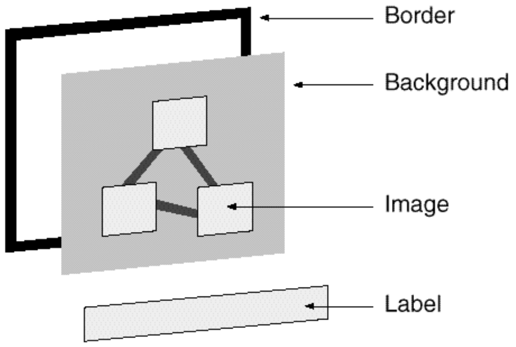
Icons

- *An icon is an image, a picture, or a symbol representing a concept.*
- Icon structure:



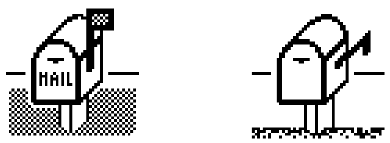
- Well-designed icons:
  - save screen space
  - are recognised quickly in a busy visual environment
  - are easily remembered
  - help interfaces become international

Icon-specific guidelines

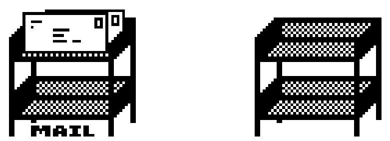
- Represent the object or action in a familiar manner
- Limit the number of different icons
- Make icons stand out from the background
- Beware of 3D icons: eye catching but distracting
- Ensure the selected icon is visible from unselected icons
- Consider adding detailed information, e.g. thickness to show the breadth of a directory, or the size of a file
- Consider animation to show actions, e.g. document icon is progressively absorbed into the printer icon to show how much of it has been printed
- Explore combinations of icons to create new objects or actions
- Use concrete objects wherever possible: abstract concepts and actions are difficult to render visually (know of a good icon for ”Undo”?)
- Consistency

Cultural and International Issues

- do not use text inside an icon (or translate it into different languages)
- do not use hand symbols, facial appearances, etc.: they vary immensely from culture to culture
- do not use metaphors dependent on a particular culture:



a U.S. mailbox



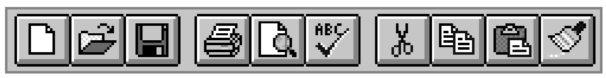
a more widely recognized image

Colours

Use colours sparingly (beware of the Las Vegas effect)

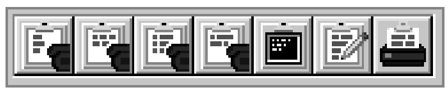
Compuserve’s *WinCim 2.0*

Images are too distracting. Unprofessional appearance.



Microsoft’s *Word*

Word’s toolbar relies on shape rather than colours: this provides far more information in less space. More professional appearance, and clearer interpretation.

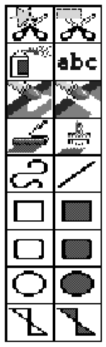


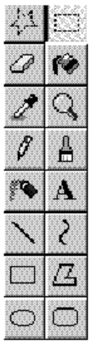
Zoc (a communications application)

The first 4 buttons are for: *Send, Send without carriage returns, Send with quotes, Send with CIS quotes.* Differences are almost undetectable, and the blue object in the foreground makes things worst.

Consistency

- the set of icons should be seen as a whole
- consistent in terms of size, colours, metaphor, level of realism (photograph, drawing, outline, silhouette), etc.
- the icons in a set should be visually balanced. Compare the old version of Paintbrush and the new icons for MS Paint:



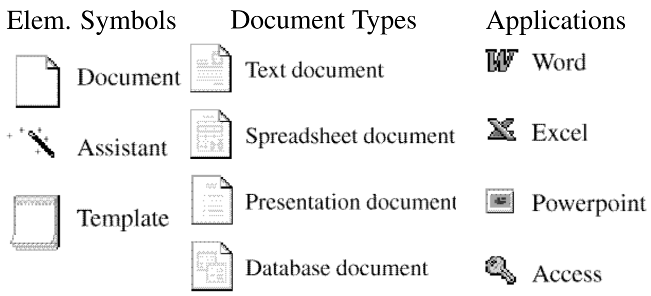


Hint: Develop an iconic language!

Iconic Language

- An iconic language is a systematic way of combining elementary symbols into more complex icons:
  - Vocabulary: set of primitive symbols.
  - Grammar: rules for combining them.
- an example: Windows NT 4.0 (95)

```
Document = Application + DocType
           [+ Template] [+ Assistant]
DocType =  Document + Type
```



Generated Icons

Word text document

Excel spreadsheet document

Powerpoint presentation document

Access database document

Word template

Powerpoint template

Access template

Word template assistant

Powerpoint template assistant

Access template assistant