce this striking open arrangement. Glass walls reach to the two-inch plank-and-beam ceiling and have sliding doors encased in aluminum frames

Builder: Eichler Homes
Architects: Jones & Emmons

The front of this award-winning house concedes that the auto is here to stay: Both garage (at left in photo below) and carport are provided. Guests enter through door in the opaque-glass fence that separates carport from inner court



PHOTOGRAPHS BY ERNST BRAUN

FEW houses in modern times have had the acclaim of the one shown on these pages. The team of builder and architects that produced it has been given the first award of honor—"for better home design and community planning"—of the American Institute of Architects and the National Association of Home Builders.

What makes it such a wonderful house? First of all it has both value and extra-fine livability. It sells in Sunnyvale, California, for \$24,950, complete with land, fences, and built-in appliances. The plan includes a 12-by-20-foot living room, a dining room, family room, four bedrooms, two bathrooms, and a garage and carport. It has radiant-heated floors, sturdy post-and-beam construction, insulated walls and ceilings, and ceramic-tile baths.

And it features in a modern dwelling the dramatic use of a beautiful old idea—the inner court. Too, the architects have closed the street side to public view, and they've

opened the rear with floor-to-ceiling glass walls that look out on a garden terrace. Beyond are high fences at the edge of the property. With these devices they've achieved an atmosphere of daylight and natural beauty throughout the house, yet they've preserved that essential human right—privacy.

But it is in the extra quality of livability that the house excels. You enter through a door in an opaque-glass wall, or fence, that separates the carport from the charming inner court. An electric latch for opening and shutting this door is controlled by a push button inside the house.

The open-sky, glass-enclosed court introduces an element of surprise to those first seeing it, but it becomes, on better acquaintance, a source of uplift for its constant reminder of the natural beauty of sky, daylight, and planting. It invites use as an outdoor living room, as a yard in which children can be watched at play, and as a meeting place for



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Charles Harrison



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“Your gift to the world is to provide straightforward solutions to real problems for living, breathing human beings.” – Charles (Chuck) Harrison





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A Life's Design



ife 500



A *Erie's Design* 2 Miles Total. 2 Miles Distance. 8-12 Miles Total. 8 Miles Distance. Erie 165.



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Dieter Rams



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“Good design is as little design as possible.” – Dieter Rams



BRAUN



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Dieter Rams 10 principles of good design

- 1. Good design is innovative.**
- 2. Good design makes a product useful.**
- 3. Good design is aesthetic.**
- 4. Good design helps us to understand a product.**
- 5. Good design is unobtrusive.**
- 6. Good design is honest.**
- 7. Good design is durable.**
- 8. Good design is consequent to the last detail.**
- 9. Good design is concerned with the environment.**
- 10. Good design is as little design as possible.**





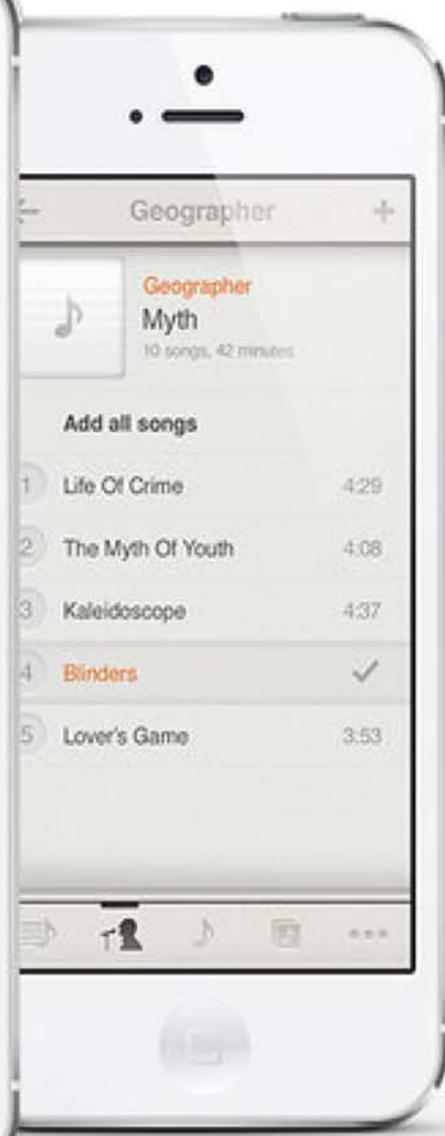
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1958



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1977



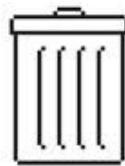
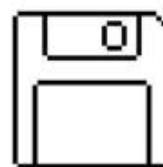
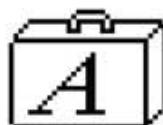


www.oyayubizoku.com



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“There are two primary functions of a good human interface design: make the product easy to learn, and make it easy to use, both without seriously compromising power and performance.”

You must remember that you are dealing with a human being and tailor your interface to deal gently with the kind of fears and anxieties that the very existence of your programs may provoke.”

- Apple II Human Interface Guidelines - 1985

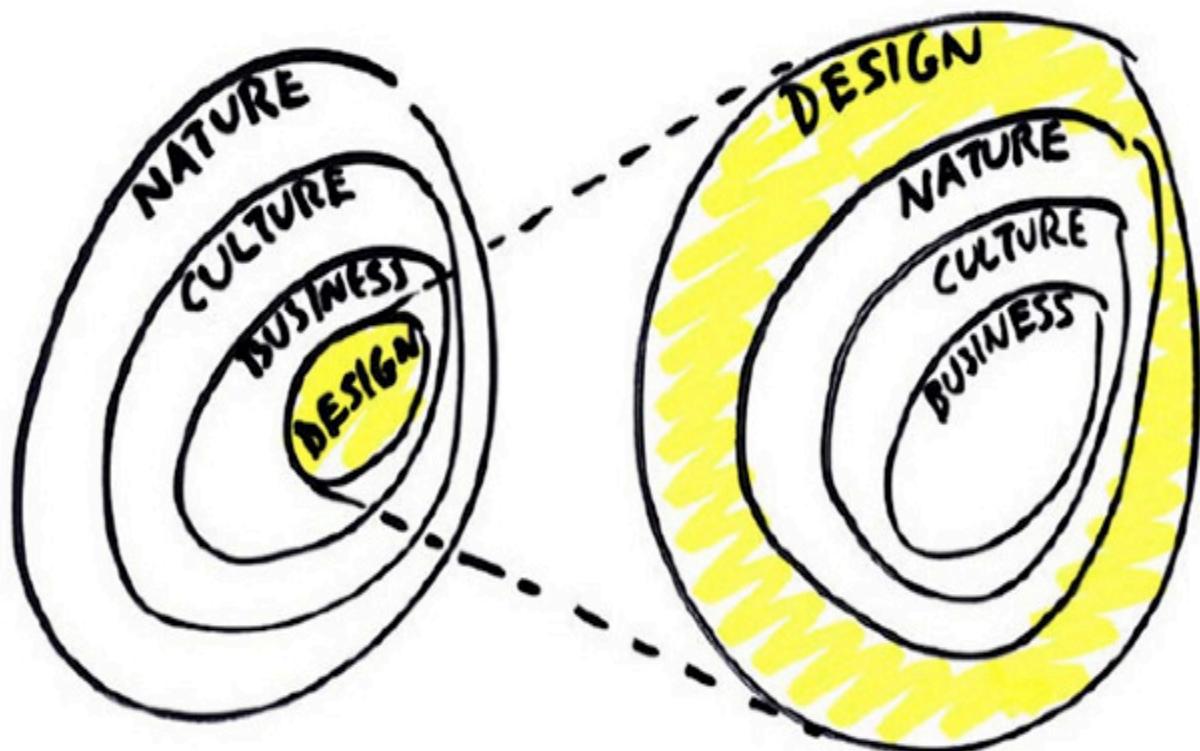




Bruce Mau



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MASSIVE CHANGE

Bruce Mau

and the Institute without Boundaries

Massive Change
is not about
the world
of design;
it's about
the design of
the world.

PHAIÐON

PHAIÐON

MASSIVE CHANGE

1. Allow events to change you.

You have to be willing to grow. Growth is different from something that happens to you. You produce it. You live it. The prerequisites for growth: the openness to experience events and the willingness to be changed by them.

2. Forget about good.

Good is a known quantity. Good is what we all agree on. Growth is not necessarily good. Growth is an exploration of unlit recesses that may or may not yield to our research. As long as you stick to good you'll never have real growth.

3. Process is more important than outcome.

When the outcome drives the process we will only ever go to where we've already been. If process drives outcome we may not know where we're going, but we will know we want to be there.

4. Love your experiments (as you would an ugly child).

Joy is the engine of growth. Exploit the liberty in casting your work as beautiful experiments, iterations, attempts, trials, and errors. Take the long view and allow yourself the fun of failure every day.

5. Go deep.

The deeper you go the more likely you will discover something of value.

IMPACT of DESIGN

DESIGN for IMPACT

Business Success

OR

Social Benefit



Business Success **AND** **Social Benefit**



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Business Success



Social Benefit



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"GOOD DESIGN IS GOOD BUSINESS"

**Problem: We need to
make a new _____
because our competition
has one.**

**Problem: How can we use
our capabilities to
improve people's lives.**



Design the System

Consider *all* the stakeholders. Understand the context for which objects exist.





The Apple Ecosystem

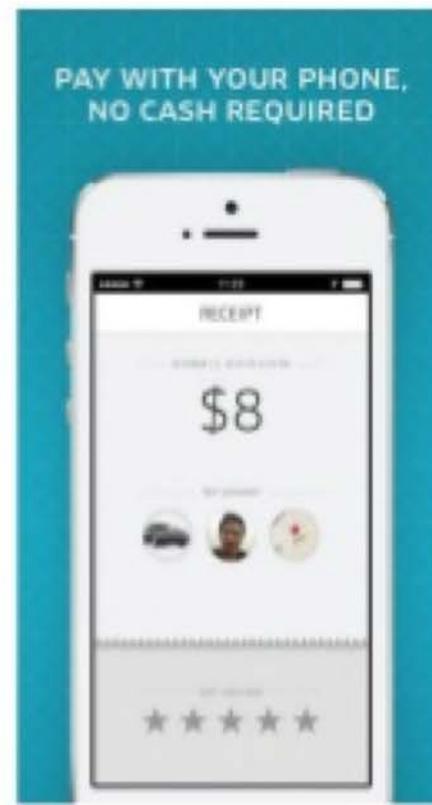
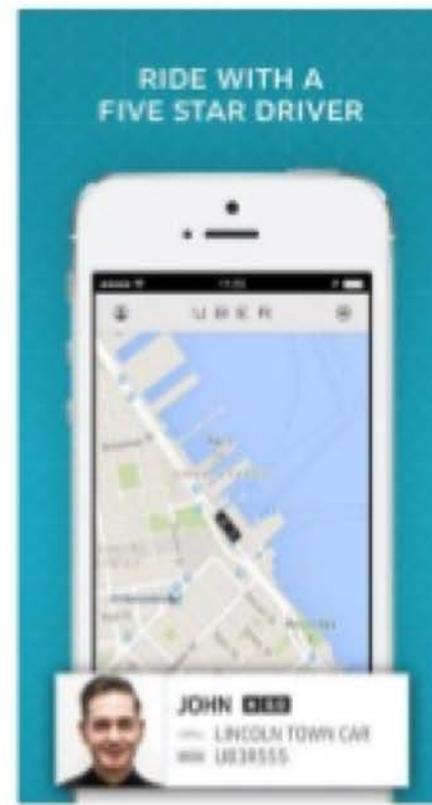
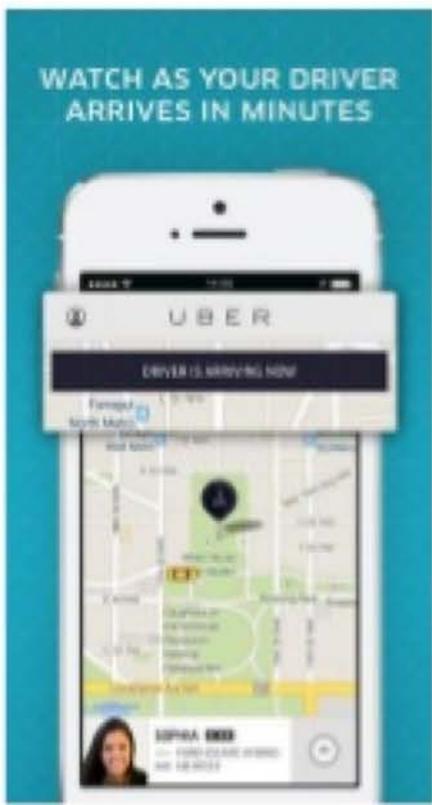
Its lineup of digital music players, computers, and phones places Apple in the center of an expanding world of suppliers, accessory producers, and content providers. Here's a look.

SUPPLIERS

ACCESSORIES

CONTENT





Uber



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Design for the majority

The vast majority of design & business is focused on serving only the top 10% of the global population.





LifeStraw®



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Design to Empower

Provide solutions that serve as tools for people
to better their own lives.





Kick-start water pump

...can irrigate 2 acres in 8 hours

Raised net farm income from \$110 to over \$1100 per year.





Universal/Inclusive Design

Universal design strives to be a broad-spectrum solution that produces buildings, products and environments that are usable and effective for everyone, not just people with disabilities.





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Design for Simplicity

Do one thing really well, instead of multiple things “just OK.”



FEATURE CREEP



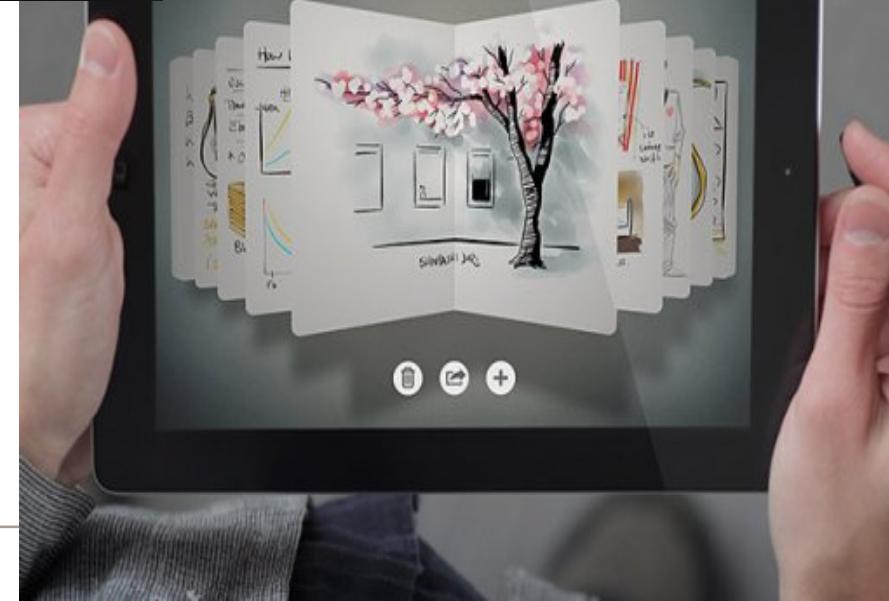


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PAPER



Philosophies of Design Impact

What we learned from the past...

Pushing the boundaries of existing convention

Providing personal benefit to people (comfort, happiness)

Understand the context

Focus on achieving a specific purpose

Where we are going...

Design the system

Design for the other 90%

Design to empower

Universal/Inclusive Design

Design for simplicity

