


# Interactive Multimedia Systems

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## Interaction Design

### Basic Characteristics

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IDEO WE ARE A GLOBAL DESIGN CONSULTANCY. WE CREATE IMPACT THROUGH DESIGN.

IDEO THINKING IDEO VOICES

## BILL MOGGRIDGE

**Bill Moggridge**

Bill Moggridge founded his design firm in London in 1969, adding a second office in 1970 in Palo Alto, in the heart of California's Silicon Valley. He designed the first laptop computer, the GRD Compass, and pioneered interaction design as a discipline. In 1991, he merged his company with those of David Kelley and Mike Nuttall to form IDEO. Bill has been active in design education throughout his career, notably as visiting professor in interaction design at the Royal College of Art in London, and consulting associate professor in the Design program at Stanford University. He is most interested in what people want, who they are, and how they interact with other people, things, and places. His book, *Designing Interactions*, is available from The MIT Press and was named one of the 10 Best Innovation and Design books of 2006 by *BusinessWeek*.

<http://www.ideo.com/thinking/voice/bill-moggridge1>



## Interaction design

Interaction design

...is about shaping our everyday life through digital artifacts – for work, for play, and for entertainment.

Gillian Crampton Smith, Designing Interactions

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## Interaction design

### Designing interactive products to support people in their everyday and working lives.

Preece et al., Interaction Design

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## Interaction design

Interaction design is the art of facilitating interactions between humans through products and services.

It is also, to a lesser extent, about the interactions between humans and those products that have some sort of "awareness" – that is, products with a microprocessor that are able to sense and respond to humans.

Dan Saffer, Designing for Interaction

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## Interaction design

Interaction Design is the professional discipline that defines the **behaviour of interactive products** and how products **communicate their functionality** to the people who use them.

Good interaction design makes products ranging from computer software to clock radios to cars more **useful, usable, and desirable.**

[www.ixda.org](http://www.ixda.org)

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## Interaction design

Interaction design is **concerned** with the **behaviour** of products and services

- how products and services work

Interaction designers need to spend a great deal of time **defining behaviour**

- behaviour of products and services
- more importantly behaviour of people who use those products and services

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## Why interaction design?

Interaction design **isn't** just about **fixing problems**

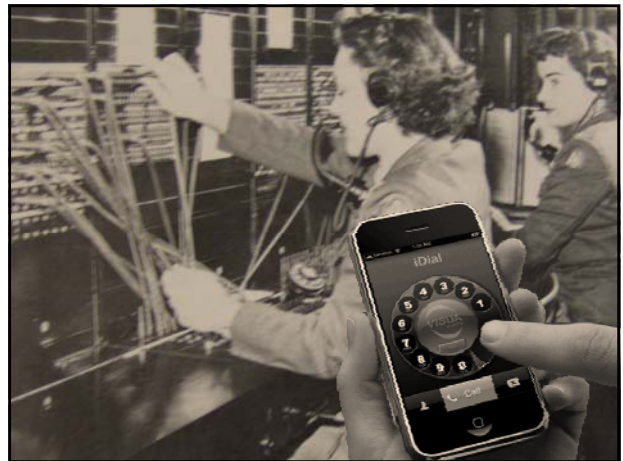
Interaction design is about making interaction **richer, deeper, and better**

What makes a technology like Internet useful?

- the collection of servers, fires, and hardware?
- or instant messaging, social networking, games...?

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## What is design?

Design is to design a design  
to produce a design

John Heskett

People have pre-conceived ideas about design

- it is about how things look!
- it is about styling and decoration!

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## What is design?

With art—if you like, you can be really weird. But in design you have to **think about what other people will like.**

Ghisli, age 10, [www.design-council.org.uk](http://www.design-council.org.uk)

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## What is design?

When you go to design a house, you talk to an architect first, not an engineer. Why is this? Because the criteria for what makes a good building fall substantially outside the domain of what engineering deals with. You want the bedrooms where it will be quiet so people can sleep, and you want the dining room to be near the kitchen. The fact that the kitchen and dining room should be proximate to each other emerges from knowing first that the purpose of the kitchen is to prepare food and the dining room to consume it, and second that rooms with related purposes ought to be closely related in space. This is not a fact, nor technical item of knowledge, but a piece of design wisdom.

Mitch Kapor, A Software Design Manifesto

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## Common elements of design

### 1: Focusing on users

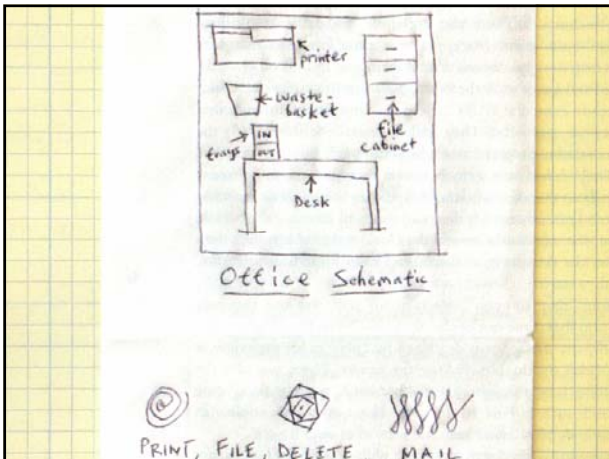
Designers are advocates for the users

Users only care about their tasks and goals

Users don't care about the company that makes the products!

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## Common elements of design

### 2: Finding alternatives

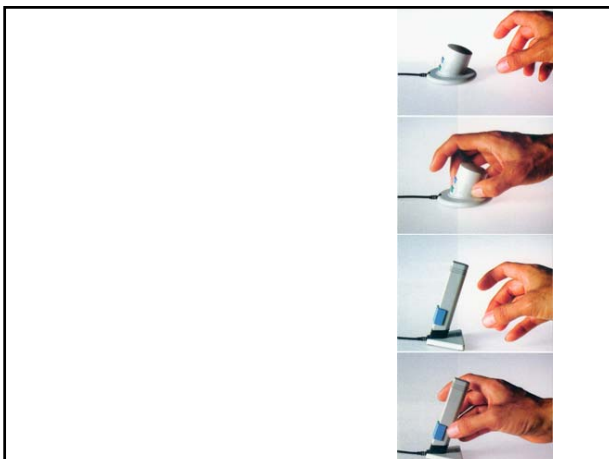
Design isn't just about choosing from amongst existing options

Design is also about creating new options

Existing options may all be undesirable

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## Common elements of design

### 3: Relying on ideation and prototyping

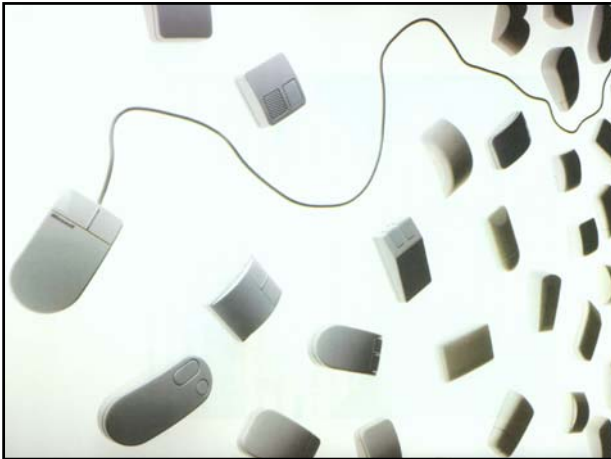
Finding solutions through brainstorming

Building models and testing solutions

Considering every prototype is "a solution" not "the solution"

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Common elements of design

## 4: Addressing constraints

Designers always work within constraints

- these include, financial, material, goals, etc.

Constraints may lead to better creativity

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Common elements of design

## 5: Creating appropriate solutions

Solutions are only appropriate

- to a particular project
- at a particular point in time

Solutions need to be appropriate to the situation

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Common elements of design

## 6: Incorporating emotion

Emotion is not an impediment to logic or making the right choices

Designs without emotion are lifeless

Emotion needs to be thoughtfully included in design decisions

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Common elements of design

## 7: Collaborating with people

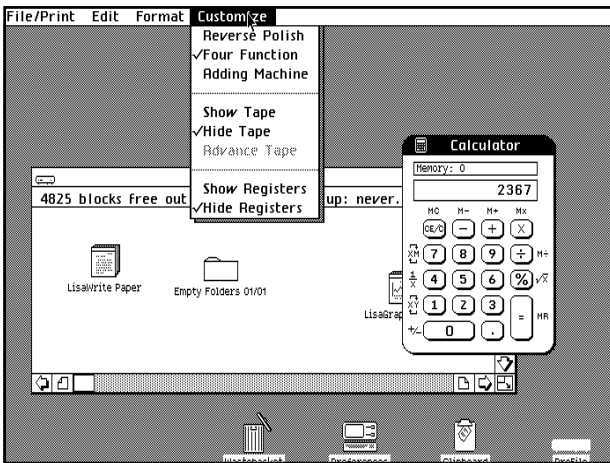
Few designers work alone

Design is almost always a team effort

Diversity of team members is crucial

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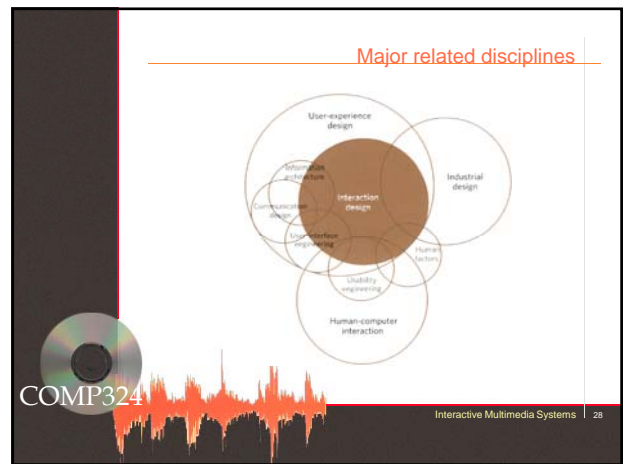
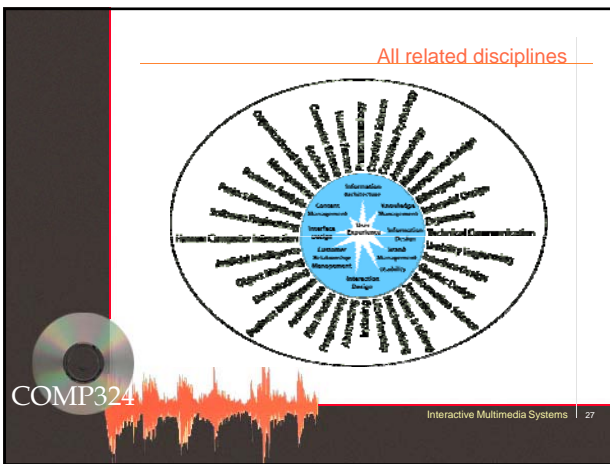


Common elements of design

## 8: Drawing on a wide range of influences

Design relies on many different perspectives  
 It is often multi-disciplinary  
 Need to draw inspiration from different ideas

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Interaction design disciplines

Interaction design brings together elements of

- communication (graphic) design
- industrial design
- user interface design
- and others

Each of these has a different focus

- they are complimentary to one another

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Primary concern: graphic designer

Concerned with making something cool or interesting happen on the screen of a device

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Primary concern: interface designer

Concerned with the communication between a person and a device



Primary concern: interaction designer

Concerned with the conversation back and forth between people and devices across time

