

The Global Virtual Museum of Information Science & Technology: a Project Idea

 ifip International Communities
of Invention and Innovation

WG 9.7 – History of Computing Int. Conference
NYU Tandon School of Engineering
25-29 May 2016



Giovanni A. Cignoni & Giovanni A. Cossu

1/30

- I'll try not to repeat :)
- Some background and motivations
- Few “technical details” ...
- ... and other considerations
- An example of stories a KB can unveil

- Coming out: I'm a software engineer
- My first approach to IST history
 - Retrieve technical documentation
 - Study the old technology
 - Rebuild old technology
 - In hardware, partially (too much real money)
 - In software, as a simulator (costs easy to hide)
 - Hacking the Macchina Ridotta

- Political and economical background of the MR
- Personal computing devices
 - 2+1+1 exhibitions
 - At the Museum of Computing Machinery of Pisa
 - From a quite rich collection, not yet catalogued
- Disappointed by Italian ICCD Standars
 - PST template: one piece, one record
 - About 400 fields, mostly NA, yet insufficient

- There are better ways to manage information
- Lot of information, lot of relations
 - Build a knowledge base
- Different yet related types of objects
 - Build an ontology
 - Each type has the proper attributes
- Models and technological solutions are available

- Institutions
 - Museums, archives
 - Research institutes, international associations
- People
 - Keepers, curators, researchers
 - Collectors and retrocomputing enthusiasts
- Authority is not evil and many want to learn
- Public engagement is a mandatory goal

- The history of IST is international
- Collections are naturally local
 - Artifacts belongs to places
 - Part of the enjoyment is to be in front of them
 - The KB does not substitute the Museums
- Competencies are local
- Knowledge is global
 - It is a pity not to exploit existing technologies
 - A shared KB helps to make a community

- A common need, approached at national level
 - MINF project
 - Science Museum Group
 - AICA virtual museum and recent survey
- We should consider a more ambitious project
 - At least as an opportunity
 - It is more efficient to build one than merge many
- It will be international as IST is

- The KB is a support to build enhanced visits
- The KB provides contents for storytelling aids
 - Interactive screens
 - Apps on mobile devices
 - In-depth browsing at home, after the visit
- An example
 - A story a researcher can discover “inside” the KB
 - A story that can be told to museum visitors

a piece of a collection



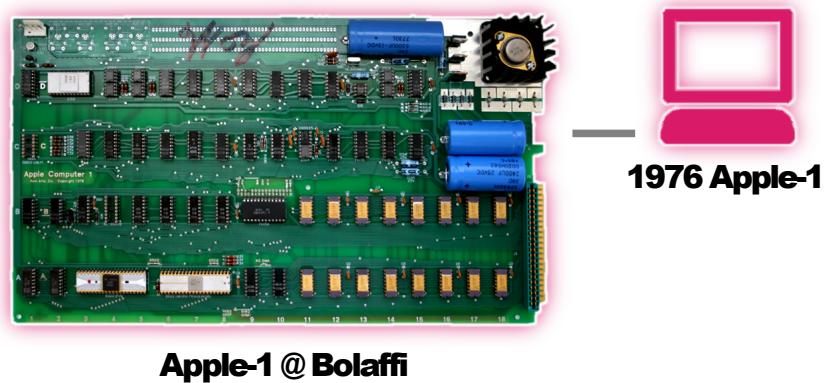
Apple-1 @ Bolaffi



Giovanni A. Cignoni & Giovanni A. Cossu

10/30

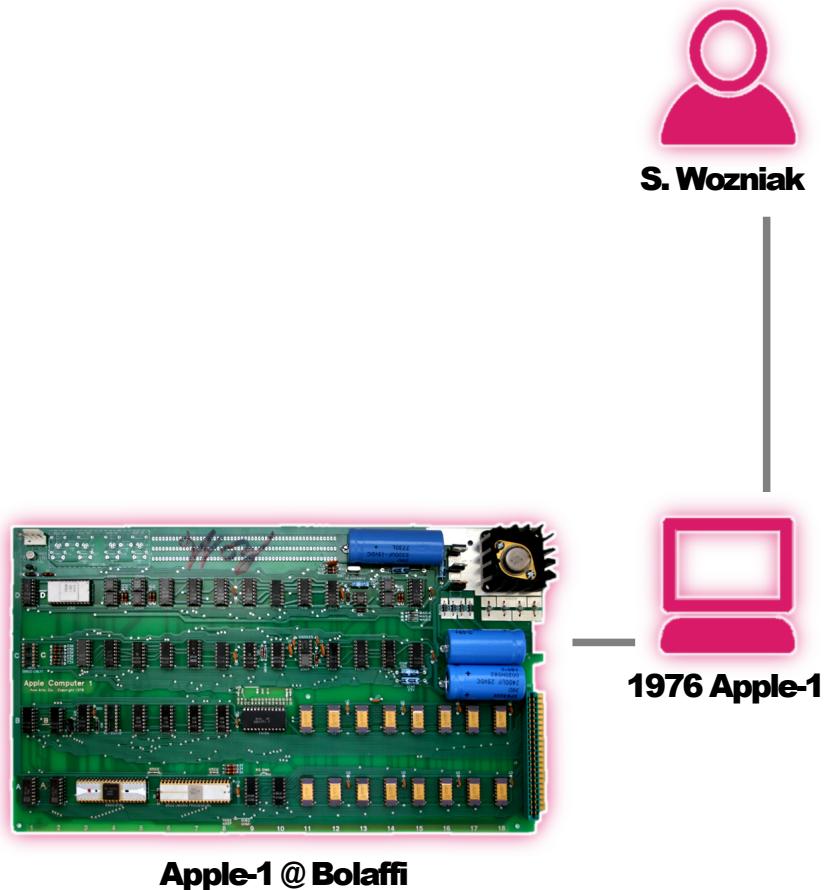
a piece of a produced model



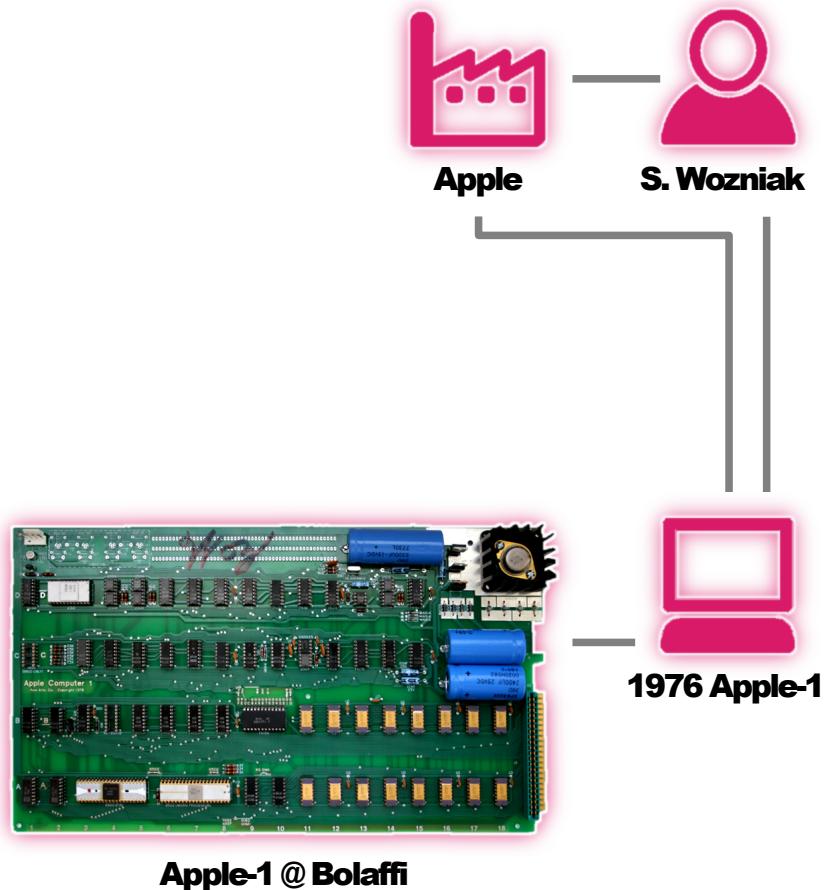
Apple-1 @ Bolaffi



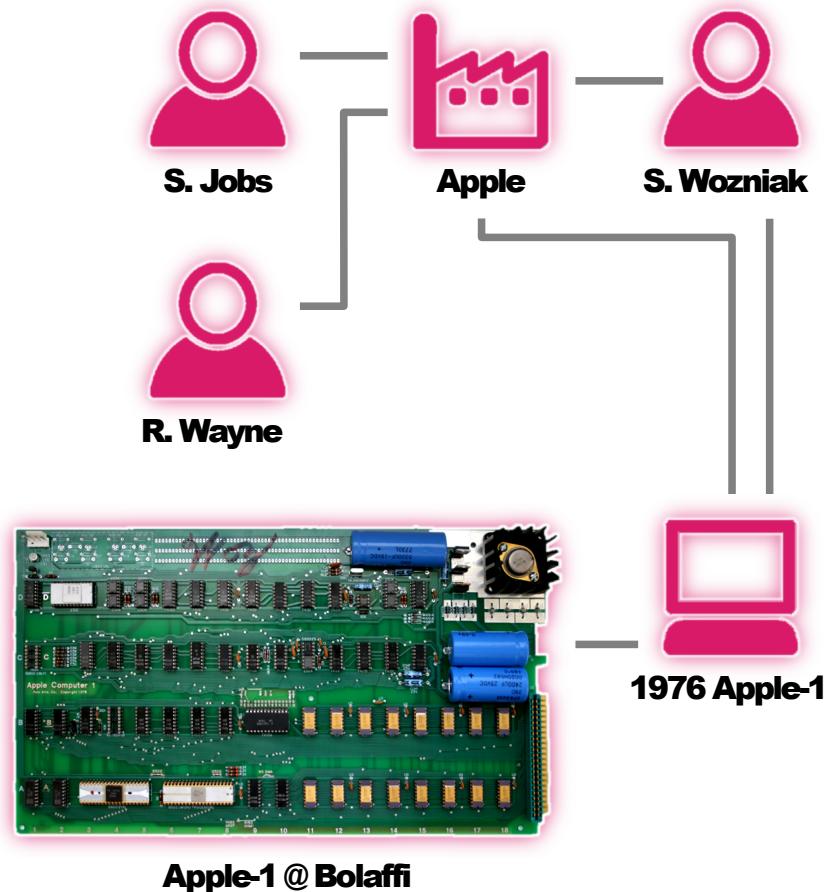
who designed the Apple-1?



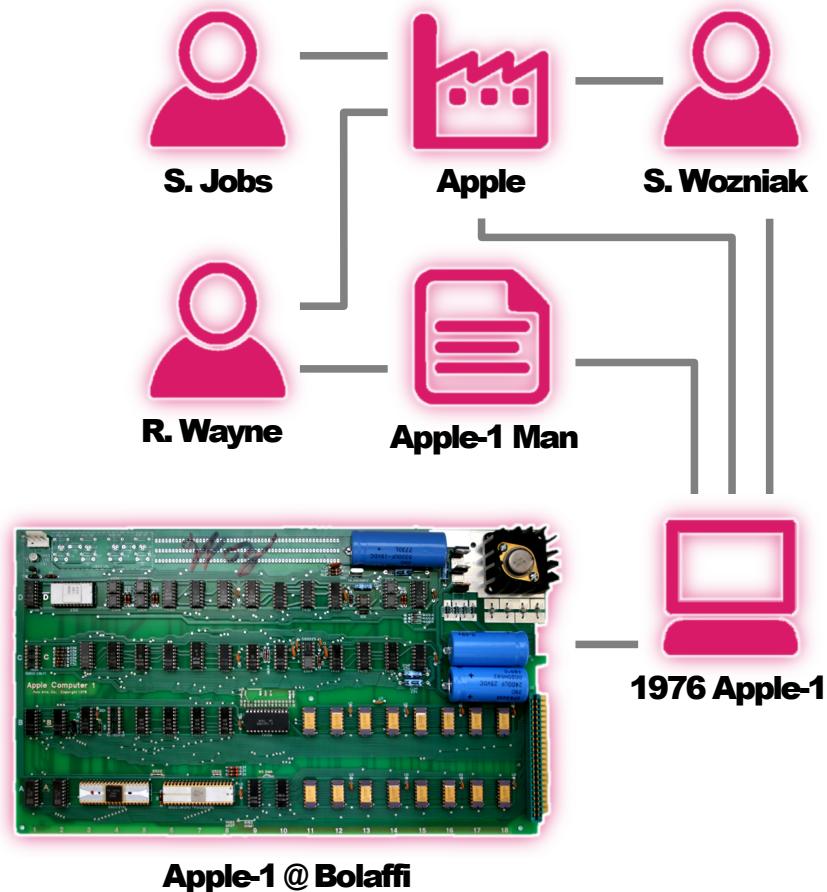
was Woz only an engineer?



the other founders

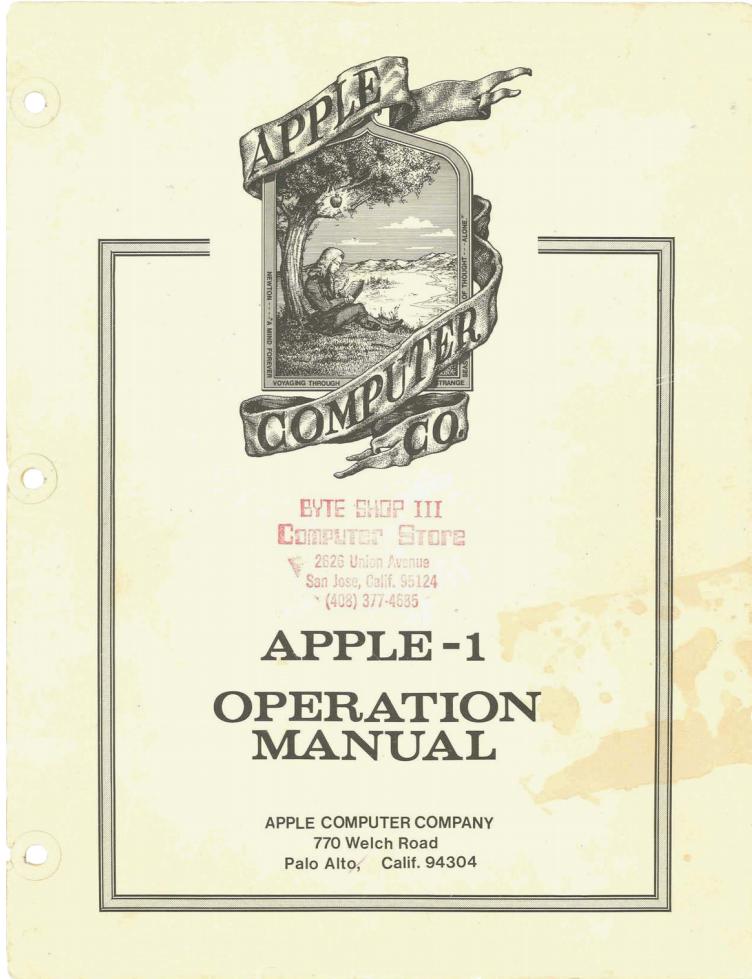


what also Wayne did?



where can I see one?

Apple-1 Man @ Computer History Museum

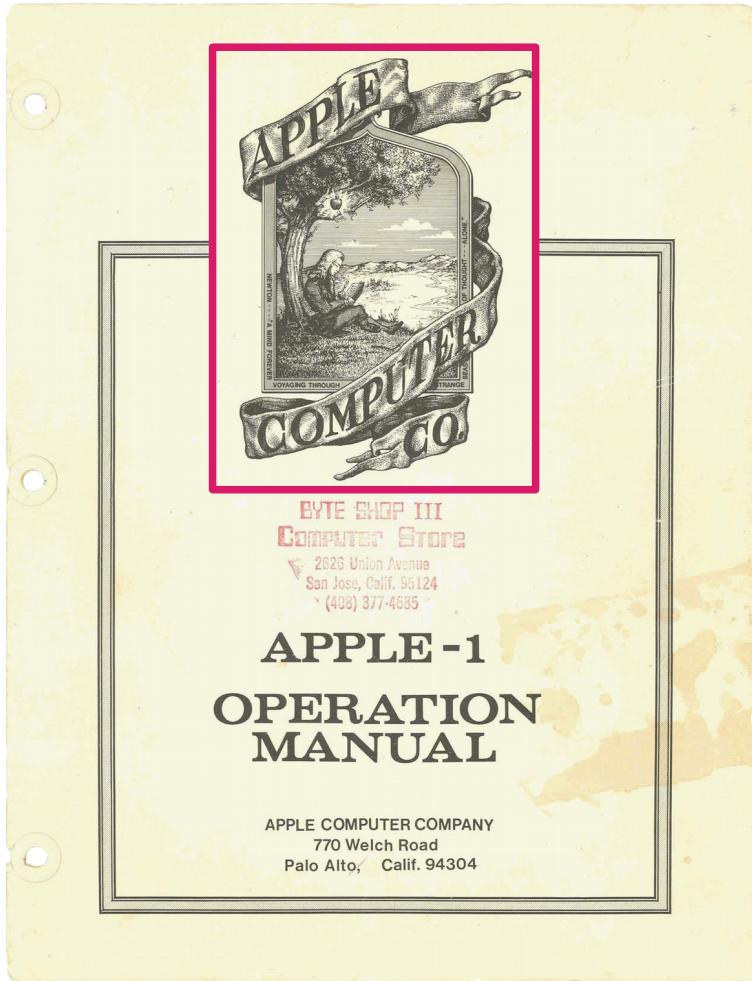


Giovanni A. Cignoni & Giovanni A. Cossu

16/30

have a closer look...

Apple-1 Man @ Computer History Museum

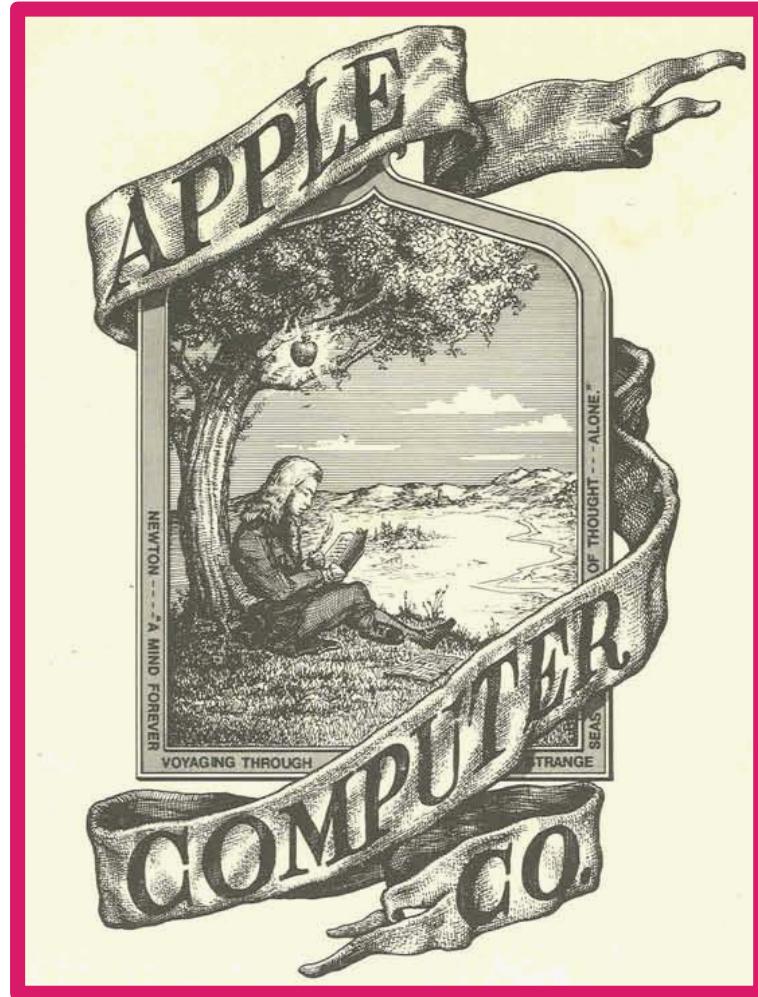
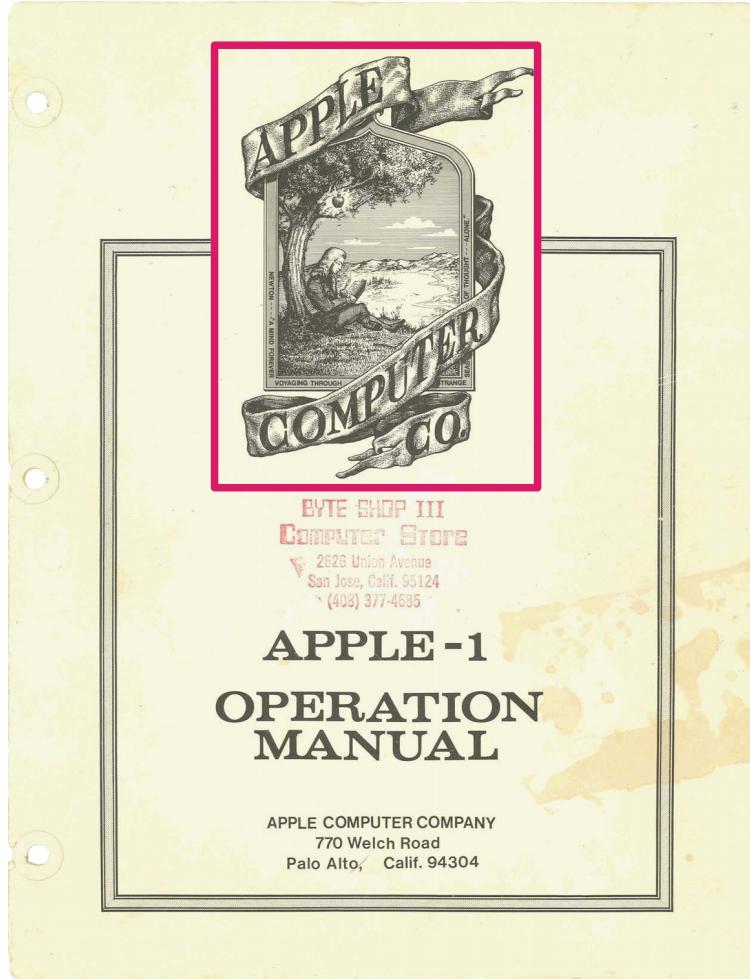


Giovanni A. Cignoni & Giovanni A. Cossu

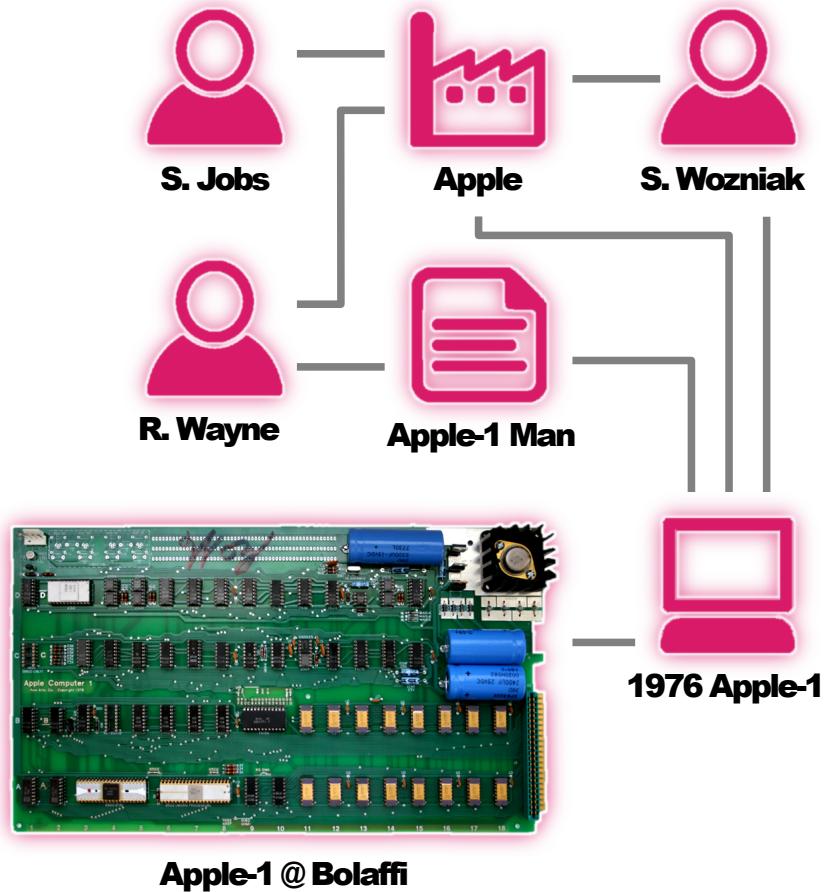
17/30

the true about the Apple's apple

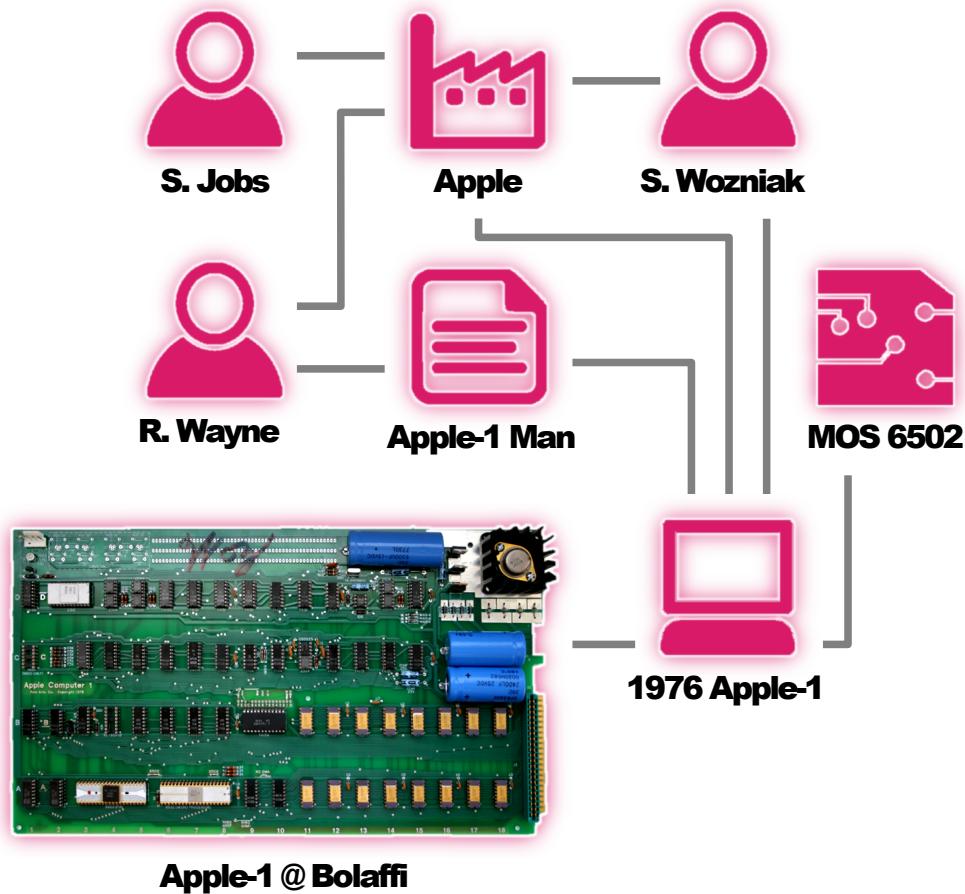
Apple-1 Man @ Computer History Museum



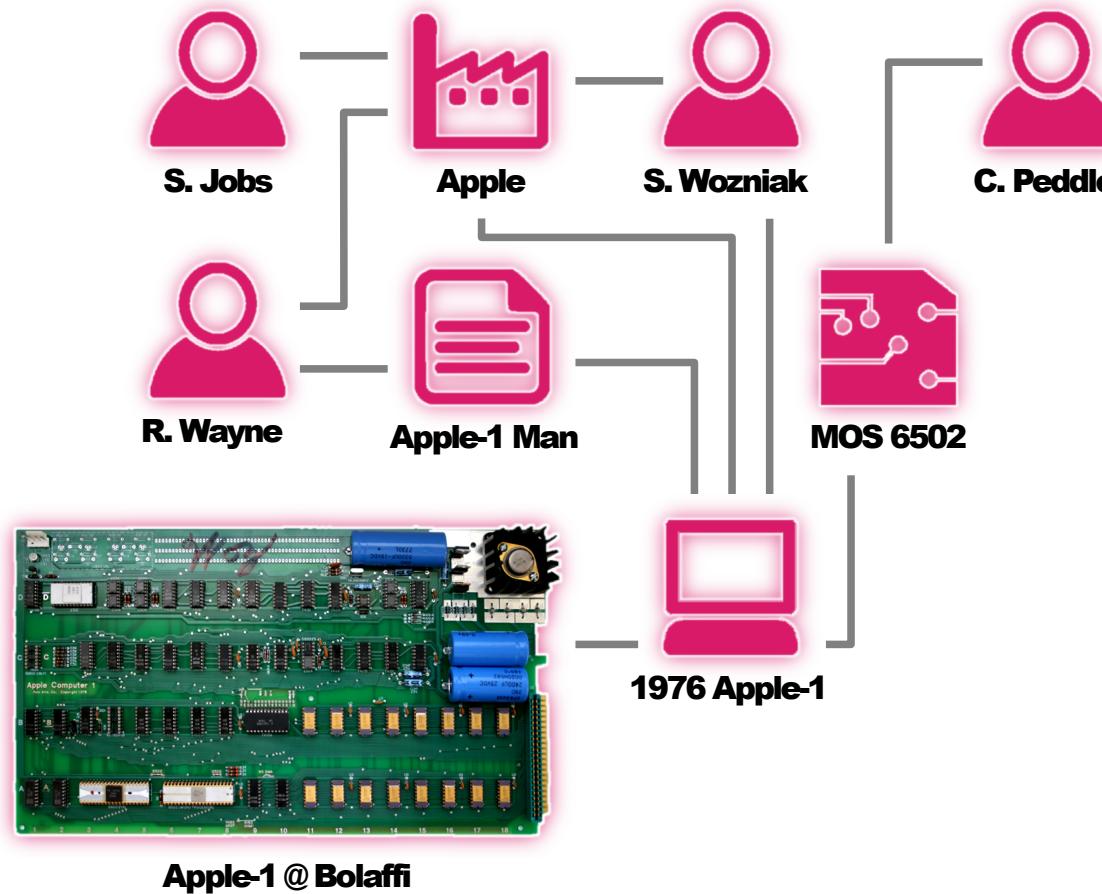
back to the Apple-1



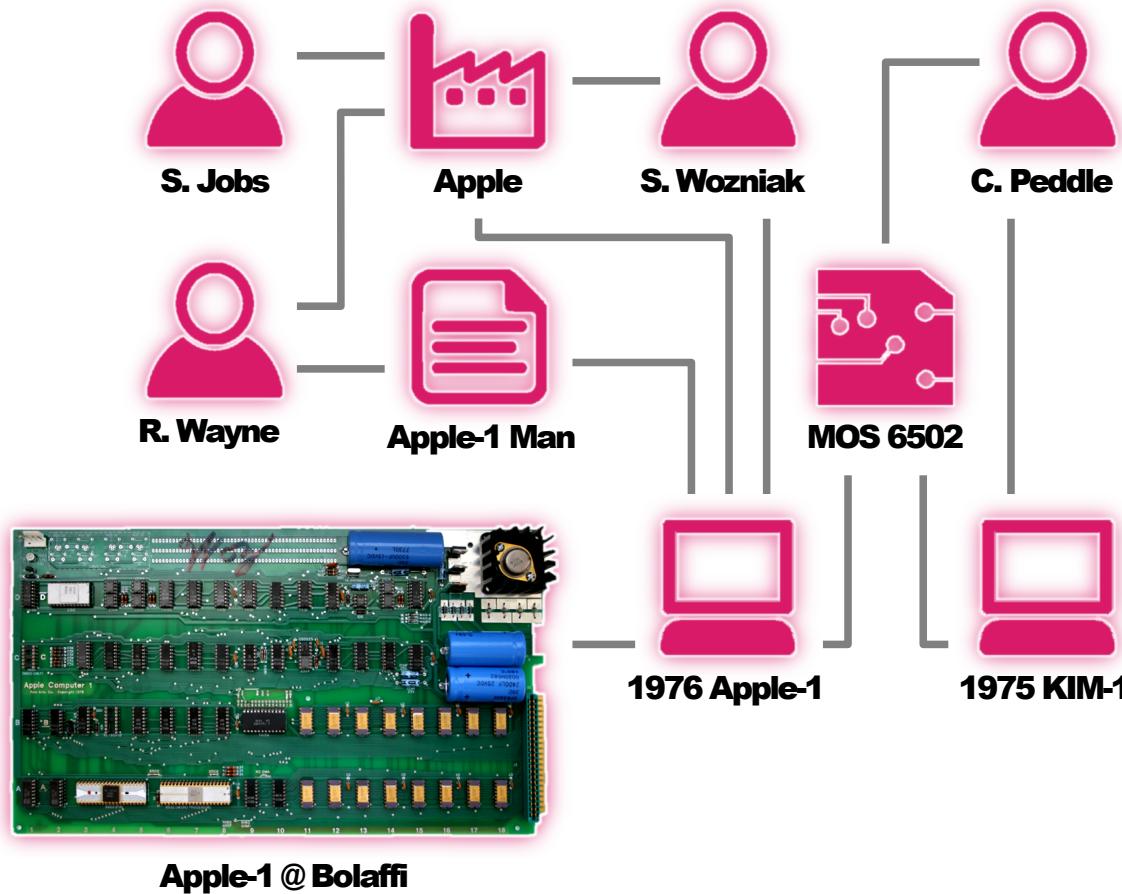
which was the Apple-1 CPU?



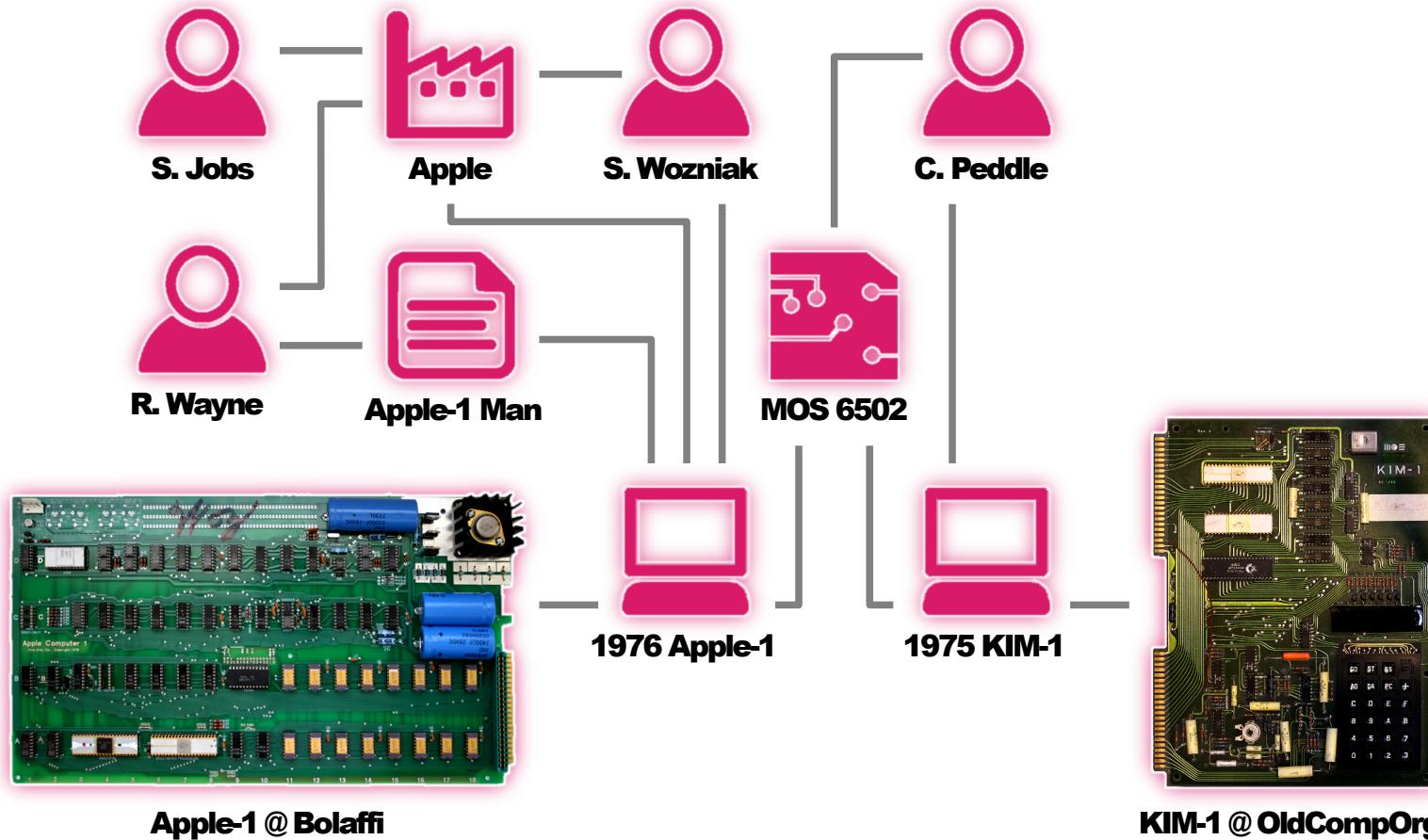
who designed the MOS 6502?

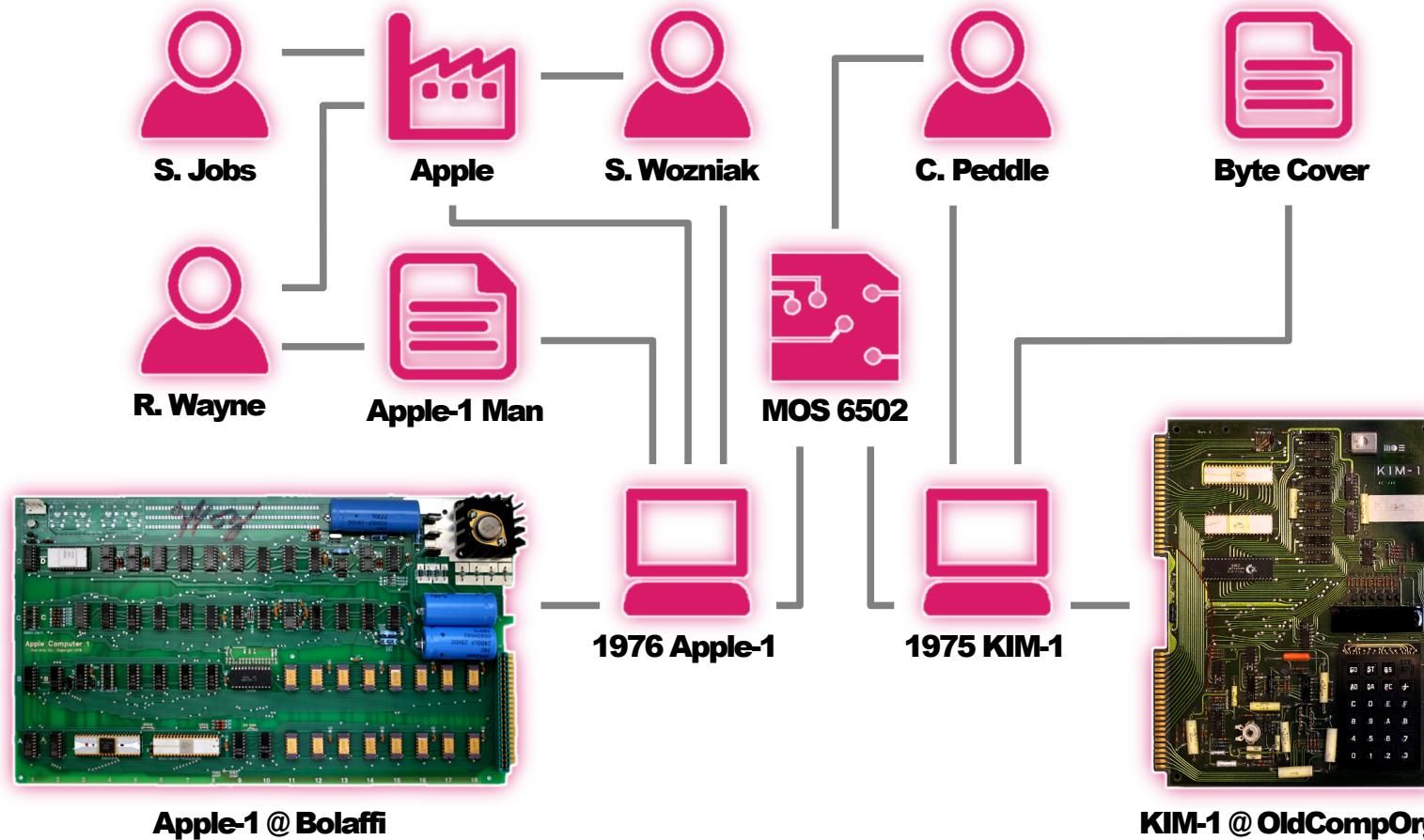


what also did Peddle designed?



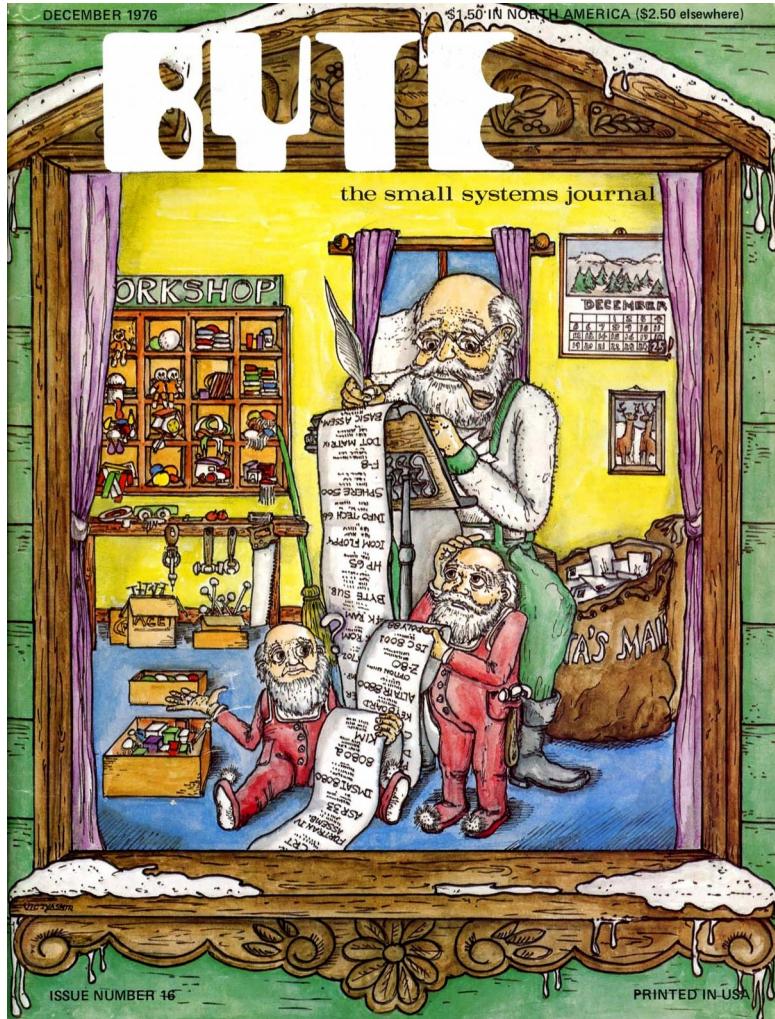
where can I see a KIM-1?





Byte, December 1976 cover

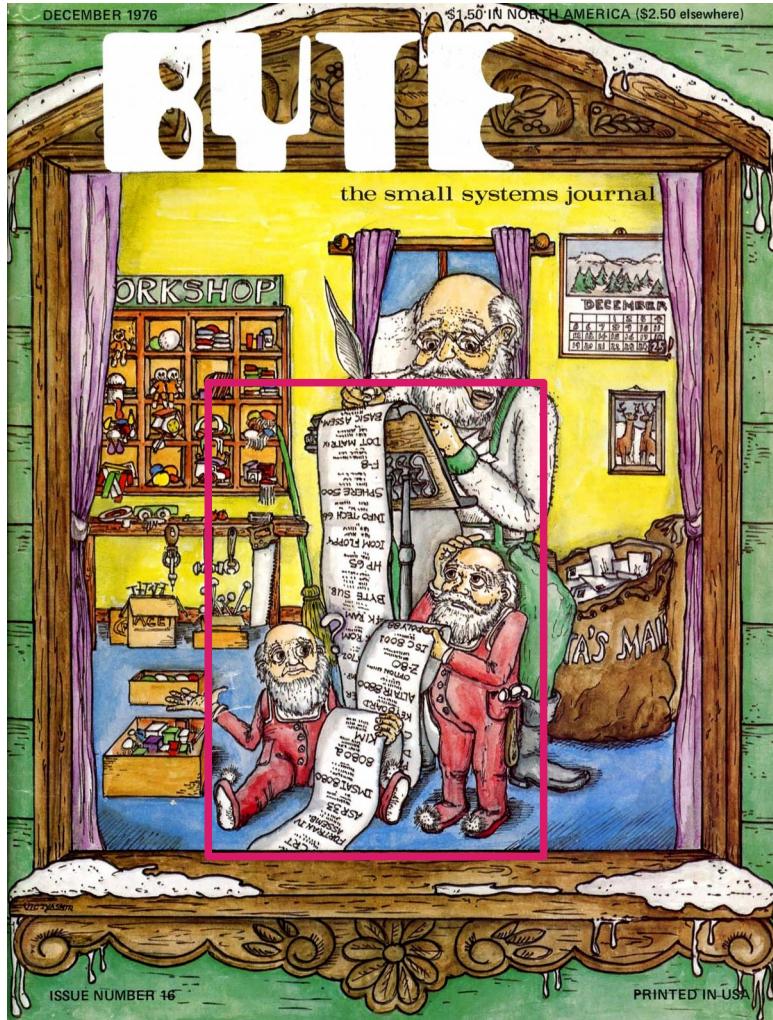
Byte cover @ Archive.org



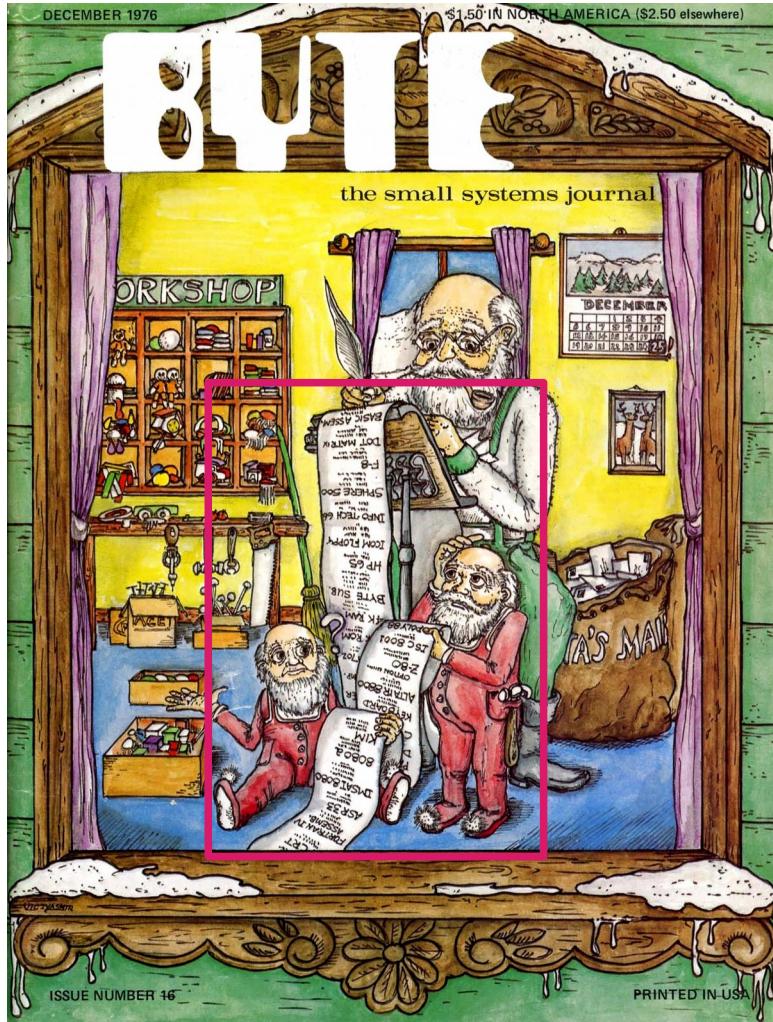
Giovanni A. Cignoni & Giovanni A. Cossu

25/30

Byte cover @ Archive.org



Byte cover @ Archive.org

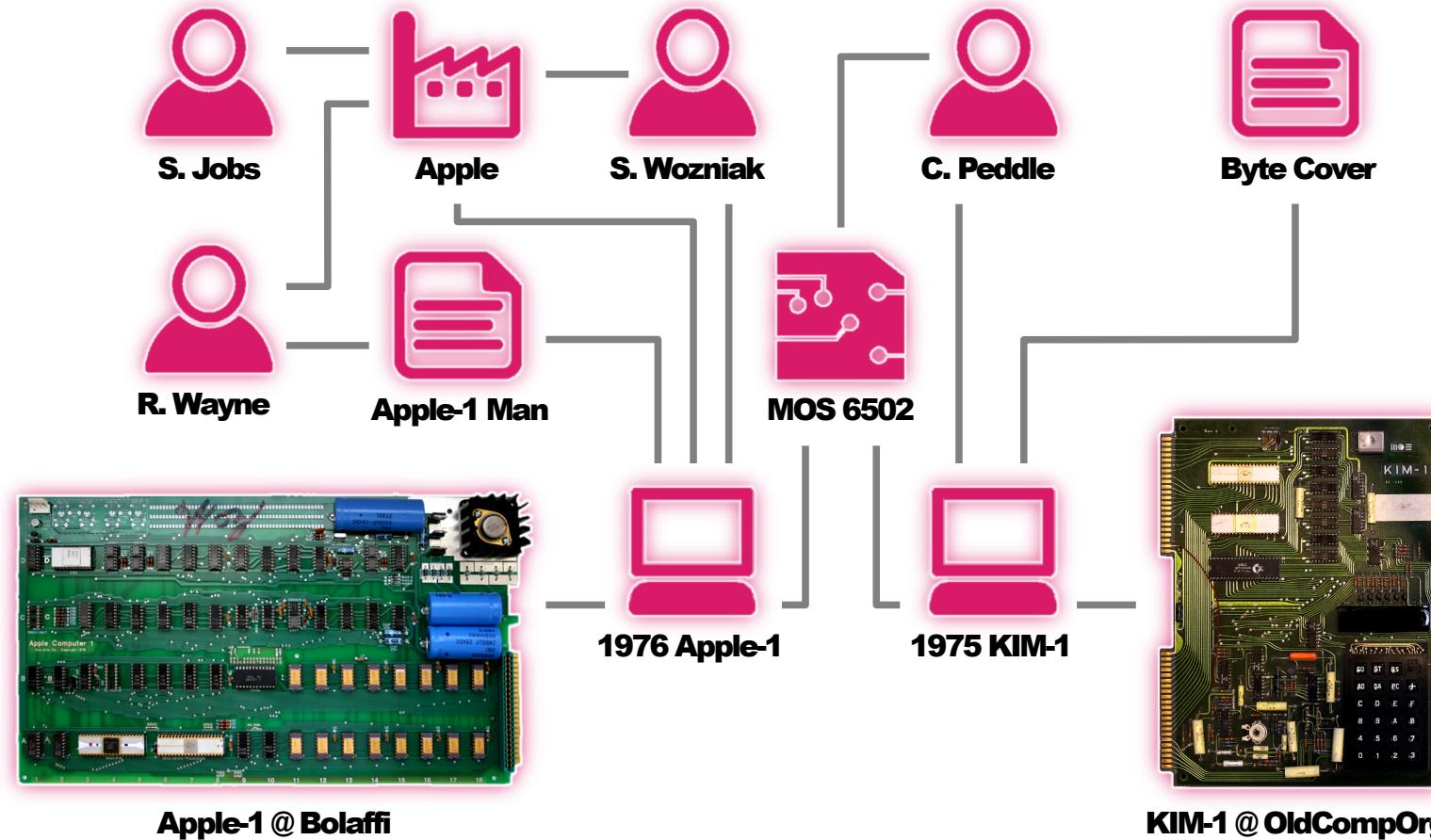


□ Computers

- Altair 8800, IMSAI 8080, Polymorphic 88 (S100 bus)
- Sphere 500, Intelligent Systems Compucolor 8001
- KIM-1, Fairchild F-8

□ Teletypes, devices and others

- ASR 33, Infotech 66
- Keyboard, CRT, dot matrix printer, ICOM floppy, Z80, 8080a, RAM, ROM
- HP 65 RPN calculator
- Basic, Fortran IV, Byte subscription



many other links (and stories)

