


# **The Media Ecology of Source Code Access**

**Clinton Ignatov  
The McLuhan Institute  
March 20, 2022**

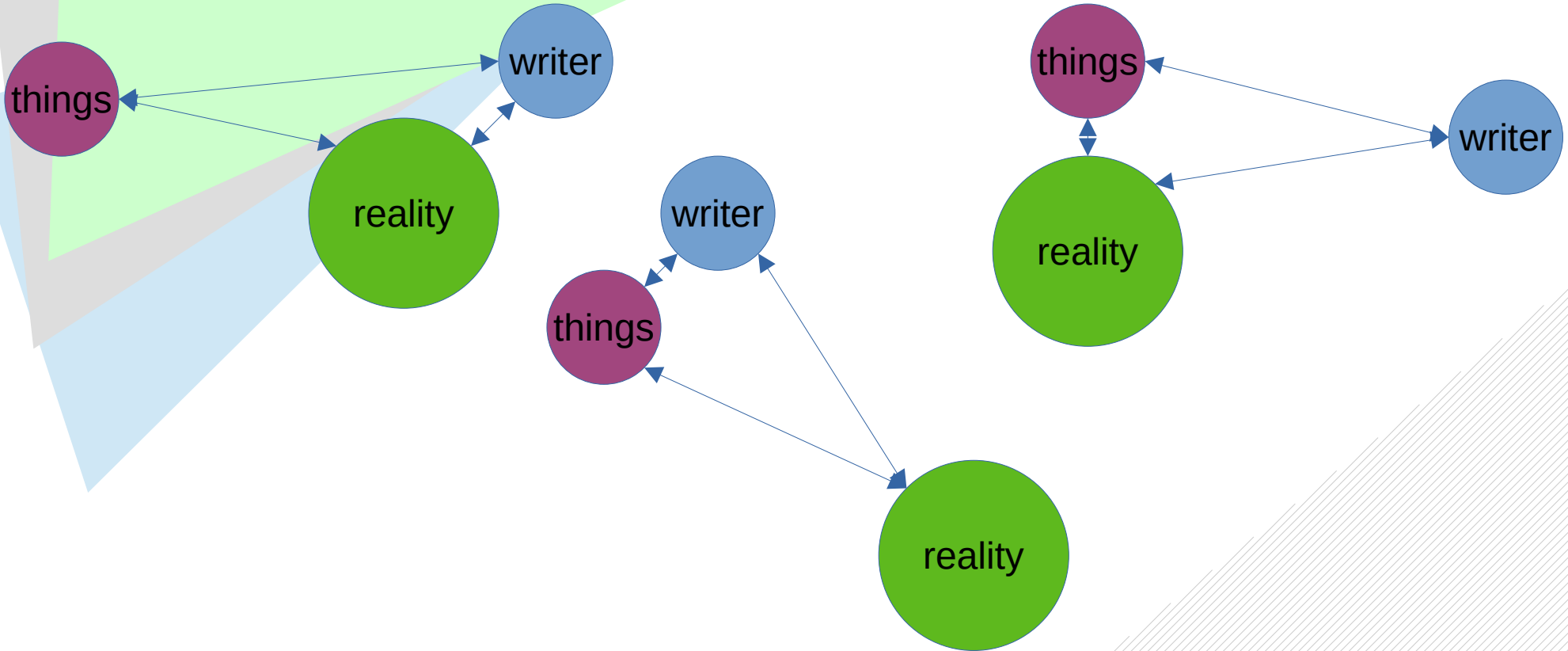




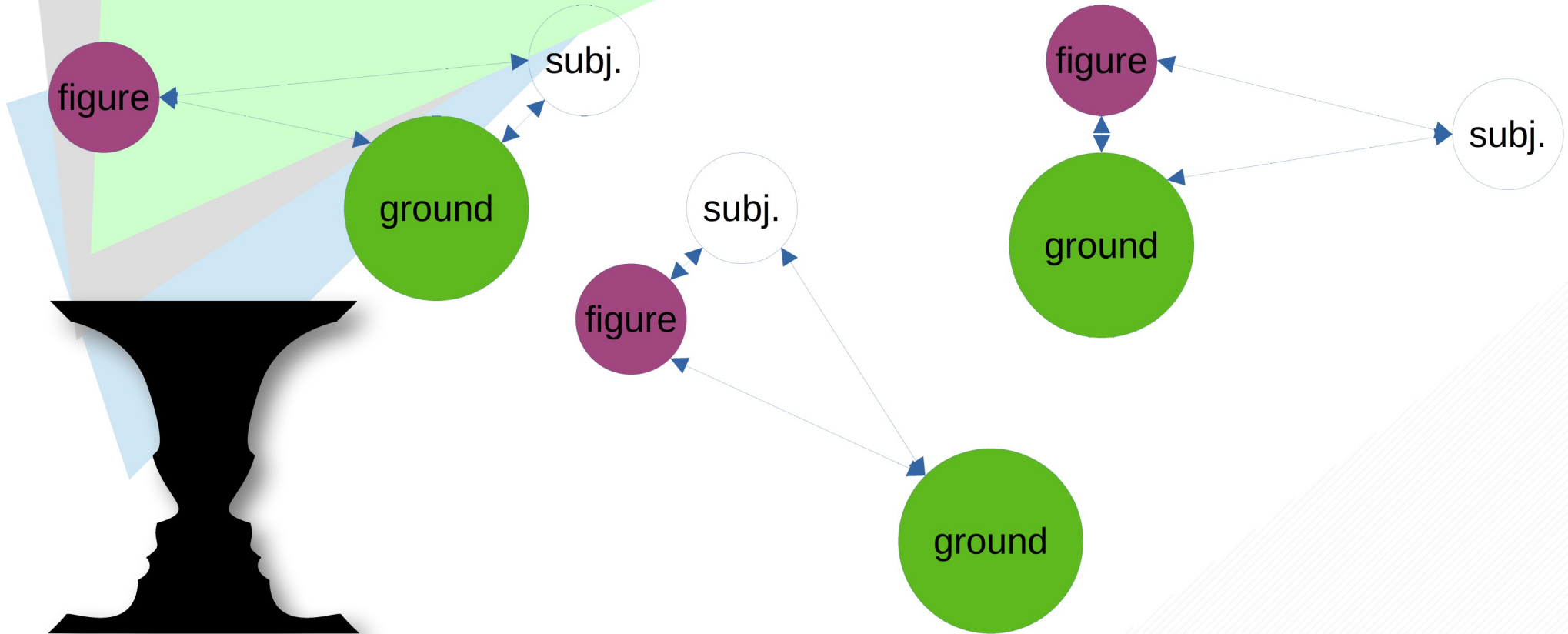
# Free Software + Media Ecology



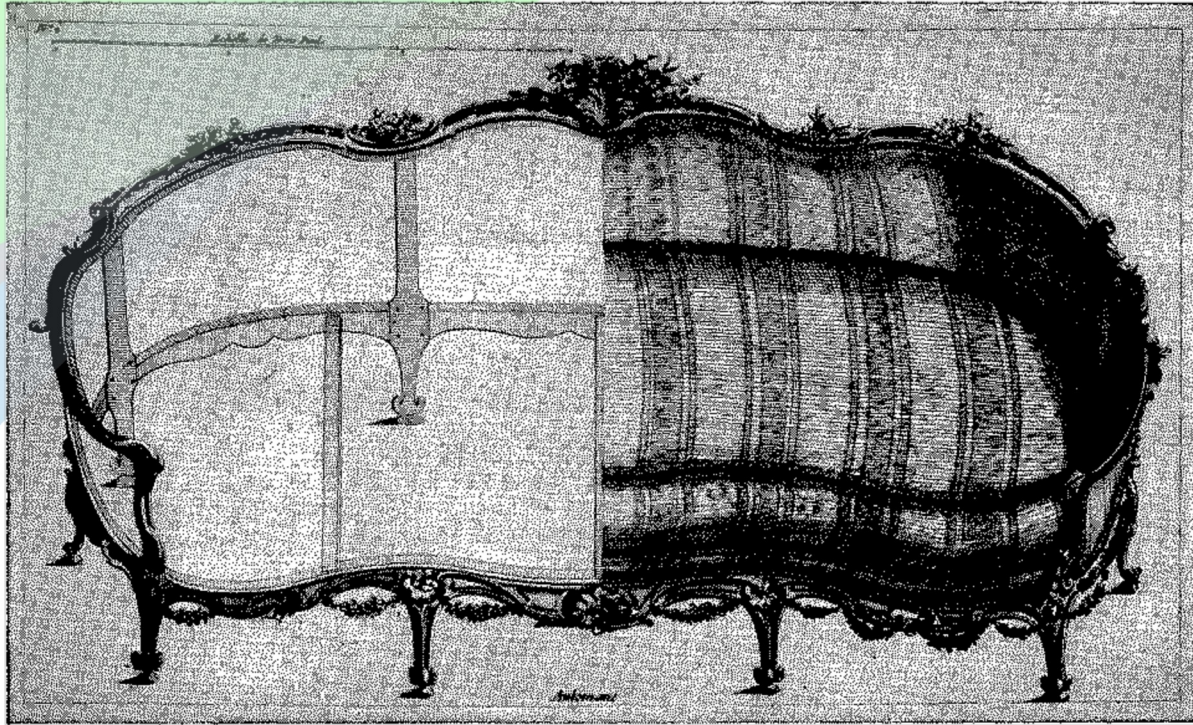
# Ratios of Perception



# Figure/Ground Gestalts



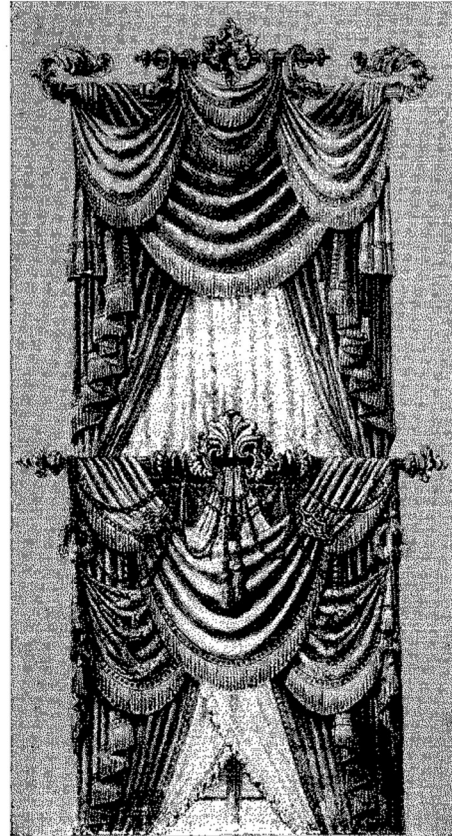
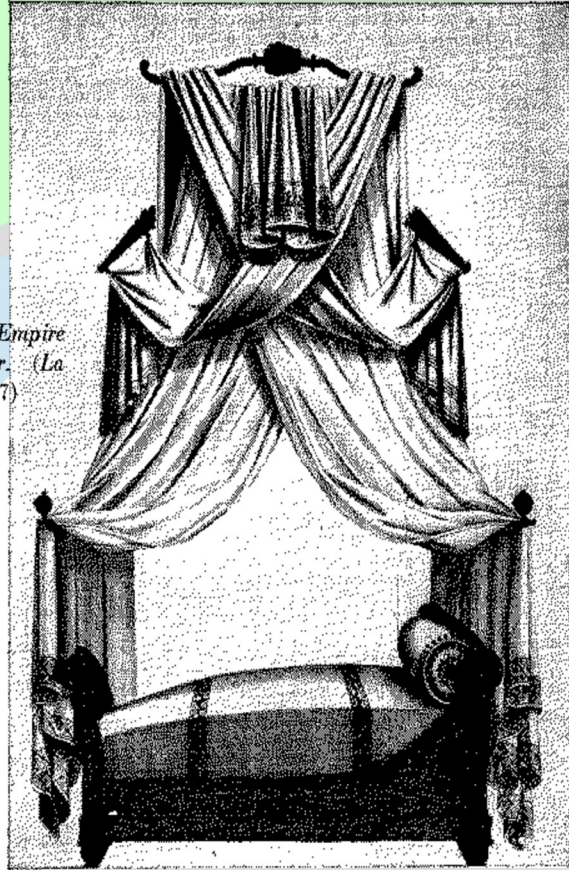
# Hand-Crafted Furniture



178. Automane by Mathieu Liard. 1762. *The greatest mastery and finesse in woodcarving developed as Louis XVI classicism was beginning to spread. Through knowledge of lines of force, the skeleton is reduced to astonishing slenderness, and shaped with the elegance of organic forms.* (Recueil des petits meubles, Paris, 1762)

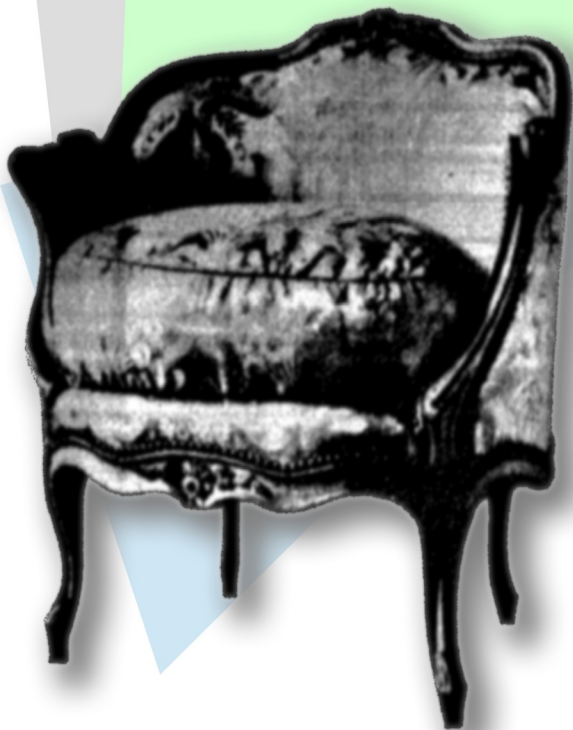
# The Upholsterer's Rule

197. Draped Bed. France, 1832. *What the Empire began, the following decades developed further.* (La Mesangère, Meubles et objets de goût, no. 737)



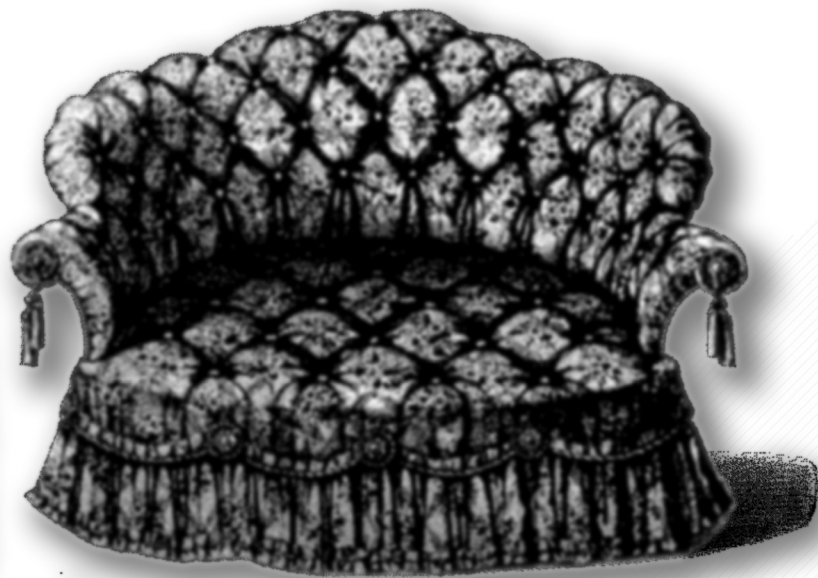
198. Drapery Croisée. 1860's. *The croisées become heavier and more and more complicated, until in the latter half of the century the whole interior is filled with a gloomy, oppressive atmosphere.* (Jules Verdellet, Manuel Géométrique du tapissier, Paris, 1859)

# The Upholsterer's Rule



175. Marquise by L. Delanois, Late 1760's. *The gondola type, which Delanois' marquise represents at its height, molds the body like a shell. The simplified curves, vigorous lines, and delicate profile show how discipline and flexibility are fused in this late period. By the end of the Rococo the cushions rise to a noticeable height. (Louvre, Paris, Archives Photographiques)*

176. Nineteenth-Century Marquise. 1863. *The gondola type continues through the Directoire and Empire, and even for a while in the period when the upholsterer became dominant. But now the skeleton and legs are concealed, and button-pleated upholstery covers its entire surface. (Exposition des Arts Industriels, Paris, 1863)*





# Patent Furniture

Fig 1

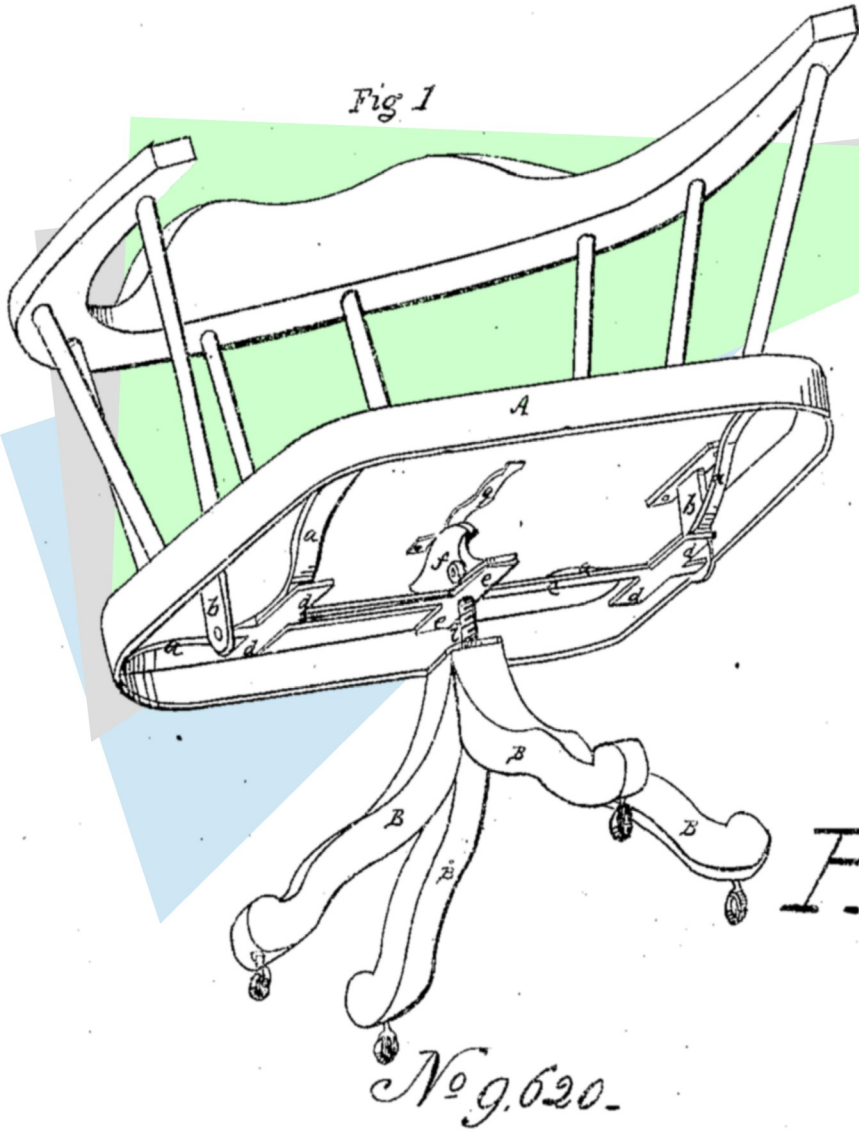
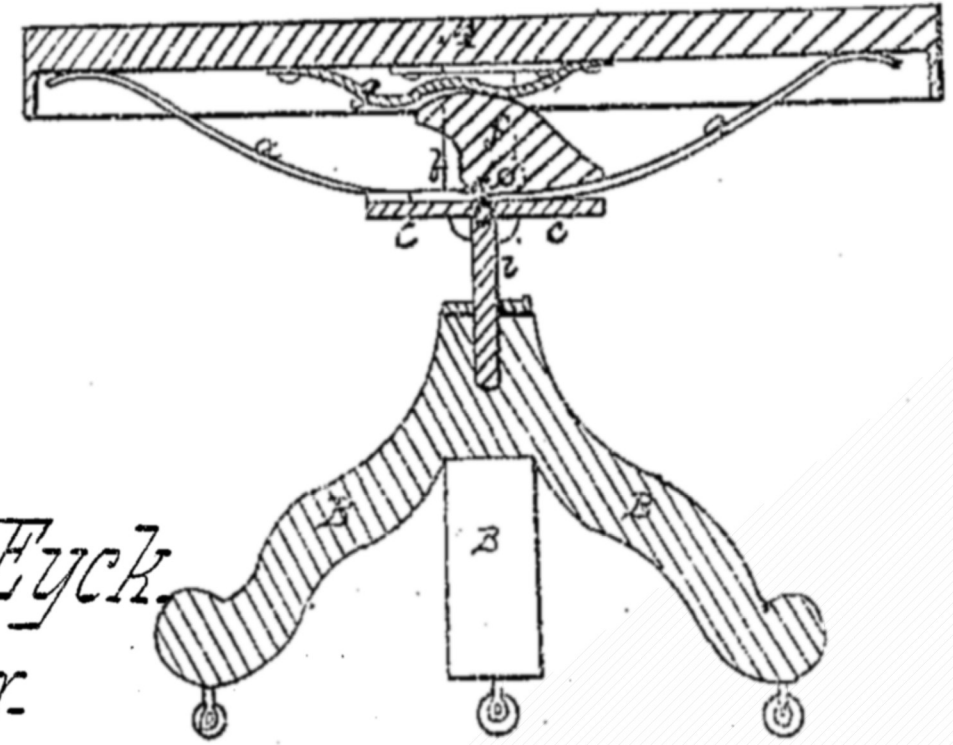


Fig 2.



*P. Ten Eyck.*  
*Chair.*

*No 9.620.*

*Patented March 15 1853.*

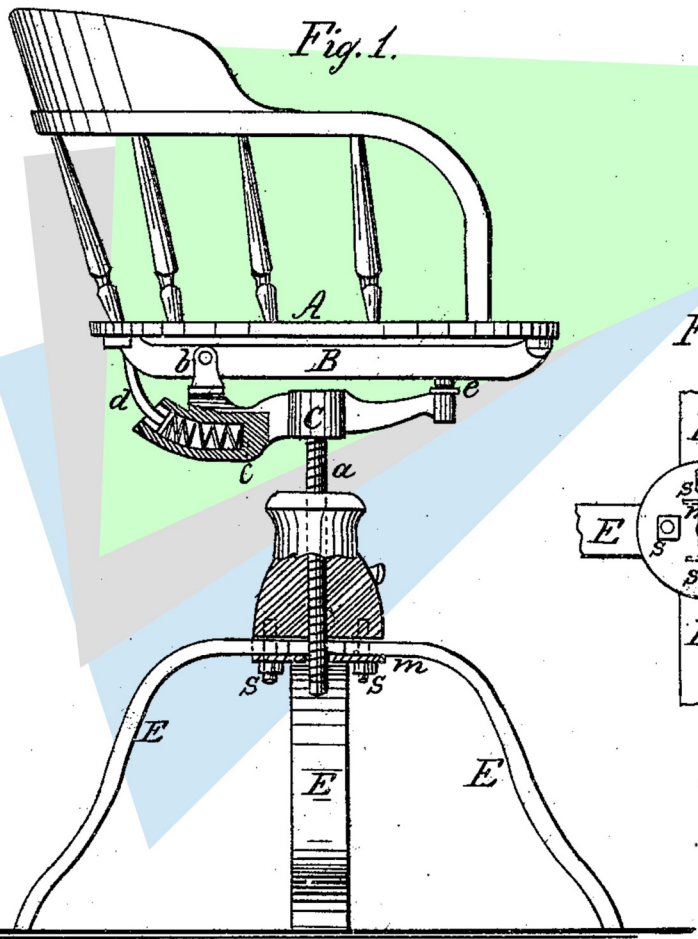


Fig. 1.

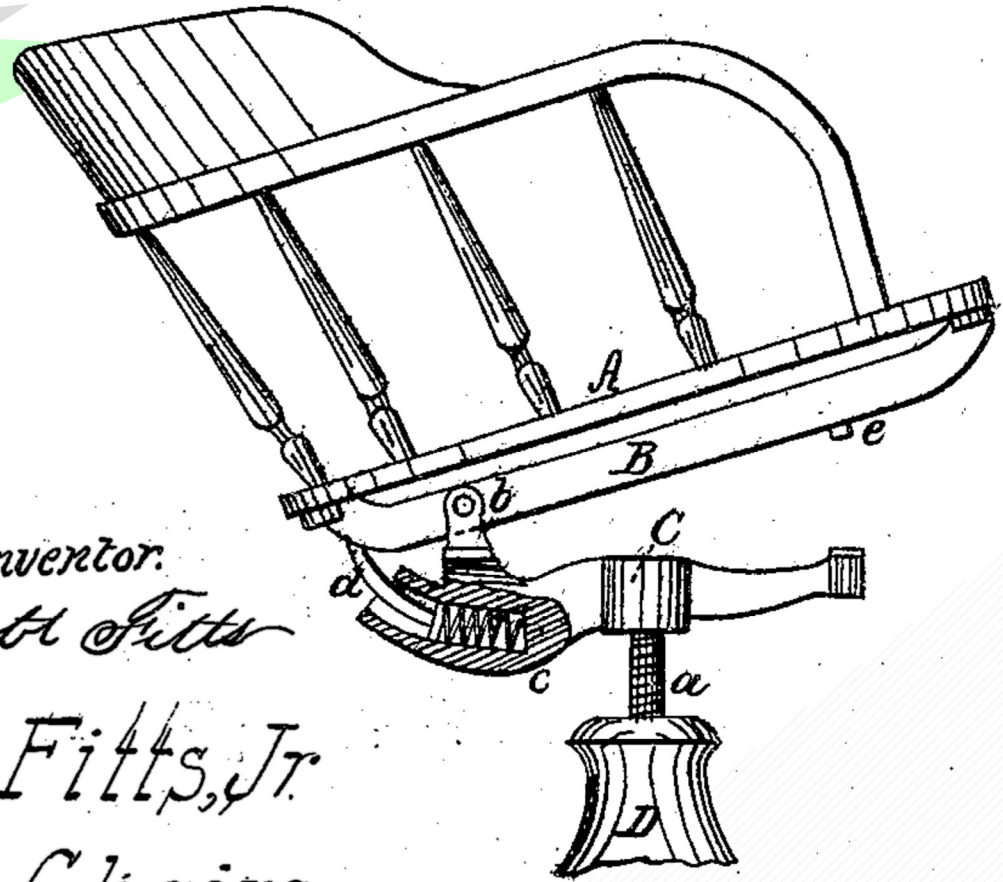


Fig. 2.

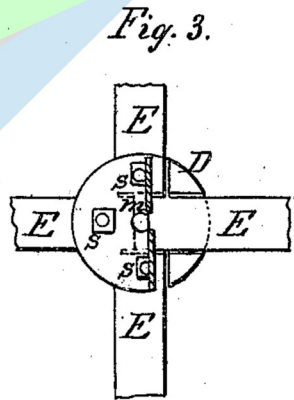


Fig. 3.

Inventor:  
*Robt Fitts*  
*R. Fitts, Jr.*

Office Chairs,

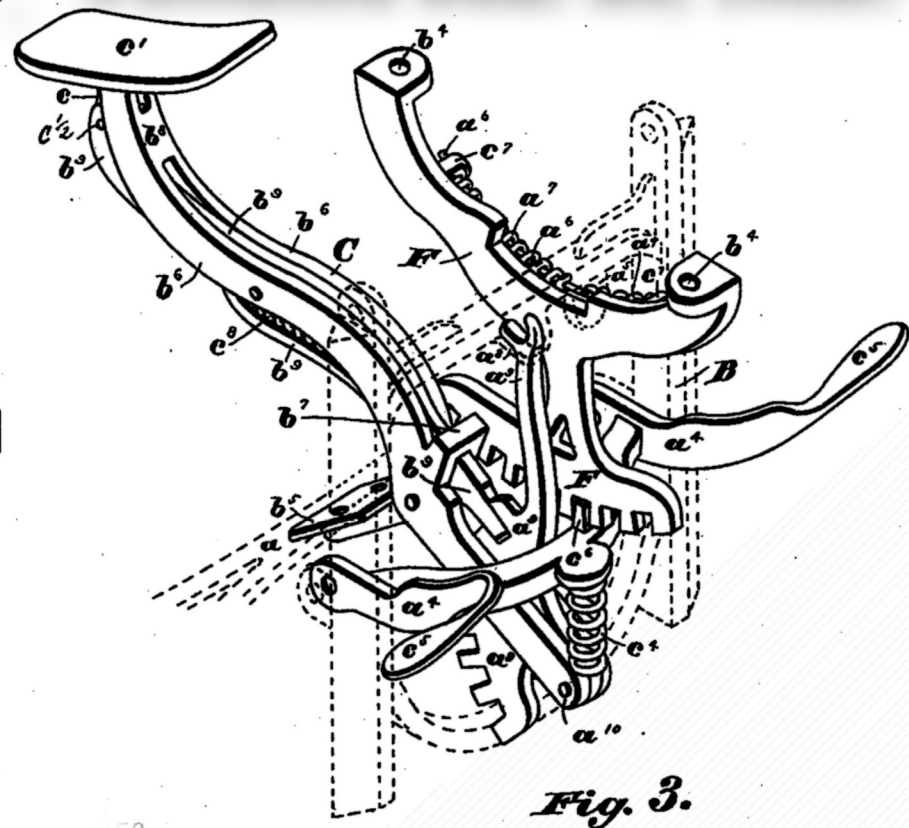
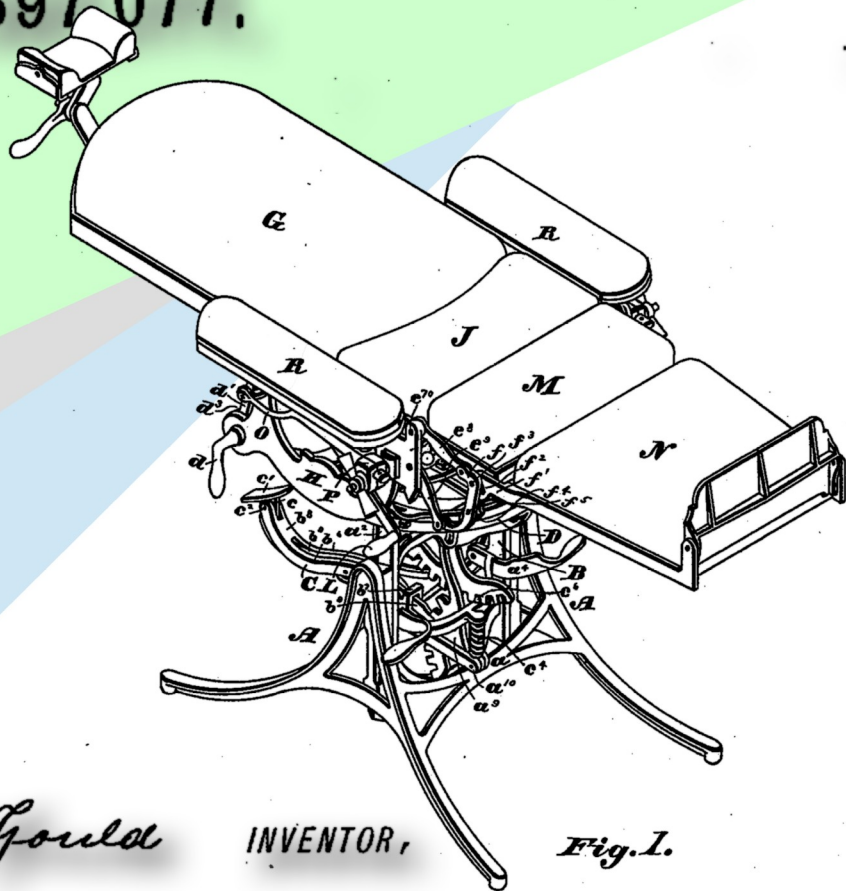
No. 67034,

Patented July, 23, 1867.

A. P. GOULD.  
SURGICAL CHAIR.

No. 397 077.

Patented Jan. 29, 1889.



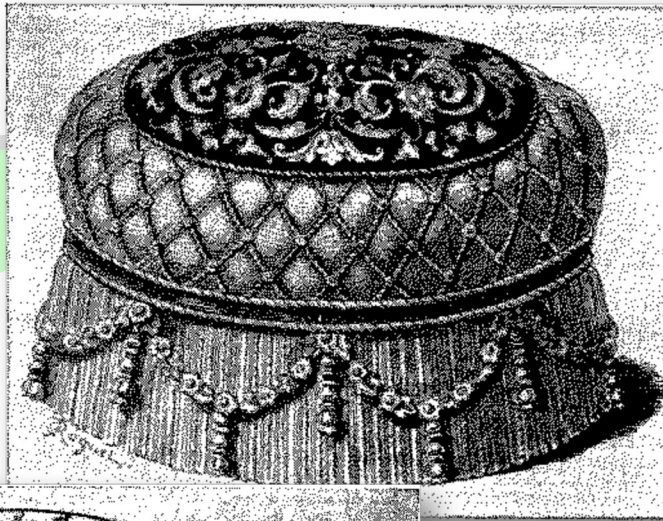
Aaron P. Gould

INVENTOR,

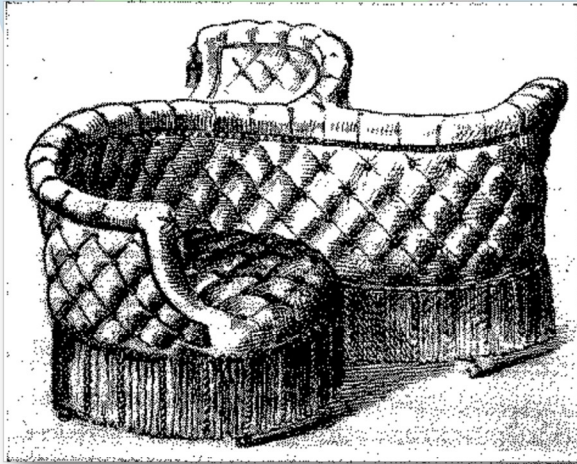
Fig. 1.

Fig. 3.

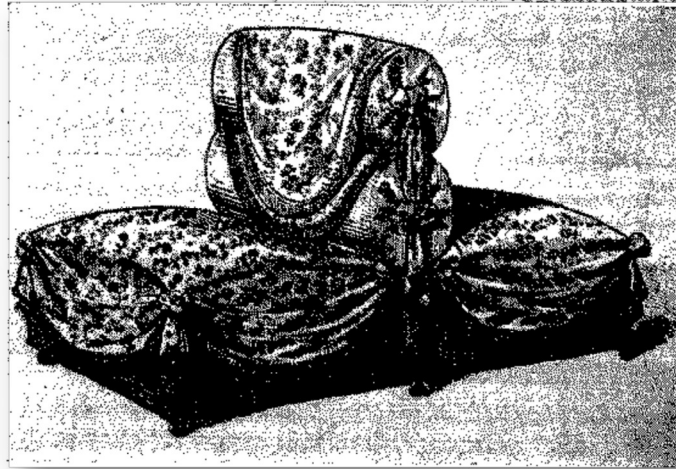
# European Style



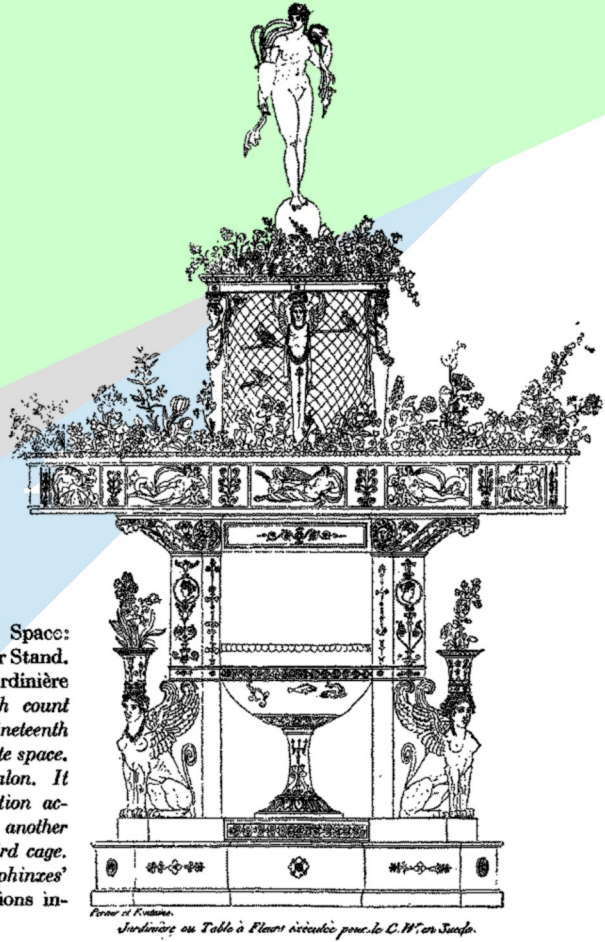
217. Pouf, c.1880. *The pouf, a favorite piece of the ruling taste, is described as a 'large labouret, cylindrical and upholstered, with a long and thick fringe, always without visible woodwork.'* (Havard, Dictionnaire de l'ameublement)



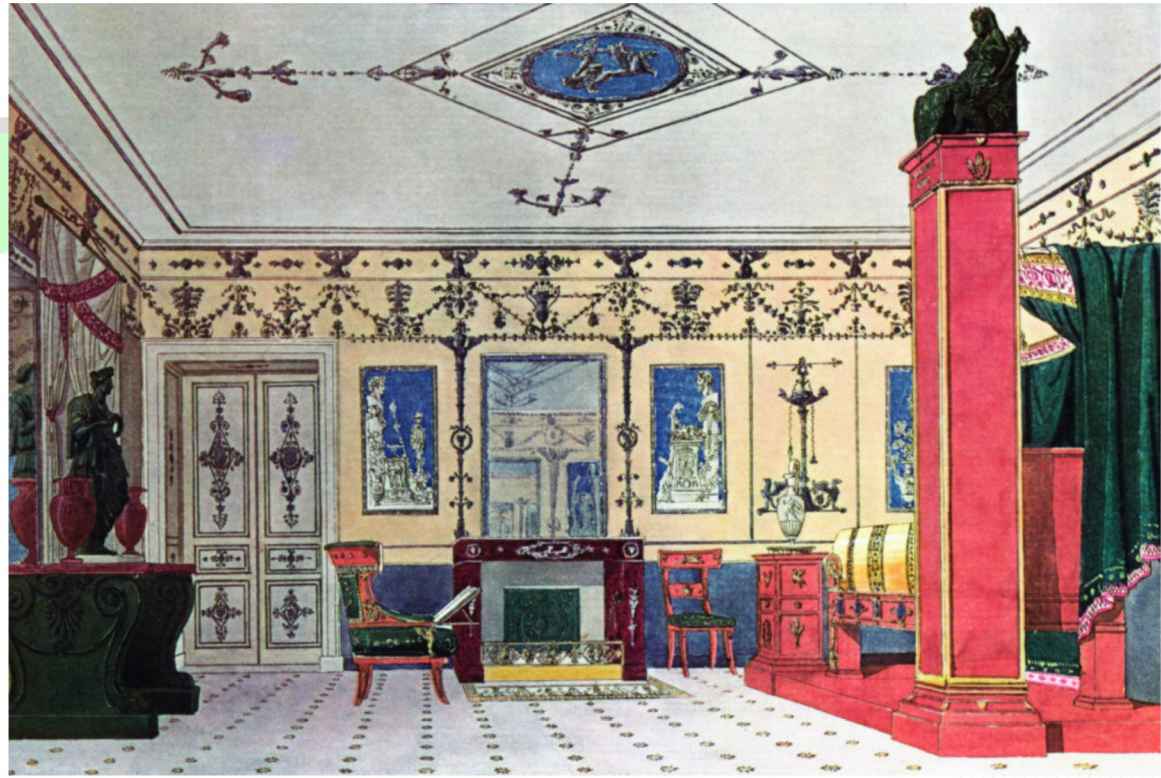
215. French Three-Seat 'Confidante,' Late 1870's. *The French upholsterer was continually launching 'fancy chairs' with new names. The confidante was an intimate type of seating, formed of two or more chairs on an S-plan.* (Havard, Dictionnaire de l'ameublement)



216. French Boudeuse, c.1880. *The boudeuse is a twin chair for the drawing room, arranged so that the sitters have their backs to one another. It is entirely draped.* (Havard, Dictionnaire de l'ameublement)

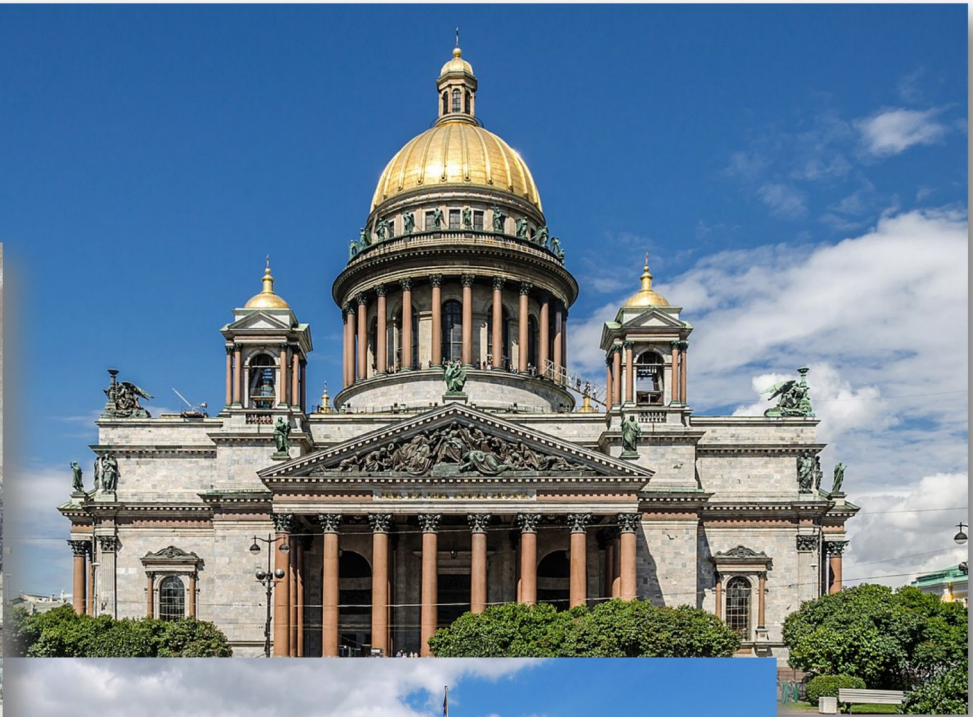
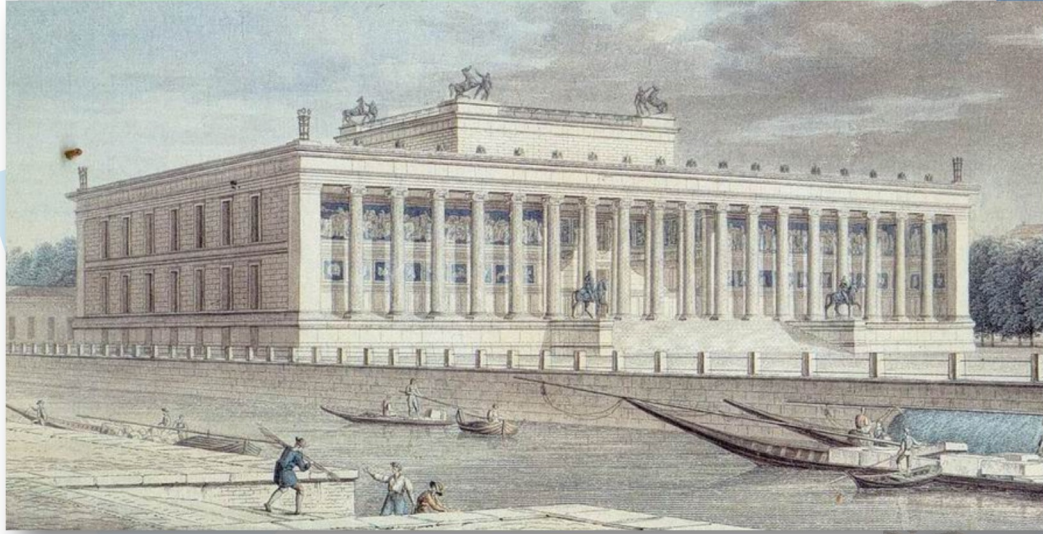


193. The Devaluation of Space: Percier and Fontaine, Flower Stand. 1801. *The tremendous jardinière commissioned by a Swedish court anticipates anything the nineteenth century later used to annihilate space. It was for the middle of a salon. It was in three parts: one section accommodated a goldfish bowl, another the flowers, and the last a bird cage. Flowers grew out of the sphinxes' heads. (Recueil de décorations intérieures)*

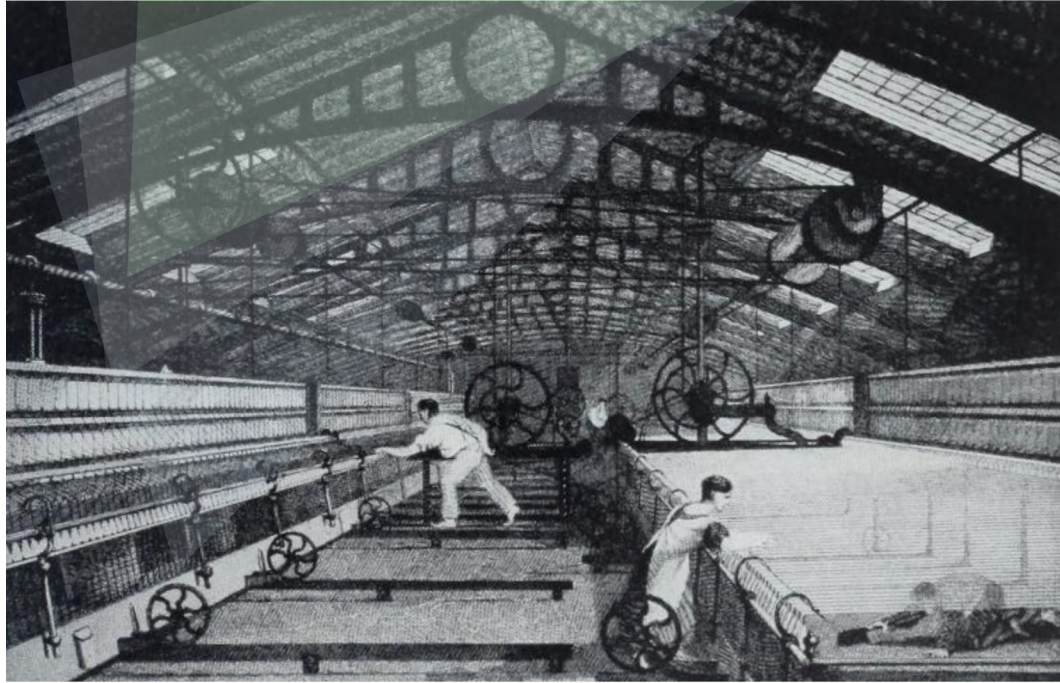


Paris bedroom in the Empire style

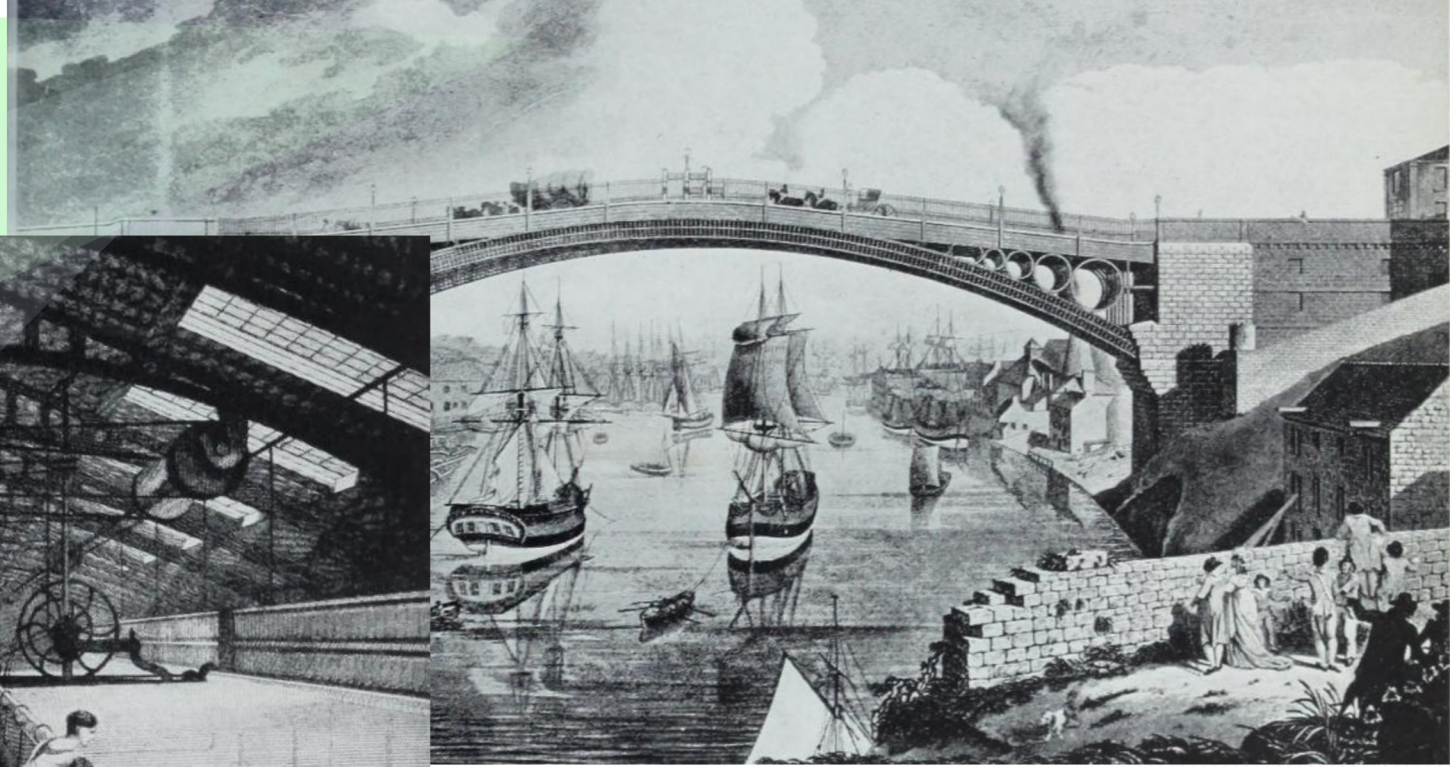
# Neo Classicalism



# The Industrial Revolution

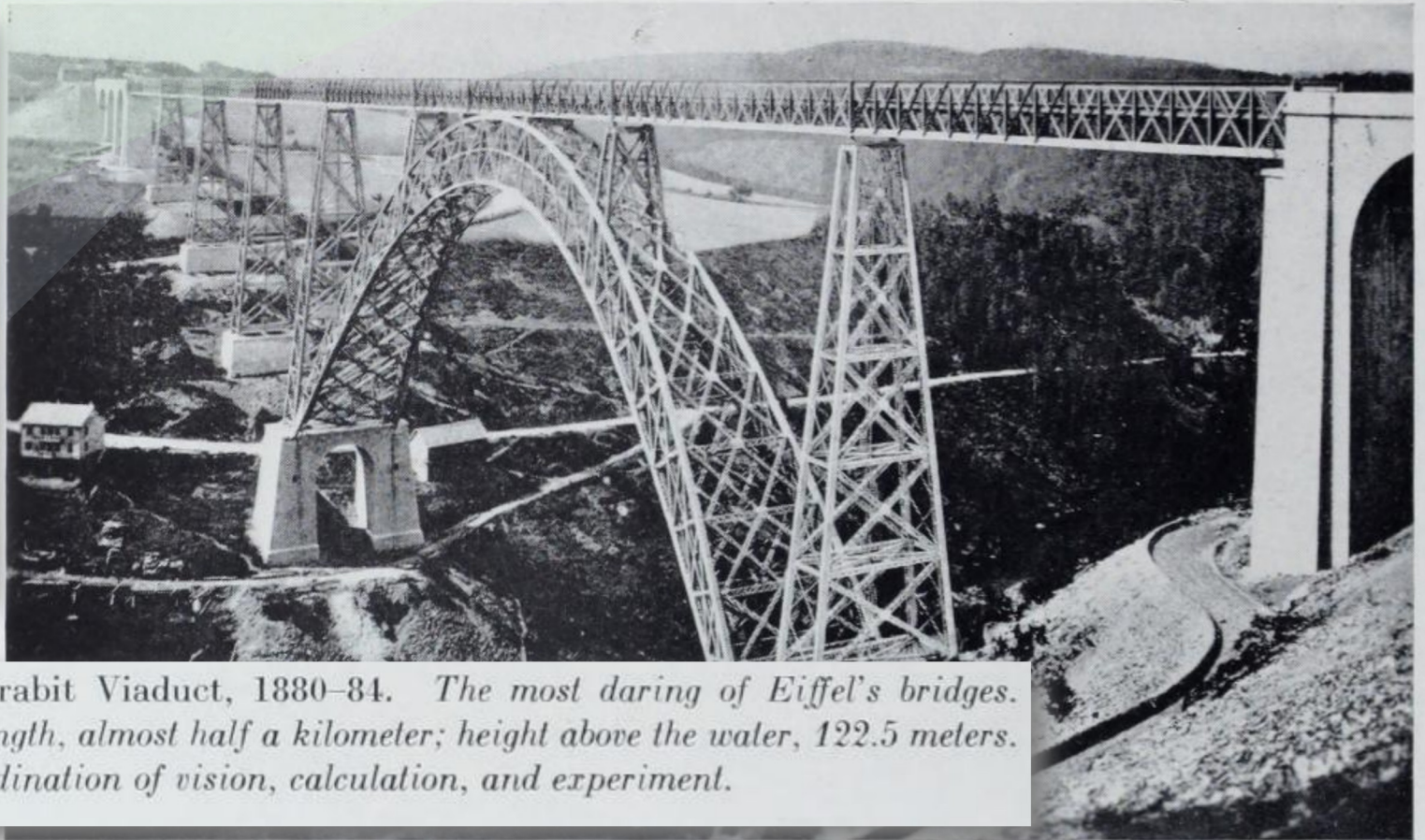


Cast Iron Factory Roof



Thomas Paine's Wearmouth Bridge

# The 1889 Paris Exhibition



167. G. EIFFEL. Garabit Viaduct, 1880–84. *The most daring of Eiffel's bridges. Span, 165 meters; total length, almost half a kilometer; height above the water, 122.5 meters. A perfect example of coördination of vision, calculation, and experiment.*



# Art Nouveau and Modernism



From the Eiffel Tower series by Robert Delauney, 1910



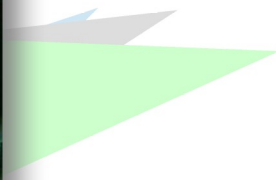
# Art Nouveau and Modernism

182. VICTOR HORTA. Maison du Peuple, Brussels, 1897. Exterior. The curved glass and iron façade is one of the most advanced productions of the period.



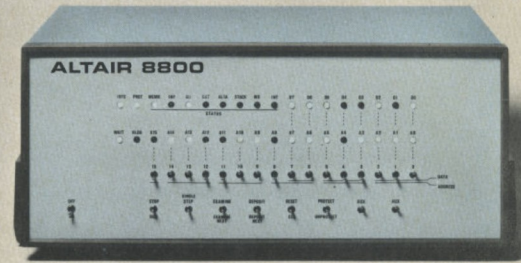
180. VICTOR HORTA. 12 Rue de Turin, Brussels. Iron column and staircase. At the end of the cast-iron period, the cast-iron column is once more introduced into the house — and brings the art nouveau with it.





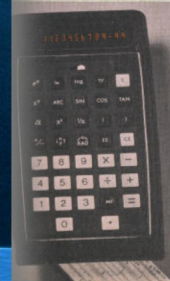
HOW TO "READ" FM TUNER SPECIFICATIONS  
**Popular Electronics**  
 WORLD'S LARGEST-SELLING ELECTRONICS MAGAZINE JANUARY 1975 / 75¢

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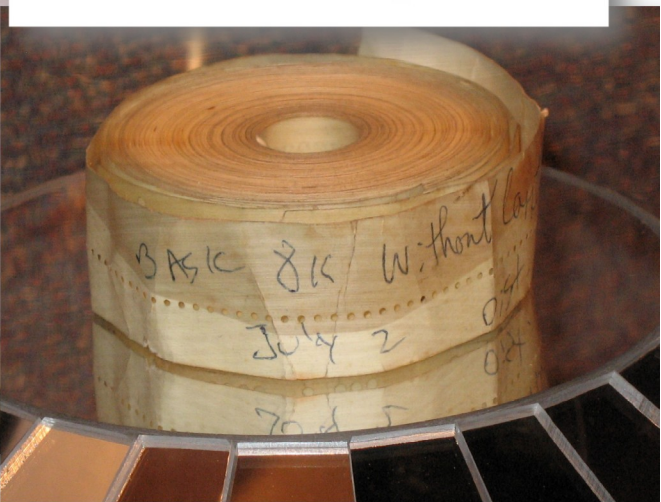
**ALSO IN THIS ISSUE:**

- An Under-\$90 Scientific Calculator Project
- CCD's—TV Camera Tube Successor?
  - Thyristor-Controlled Photoflashers



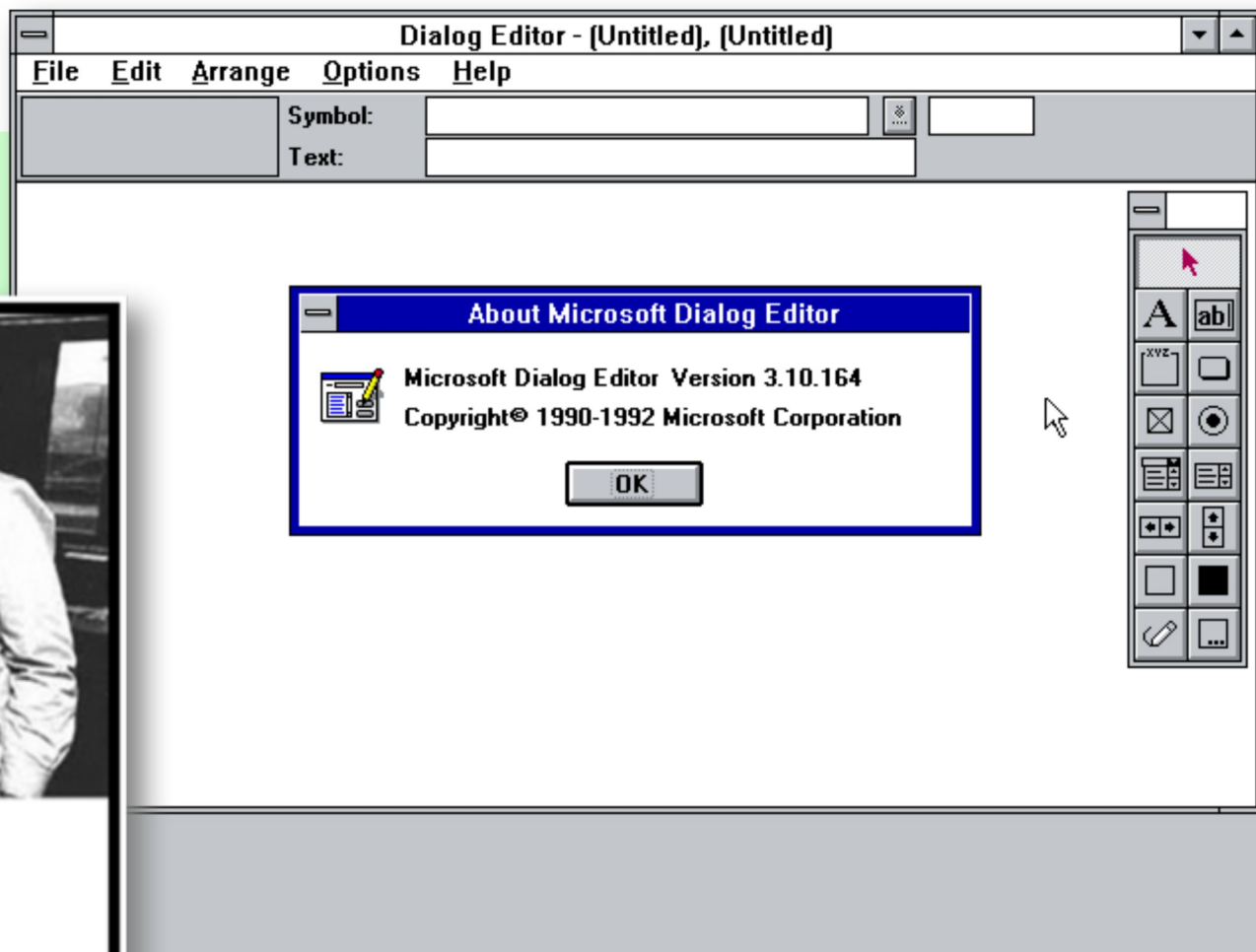
**TEST REPORTS:**

- Technics 200 Speaker System
- Pioneer RT-1011 Open-Reel Recorder
- Tram Diamond-40 CB AM Transceiver
- Edmund Scientific "Kirlian" Photo Kit
- Hewlett-Packard 5381 Frequency Counter





**simula**  
SOFTWARE DEVELOPMENT



# Inside Macintosh '85

The standard cursors shown in Figure 4 are defined in the system resource file. Their resource IDs are:

```
CONST iBeamCursor = 1; {to select text}
crossCursor = 2; {to draw graphics}
plusCursor = 3; {to select cells in structured documents}
watchCursor = 4; {to indicate a long wait}
```



Figure 4. Standard Cursors

**Note:** You can set the cursor with the QuickDraw procedure SetCursor. The arrow cursor is defined in QuickDraw as a global variable named arrow.

```
CONST documentProc = 0; {standard document window}
dBoxProc = 1; {alert box or modal dialog box}
plainDBox = 2; {plain box}
altDBoxProc = 3; {plain box with shadow}
noGrowDocProc = 4; {document window without size box}
rDocProc = 16; {rounded-corner window}
```



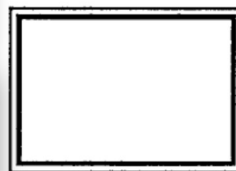
documentProc



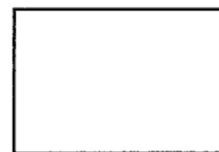
noGrowDocProc



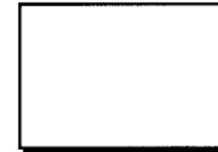
rDocProc



dBoxProc

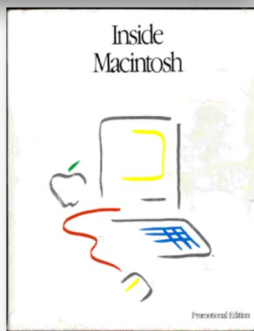


plainDBox



altDBoxProc

Figure 4. Standard Types of Windows



# Apple Human Interface Guidelines '87

## Guidelines '87

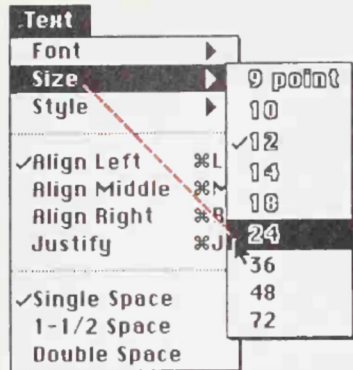
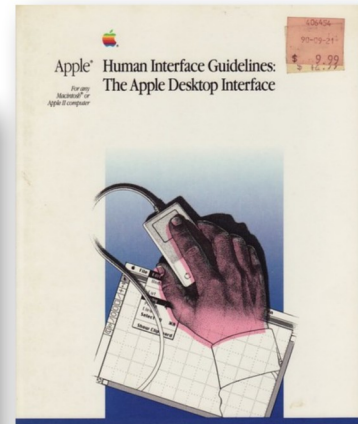


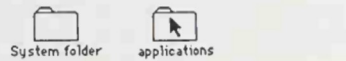
Figure 3-42  
Dragging diagonally to a submenu item

1. Insertion point is within a word      word
2. Shift-← is pressed                      w|ord
3. Another Shift-←                            **wo**rd
4. Shift-→                                      wo|rd
5. Three more times Shift-→               wo**rd**

Figure 3-57  
Selecting with Shift and arrow keys



1. Pointer over icon to be dragged



2. Click to select



3. Drag outline to right



4. Release button



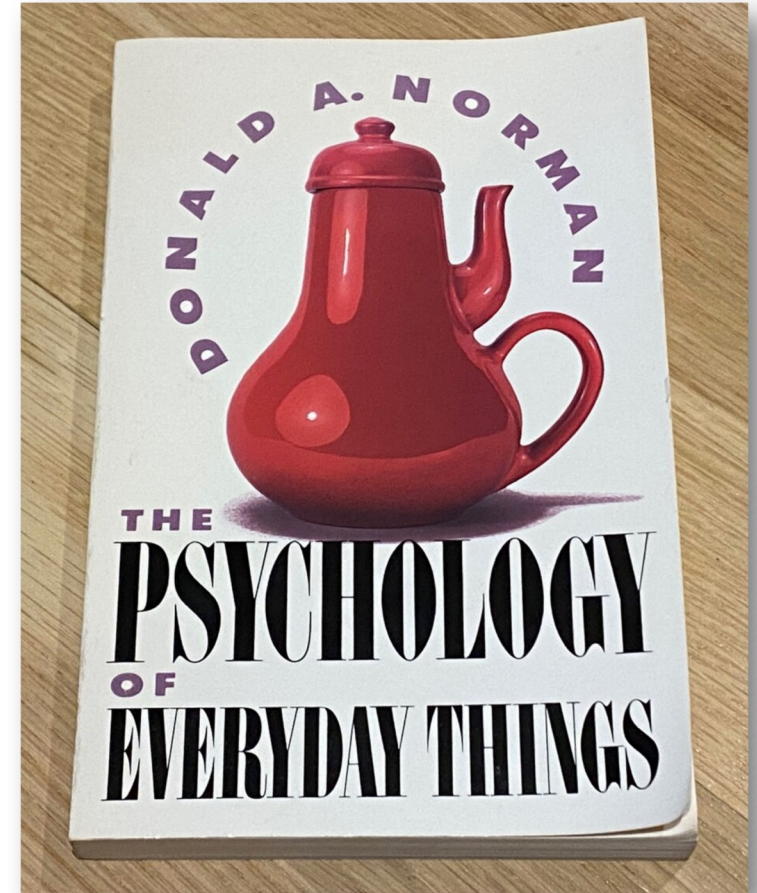
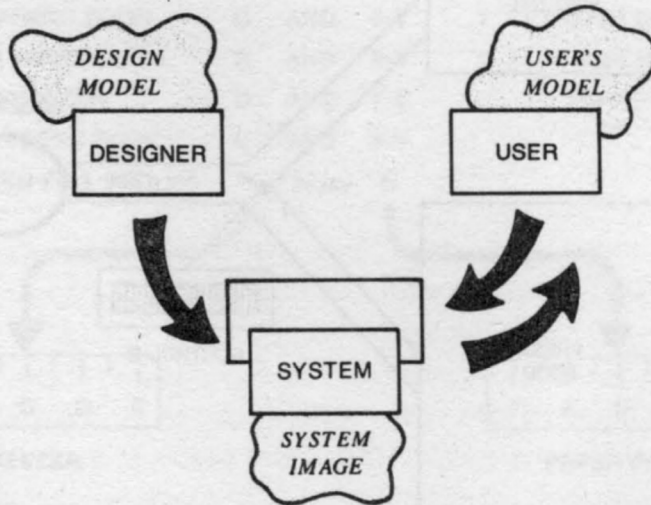
Figure 3-50  
Dragging with the mouse

1. Insertion point is within a word      another word
2. Option-Shift-← is pressed              another **wo**rd
3. Another Option-Shift-←               **another wo**rd

Figure 3-58  
Selecting with Option-Shift and arrow keys

# Don Norman's Design Book '88

**1.10 Conceptual Models.** The *design model* is the designer's conceptual model. The *user's model* is the mental model developed through interaction with the system. The *system image* results from the physical structure that has been built (including documentation, instructions, and labels). The designer expects the user's model to be identical to the design model. But the designer doesn't talk directly with the user—all communication takes place through the system image. If the system image does not make the design model clear and consistent, then the user will end up with the wrong mental model. (From Norman, 1986.)

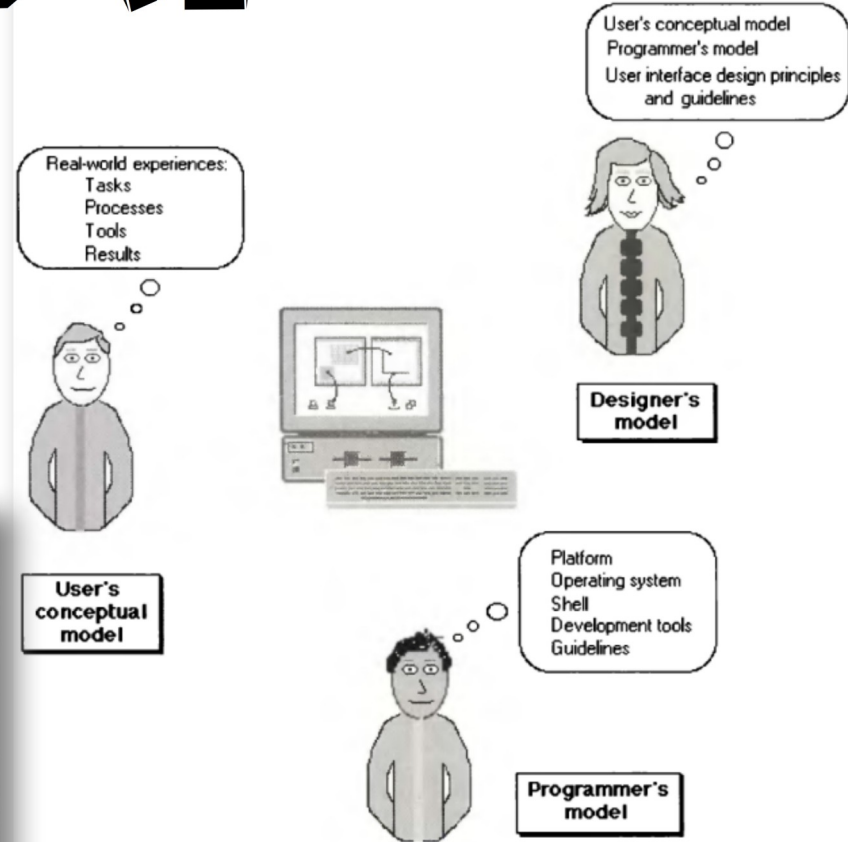
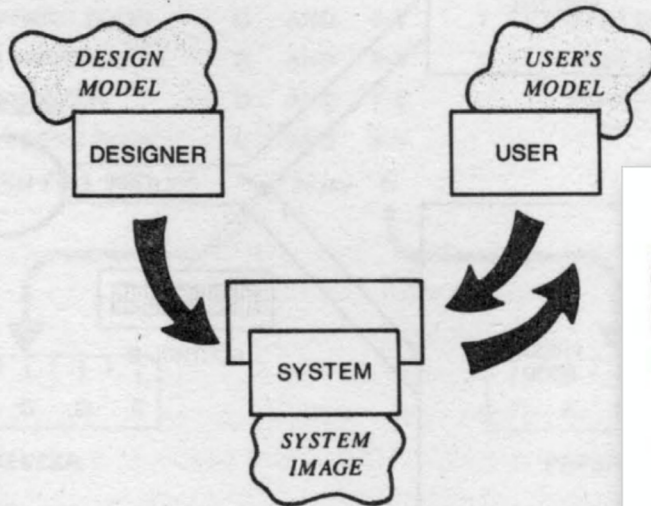




# IBM Common User Access

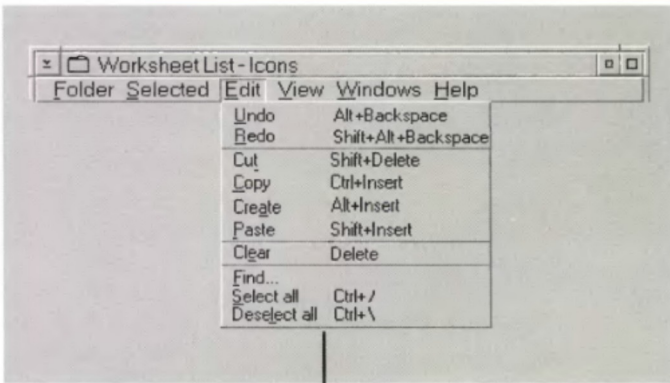
## Guidelines '92

**1.10 Conceptual Models.** The *design model* is the designer's conceptual model. The *user's model* is the mental model developed through interaction with the system. The *system image* results from the physical structure that has been built (including documentation, instructions, and labels). The designer expects the user's model to be identical to the design model. But the designer doesn't talk directly with the user—all communication takes place through the system image. If the system image does not make the design model clear and consistent, then the user will end up with the wrong mental model. (From Norman, 1986.)



# IBM Common User Access

## Guidelines '92



Edit menu

### When to Use

Provide the **Edit** menu when a menu bar is provided in a window and at least two of the following choices are provided: **Undo, Redo, Cut, Copy, Create, Paste, Clear, Delete, Find, Select all, and Deselect all.**

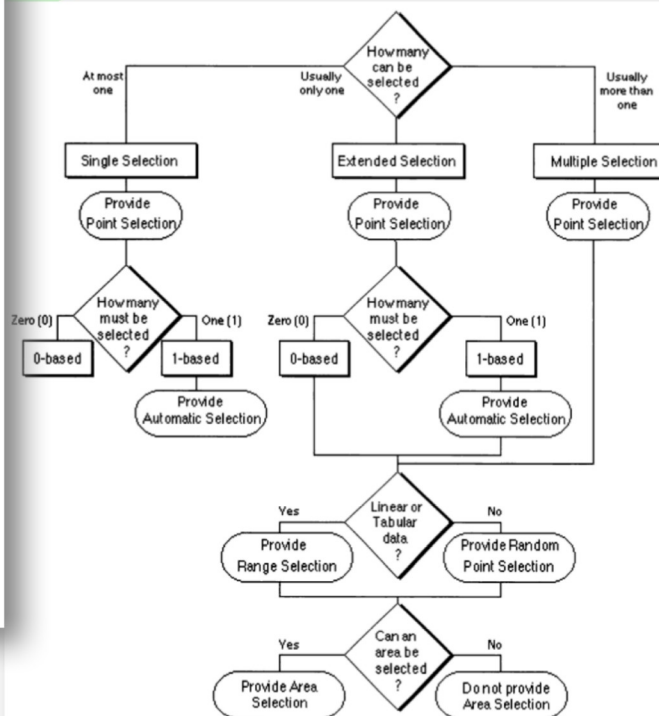
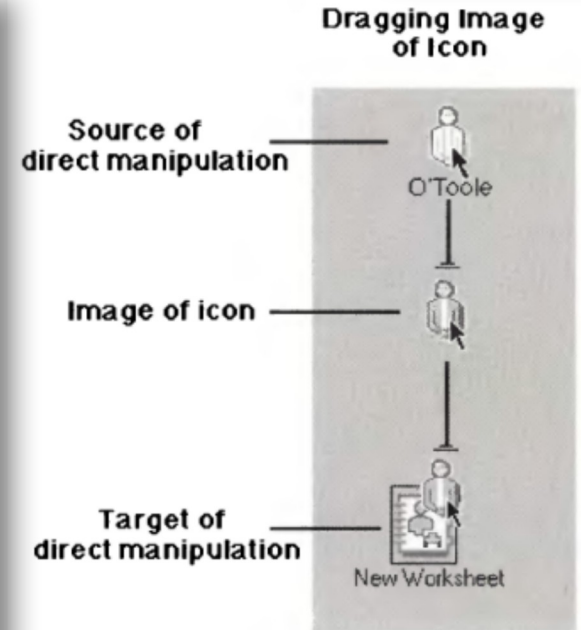


Figure 66. Decisions for Selection. A designer must first consider a user's objects and tasks to determine how many objects the user should be allowed to select at one time within a scope of selection. Next a designer must consider the minimum number of items that must be selected. Then, by evaluating the type of data being presented, the form in which it is presented, and the types of tasks the user will be trying to accomplish, the designer can determine which selection techniques to provide.



# IBM Common User Access

## Guidelines '92

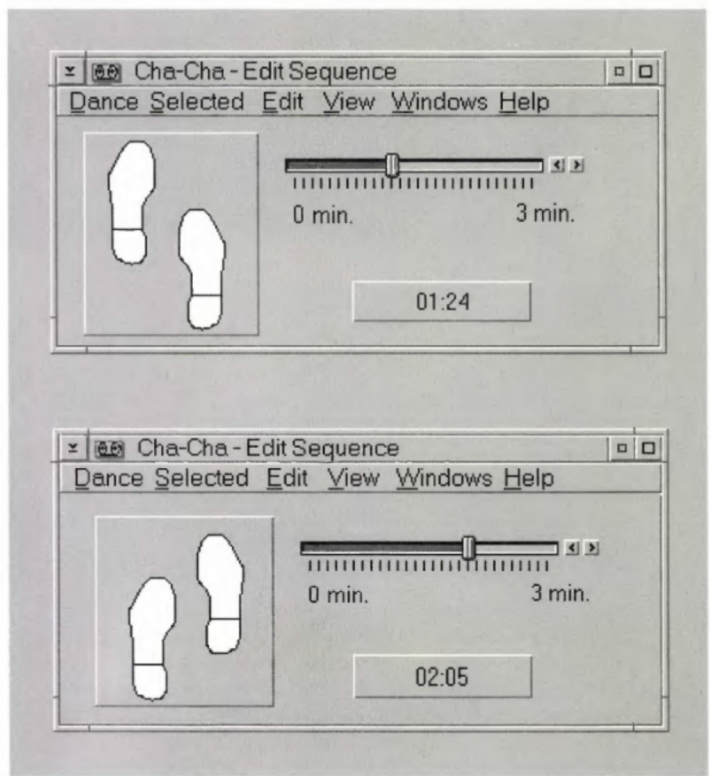


Figure 208. Slider. A slider can be used to represent a quantitative aspect of a multimedia object.

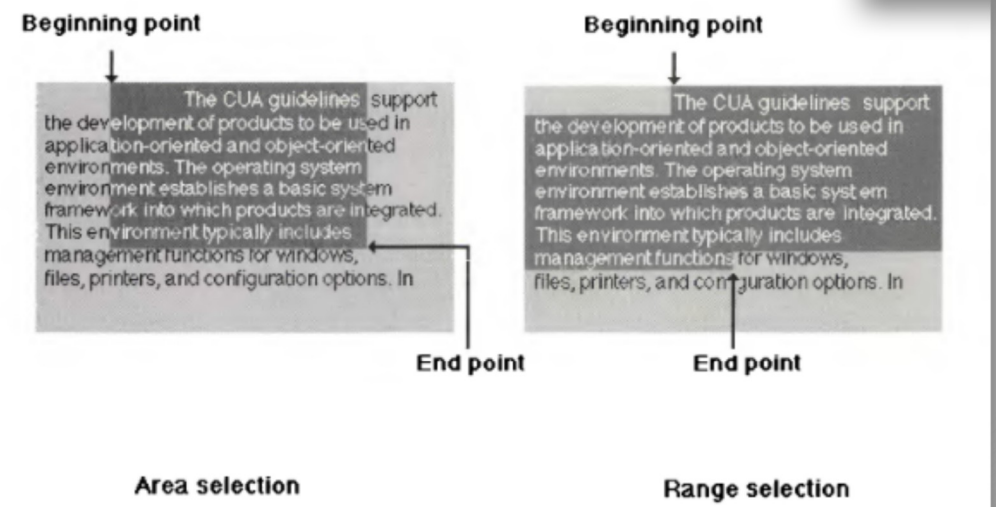


Figure 68. Area Selection and Range Selection in Text. In an area of selection, the boundary of the selected text is regular and is based on the spatial area indicated by a user. All items within the area (in this case, a rectangle defined by a beginning point and an endpoint) are selected. In a range of selection, the boundary of the selected text can be irregular. A user defines the beginning point and the endpoint, and the product determines which intermediate points are selected. For some kinds of tasks, a designer might want to provide both area selection and range selection.

File Edit View Insert Format Styles Table Form Tools Window Help

Outline.odt - LibreOffice Writer

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### Presentation Order

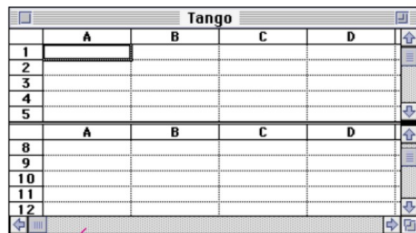
- Extensions of Man
  - Licklider - Symbiosis
  - Mechanical McLuhan
  - Electronic McLuhan
    - Discarnate Man, Extensions of Nervous System, Pattern Re
  - Computers aren't Communications Medium
    - Telegraph, Telephone, Televisions, Radio all bridge space.
    - Computers, like Mechanical Devices, are proximate.
- The forms and the aesthetic illusions
  - Upholstered Chairs vs. Patent Furniture
    - Patents = Source Code
  - Classical Styles vs. Eiffel Tower
    - Iron and Glass = ugly
  - Medium and Content
    - Old thing the past environment = telephone, television, tel

# Macintosh Human Interface

## Guidelines '95



Figure 5-42 Independent and locked scrolling of window panes



Vertically, these panes scroll independently.

Horizontally, these panes scroll together.

Figure 8-10 Localized mailbox icons



United States



Italia



France



Danmark

Figure 6-5 Incorrect absence of a close box in a modeless dialog box



No close box.



Figure 8-23 Standard 256-color palette with icon colors marked

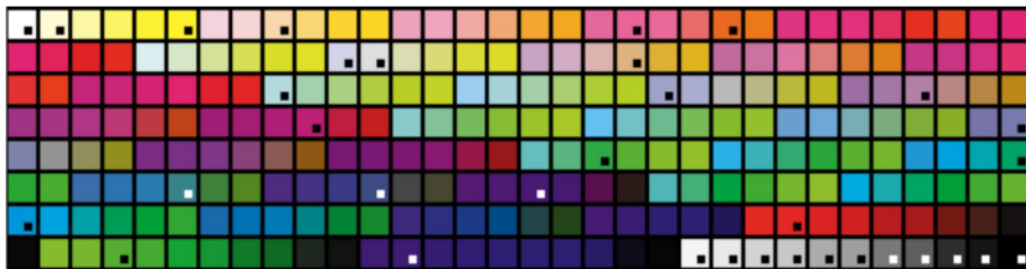
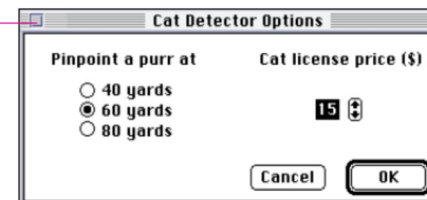
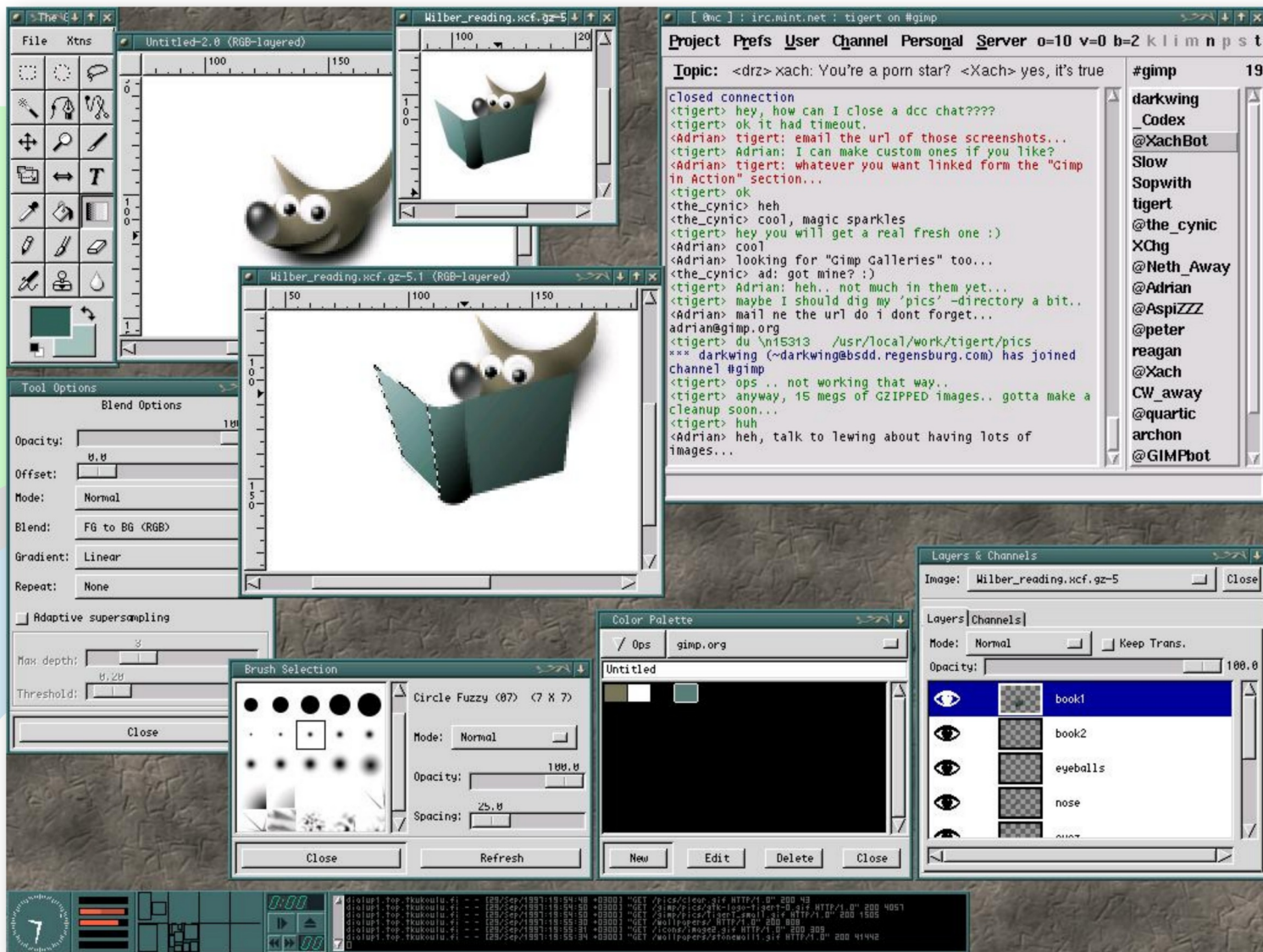


Figure 6-9 Close box used incorrectly in a movable modal dialog box





# IBM Common User Access

## Guidelines '92

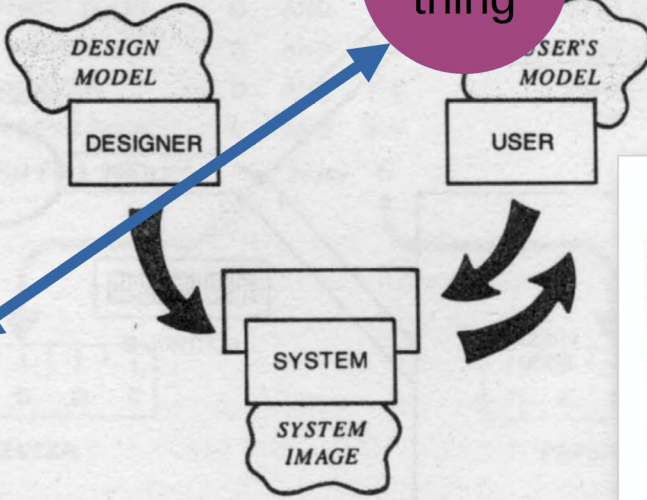
designed reality (social construction)

user

designed thing

designer

1.10 *Conceptual model* is the designer's conceptual model. The user's model is developed through interaction with the system. The system image results from the physical structure that has been built (including documentation, instructions, and labels). The designer expects the user's model to be identical to the design model. But the designer doesn't talk directly with the user—all communication takes place through the system image. If the system image does not make the design model clear and then the user will end up with the wrong mental model. (From Norman)



Real-world experiences:  
Tasks  
Processes  
Tools  
Results

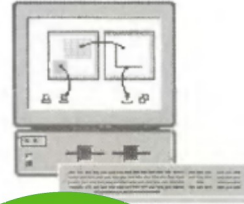
User's conceptual model  
Programmer's model  
User interface design principles and guidelines



Designer's model



User's conceptual model



Platform  
Operating system  
Shell  
Development tools  
Guidelines

Programmer's model

insensible, unarticulated low-level reality

