

# Personal Dynamic Media

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# The Learning Research Group at Xerox Palo Alto

- Originators of much of modern computing
  - Mice
  - Color graphics
  - Wysiwyg text editor
  - Ethernet
- Object Oriented programming language

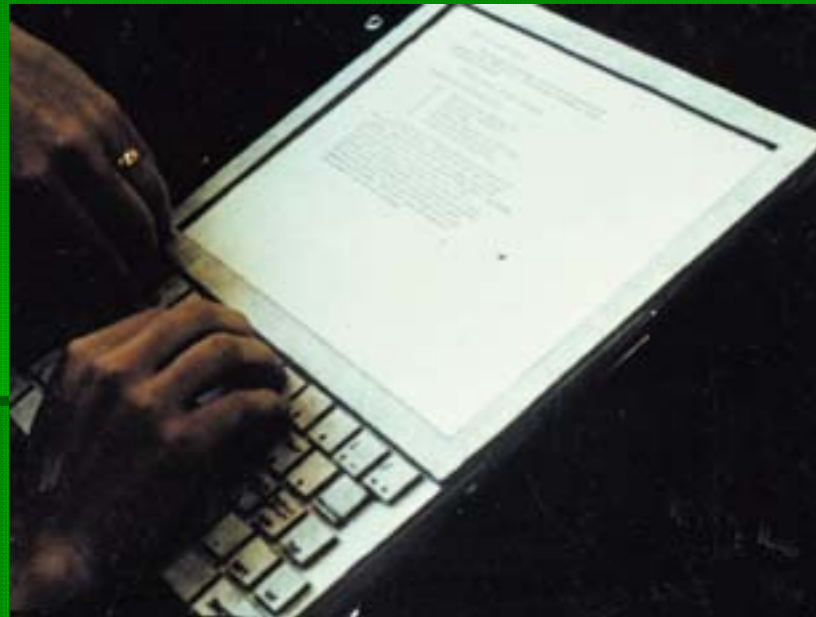
# Alan Kay

- From a memo I wrote to Xerox in 1971: “Though the Dynabook will have considerable local storage and will do most computing locally, it will spend a large percentage of its time hooked to various large, global information utilities which will permit communication with others of ideas, data, working models, as well as the daily chit-chat that organizations need in order to function. The communications link will be by private and public wires and by packet radio. Dynabooks will also be used as servers in the information utilities. They will have enough power to be entirely shaped by software. ”

# The Dynabook Idea

- At the time most computer users timeshared large mainframes with limited power
- Dynabook would be more powerful and designed to offer each person their own computer
- It would be portable and used for media

# The Dynabook Prototype



# Dynabook and Children

- Dynabook creators decided to focus on children as their users
- Kids brought excitement and new expectations to the project
- They expected more power and interactions than adults

# Interim Dynabook

- Used the Smalltalk programming language
- Self contained system
- Came with mouse, keyboard, disk drive and speakers

# Dynabook Features

- Text editing using the keyboard, allowed users to layout and choose fonts
- Drawing and painting using the mouse
- Multiple window displays and documents
- Allowed editing, and filing of documents
- Graphics could be animated
- Music creation with the keyboard of onscreen

# Simulation

- Shazam – Animation tool using a sequence of frames
  - Allowed for changes to individual frames
- Shape creation simulation
  - Allowed for manipulation of the shapes
- Hospital simulation
  - Used departments and patients to show resource use

# Simulation

- TWANG
  - Music creation system
- OPUS
  - Musical score capture system, could print and breakdown the score for different instruments
- Electronic Circuit Design System
  - Allowed the user to lay out electronic circuits

# Conclusion

- The Dynabook was the father of what most modern computers are
- Think of all the modern programs we use that are adapted from these early ones
  - What would we do without Office, Photoshop, 3d Studio Max, Pro Tools, Finale, Windows