



NUI: What's in a Name?

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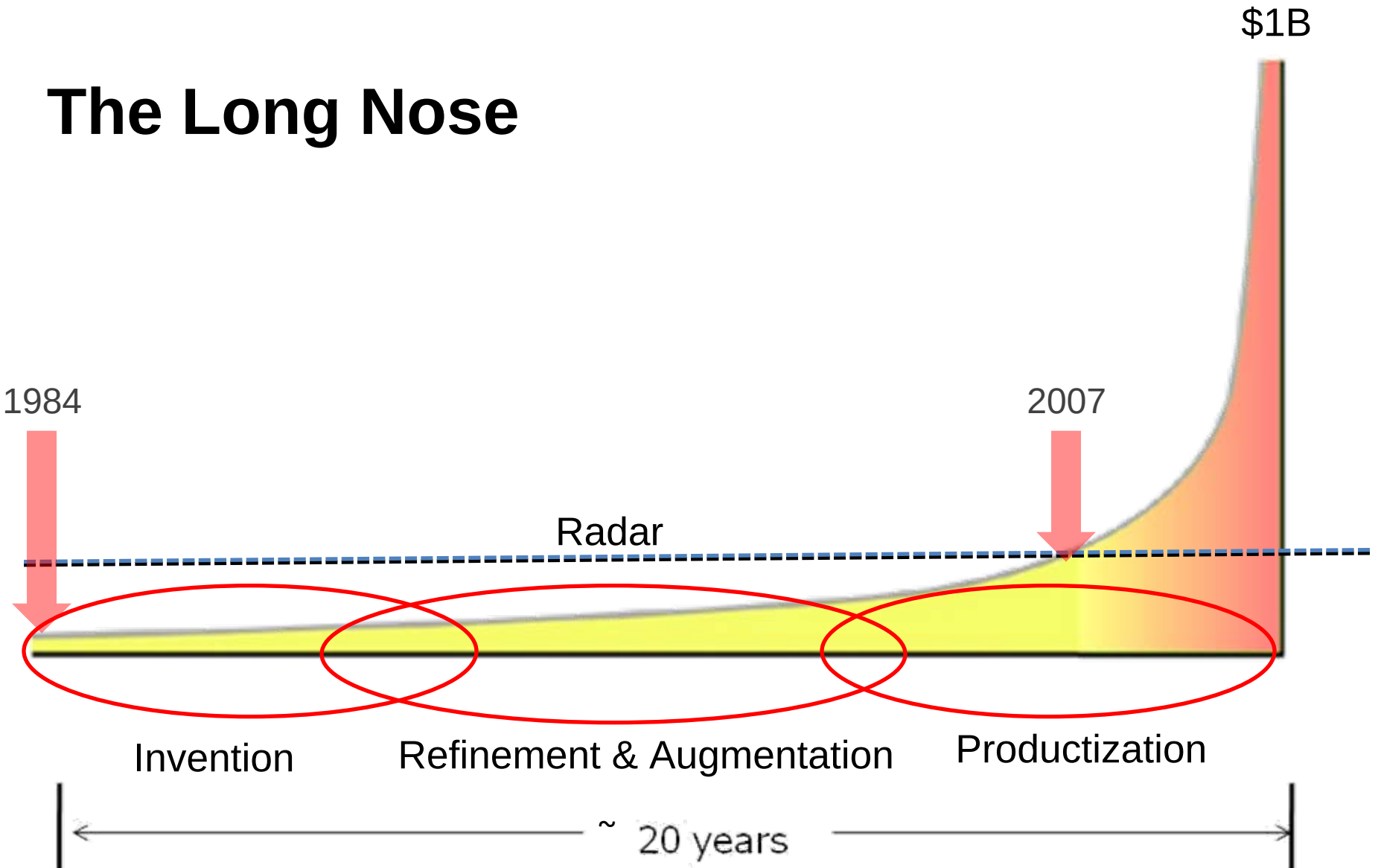


The only true voyage of discovery is
not to go to new places, but to
have other eyes.

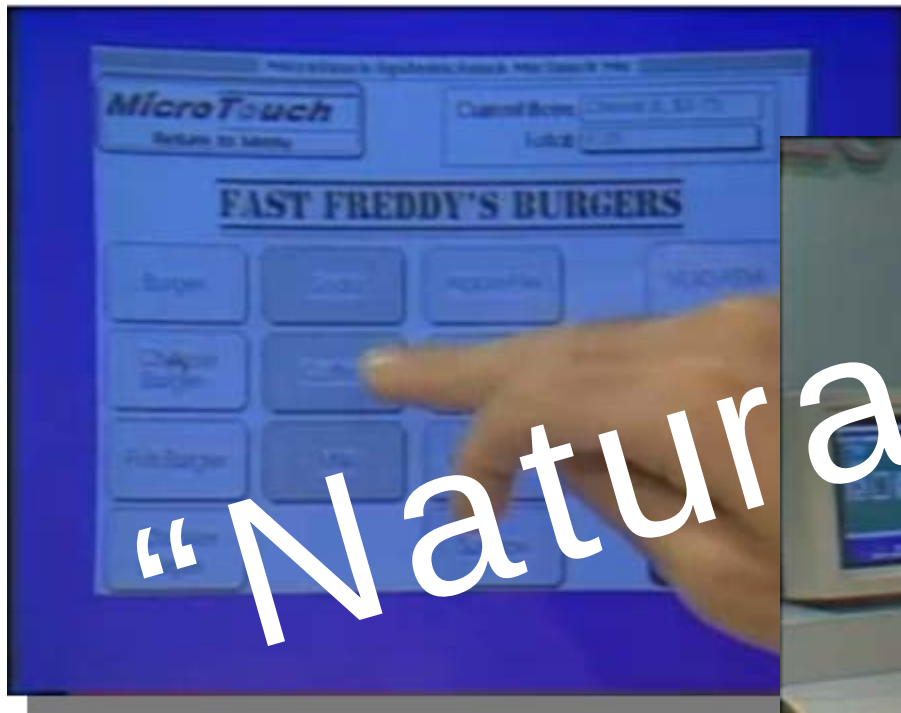
Marcel Proust



The Long Nose



MicroTouch



Elographics

Computer Chronicles: 1990

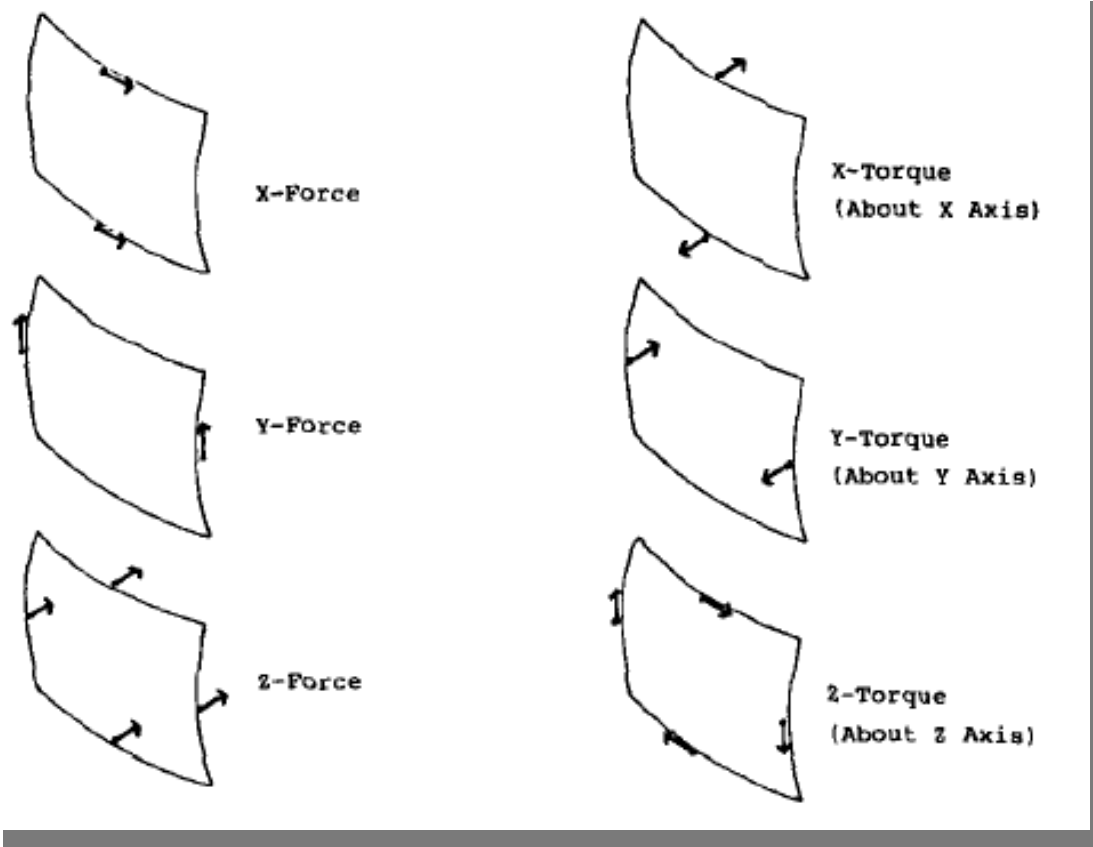
www.archive.org/details/inputdevices



PLATO IV terminal with touch-screen enabled plasma display. (circa 1972-74).

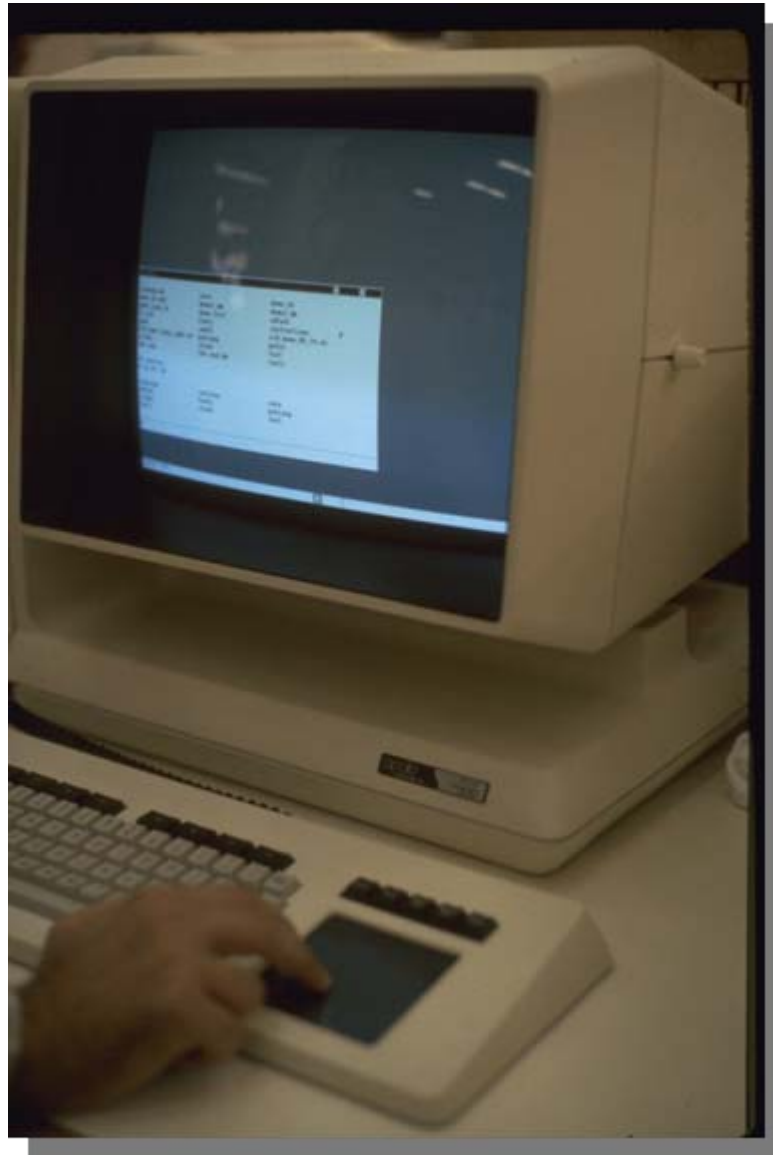
Photo courtesy of the Archives of the University of Illinois, Urban Champaign.

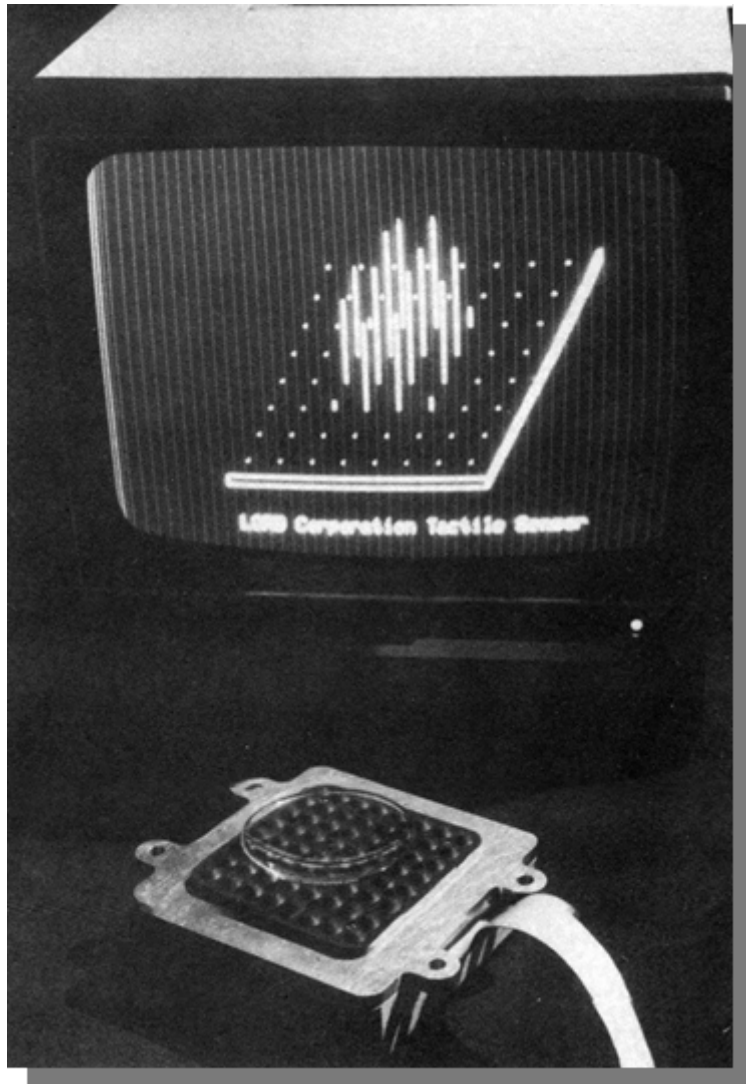
Found in RS: 39/2/20, Box COL 13, Folder COL 13-13 Computer Ed. Research Lab / PLATO 1952-74



Herot, C. & Weinzapfel, G. (1978). One-Point Touch Input of Vector Information from Computer Displays, *Computer Graphics*, 12(3), 210-216. <http://www.youtube.com/watch?v=vMkYfd0sOLM>

Apollo Workstation (1981)

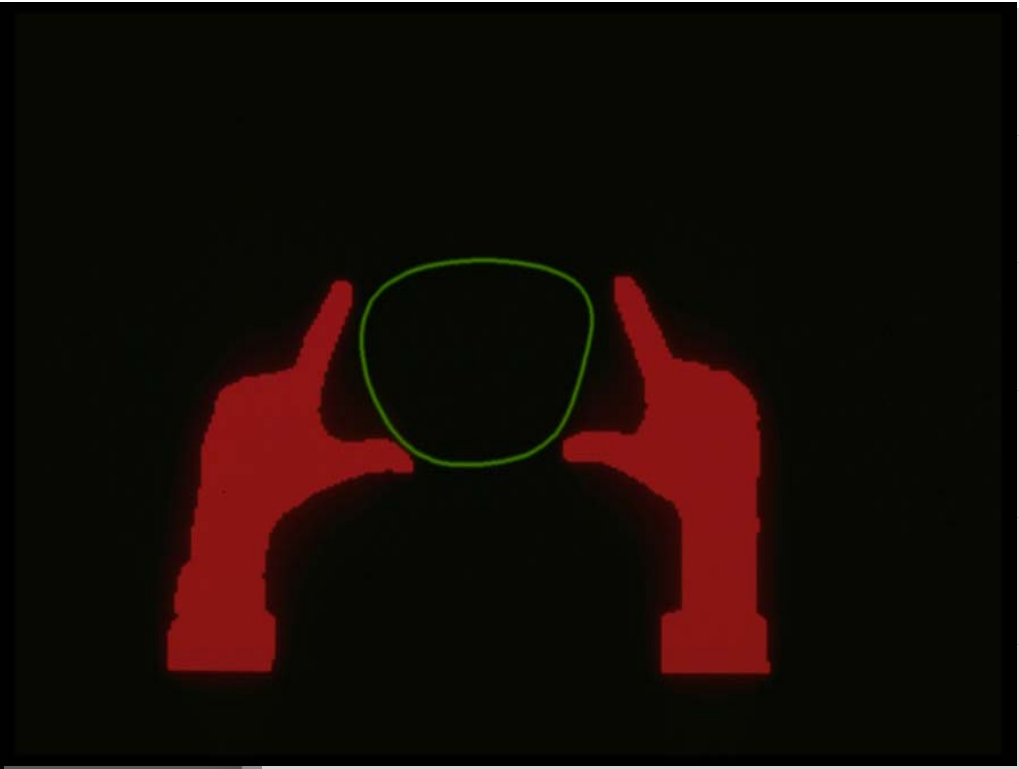




8 x 8 array of sensors in a 4" x 4" pad

Wolfeld, Jeffrey A. (1981). [*Real Time Control of a Robot Tactile Sensor*](#). MSc Thesis. Philadelphia: Moore School of Electrical Engineering.

Krueger, Myron, W. (1983)
Krueger, Gionfriddo &
Hinrichsen, (1985)



TOUCH SENSOR CALCULATORS

- Continuous readout of time and date
- Crystal touch-sensitive calculator
- 3 daily alarms
- Hourly time signal
- Countdown alarm with repeat
- Dual time
- One-touch changeover between 12/24 hour formats
- 1/100 sec. stopwatch
- 18-month battery life
- Micro-light (TC-600, TC-600G)



24 6-30
10:58:50
Single-point alarm



24 6-30
10:58:50
Single-point alarm



24 6-30
10:58:50
Single-point alarm

• TC-600-1*
Module No. 119
Chrome plated case

• TC-600G-5*
Module No. 119
Gold tone

*Available with either free-size or three-size strap



NOW... THE INVISIBLE CASIO CALCULATOR WATCH

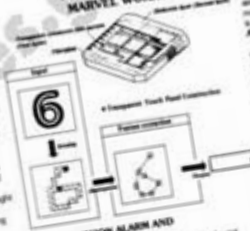
Finger-write your figures on the watch face.

Introducing the technology that adds another dimension to watch technology. This new CASIO combines state-of-the-art micro-computer technology with the latest styling to give you an elegant timepiece with a multitude of functions.

And the most remarkable function of all is... The watch face actually reads your finger-written numbers. You can use it to compute math problems you face on a daily basis.

And there's more, much more... for less than \$100.00.

HERE'S HOW THIS MARVEL WORKS



ELECTRO TOUCH TECHNOLOGY

This handsome and ruggedly styled timepiece has a transparent crystal that reads finger-written numbers. The watch face has a multi-layered digital display. Take your finger and write the numbers on the watch face. The watch face will read the numbers and the answer will appear on the display.

The basic, the technology, no need to use a calculator. Even the toughest figures will work. Add, subtract, multiply, divide - all in the blink of an eye. The watch face will read the numbers and the answer will appear on the display.

DIGITAL PRECISION, ANALOG STYLE.

This handsome CASIO watch combines the best of both worlds. It has a digital display that reads finger-written numbers. The watch face has a multi-layered digital display. Take your finger and write the numbers on the watch face. The watch face will read the numbers and the answer will appear on the display.

The basic, the technology, no need to use a calculator. Even the toughest figures will work. Add, subtract, multiply, divide - all in the blink of an eye. The watch face will read the numbers and the answer will appear on the display.

PRECISION ALARM AND STOPWATCH

You can program this multi-talented watch for daily events. To wake you up, set your alarm. Program it for any time you choose. Or set it to keep you on time for your daily routine.

In addition to helping you organize your day, this digital chronograph counts a variety of elapsed seconds. Record your time and set times with accuracy to 1/100 second. A built-in stopwatch and stop watch. Ideal for timing cooking time, exercise or your parking meter or anything you like.

WE INTRODUCE IT AND WE GUARANTEE IT.

When we first heard the engineers at CASIO were on the brink of perfecting a finger trace recognition calculator watch, we had hopes of being the first to offer it. And now that's a reality.

Because this remarkable timepiece is now available only through On The Run, to be sure you get the best of both worlds, we've added exclusive features, please visit your nearest exclusive dealer, please visit your nearest exclusive dealer, please visit your nearest exclusive dealer.

Chose the silver, chrome, or gold-plated model. A only \$99.95 and gold-plated model AT-5500 - \$119.95.

See how this handsome timepiece can be used to solve any problem. Choose the convenience of finger trace calculation and all the other special features of this talented timepiece. Once you see this handsome and functional timepiece, you'll want to use it every day. If not, we guarantee your satisfaction. Simply return it to us within 30 days for a full and courteous refund. Our dealers for a full and courteous refund. Our dealers for a full and courteous refund.

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To order call toll-free number below, or send a check of money order for the total amount plus \$3.50 for shipping. \$1.00 for each additional watch for shipping and insurance. Add an additional \$2.00 for 15% or delivery. No cash orders. All P.O. orders.

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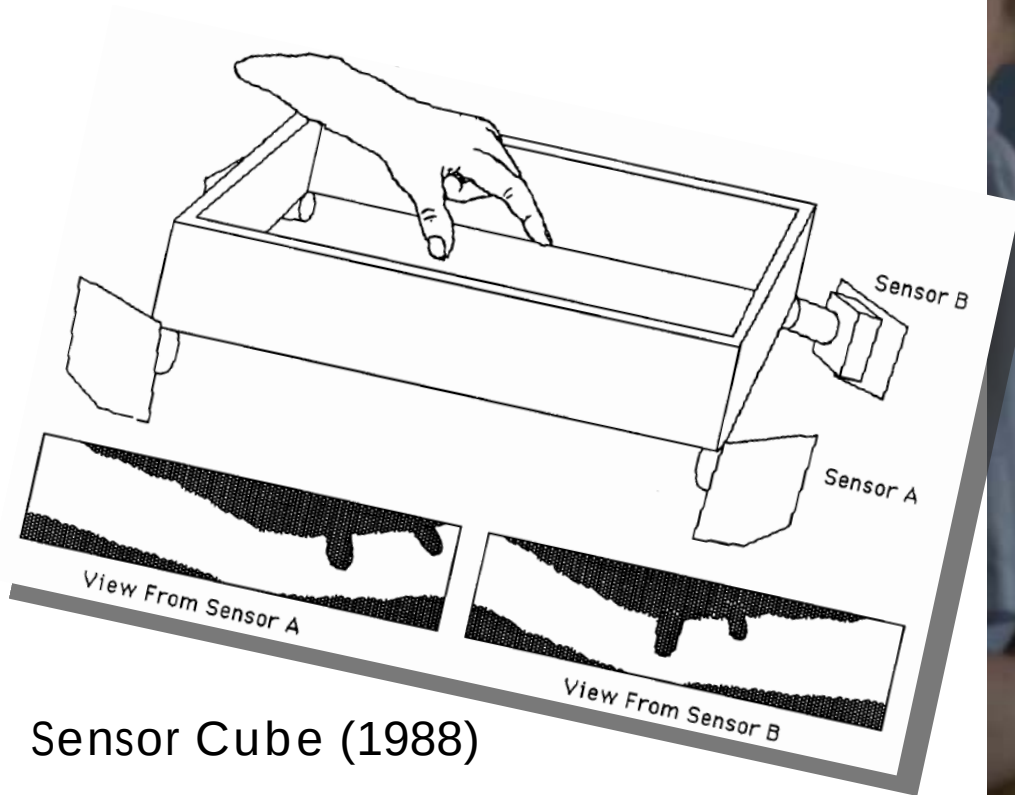


Buxton, W., Hill, R. & Rowley, P. (1985)
Lee, S., Buxton, W. & Smith, K.C. (1985)



Photonics (1986)

Paul McAvinney
Sensor Cube (1988)



Sensor Cube (1988)



A Smartphone

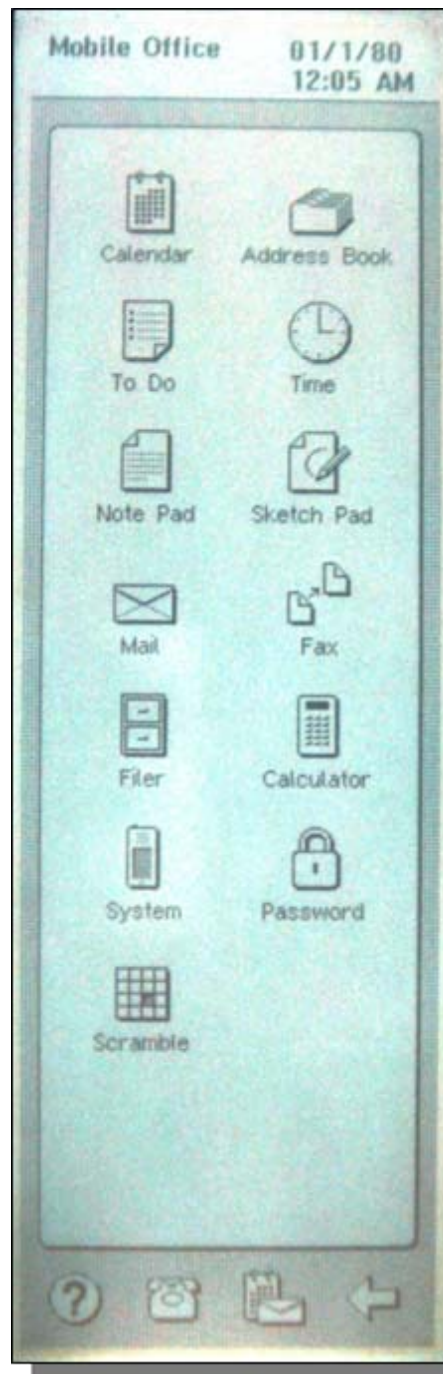
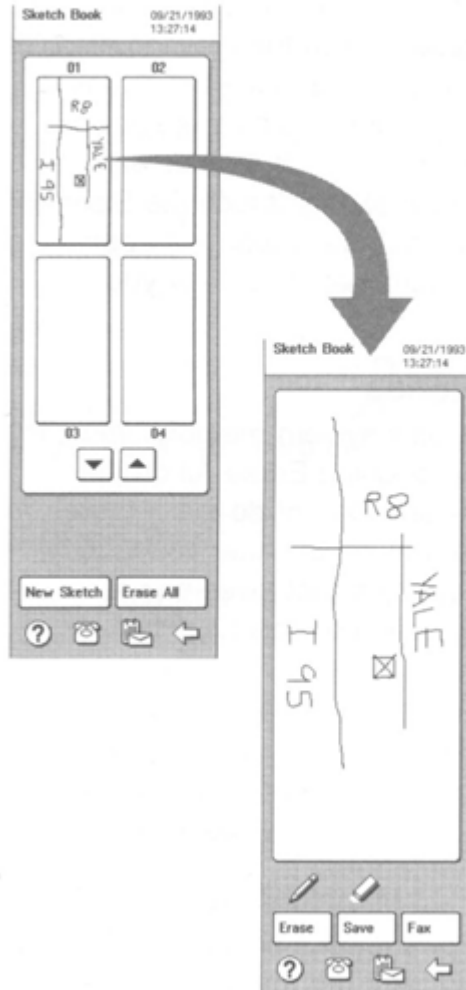


Simon. IBM & Bell South(1993)

Using the sketch pad



Sketch Pad





A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
R	S	T	U	V	W	X	Y	Z	space	backspace	return	capshift	caplock			
0	1	2	3	4	5	6	7	8	9							

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Palm Pilot(1996)



Portfolio Wall(1993)



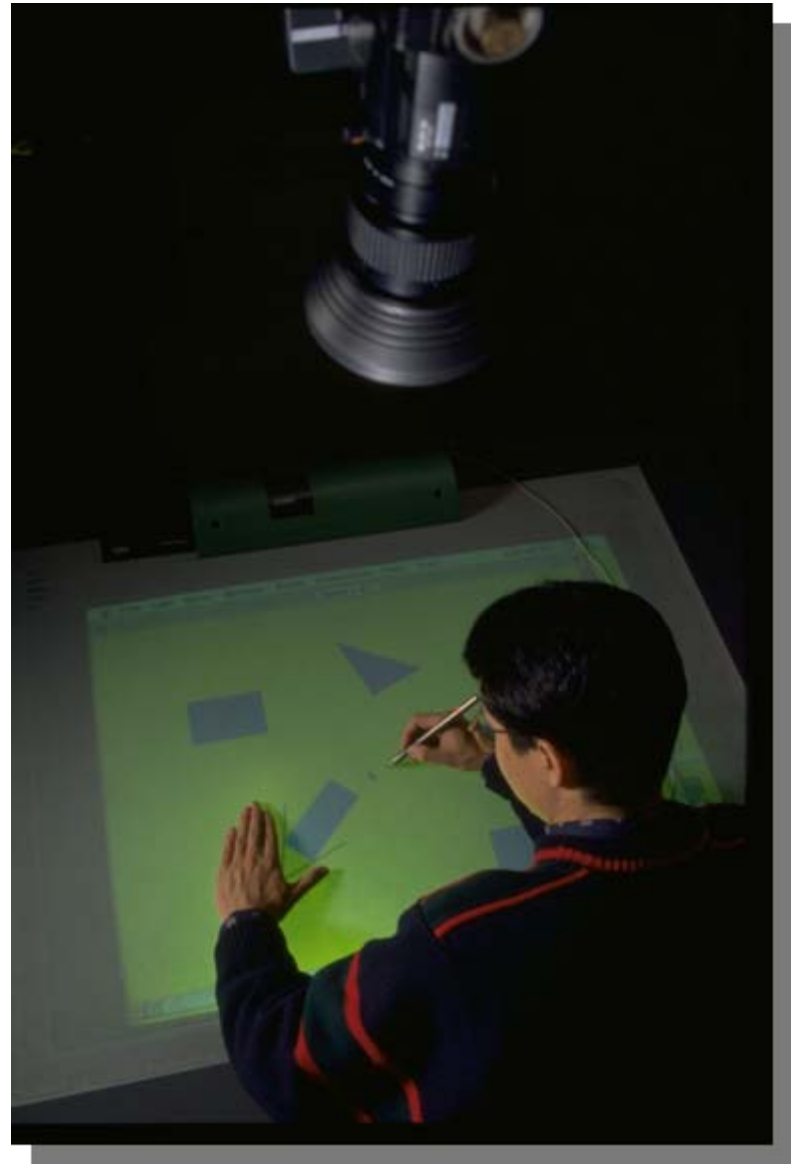
Buxton & Myers (1986)



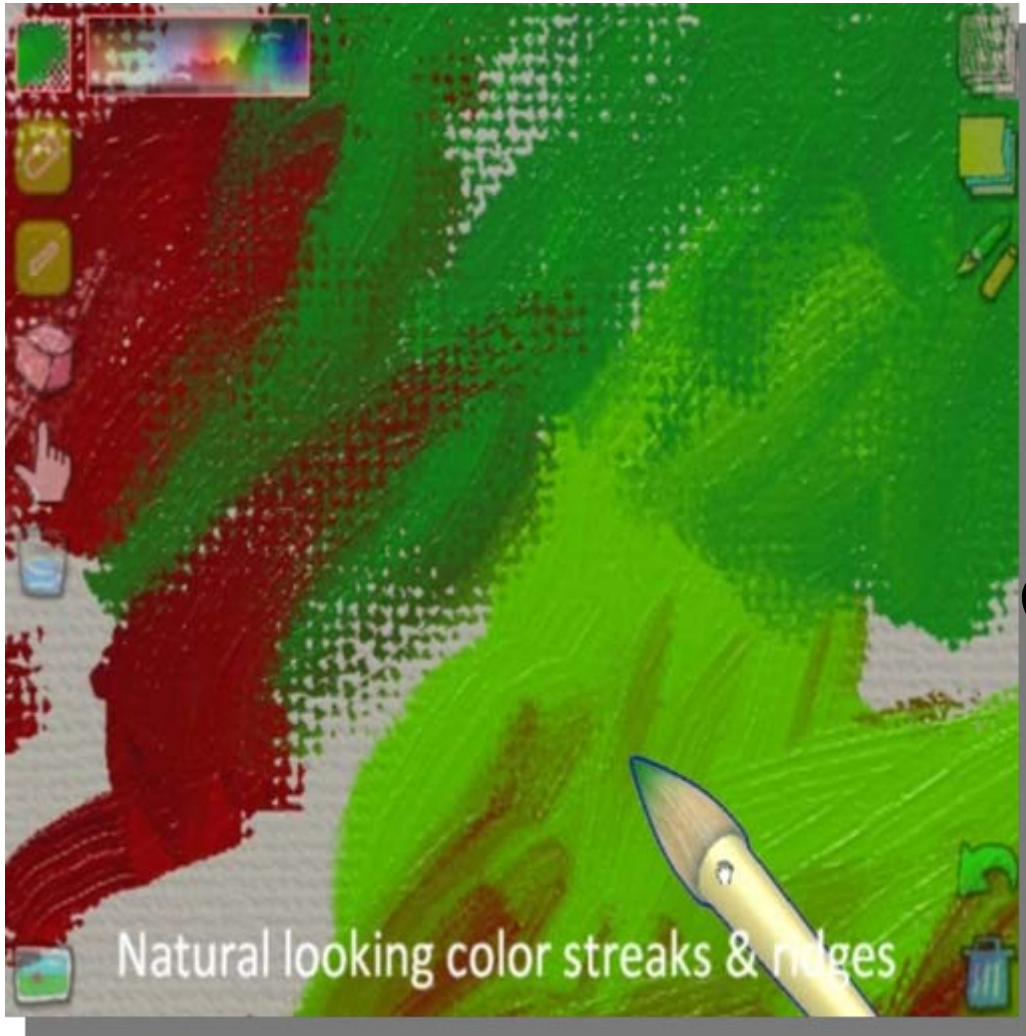
A) Stretchable square

Graspable UI. Fitzmaurice, Ishii, Buxton(1996)

Active Desk
University of Toronto (1992/94)







Gustav Demo





Natural UI

It's as simple as nature herself!