the media we hold and behol

implications for learning

Jochen "Jeff" Rick

tangibles

learning

tangibles

learning

media theory

embodiement

the media we hold

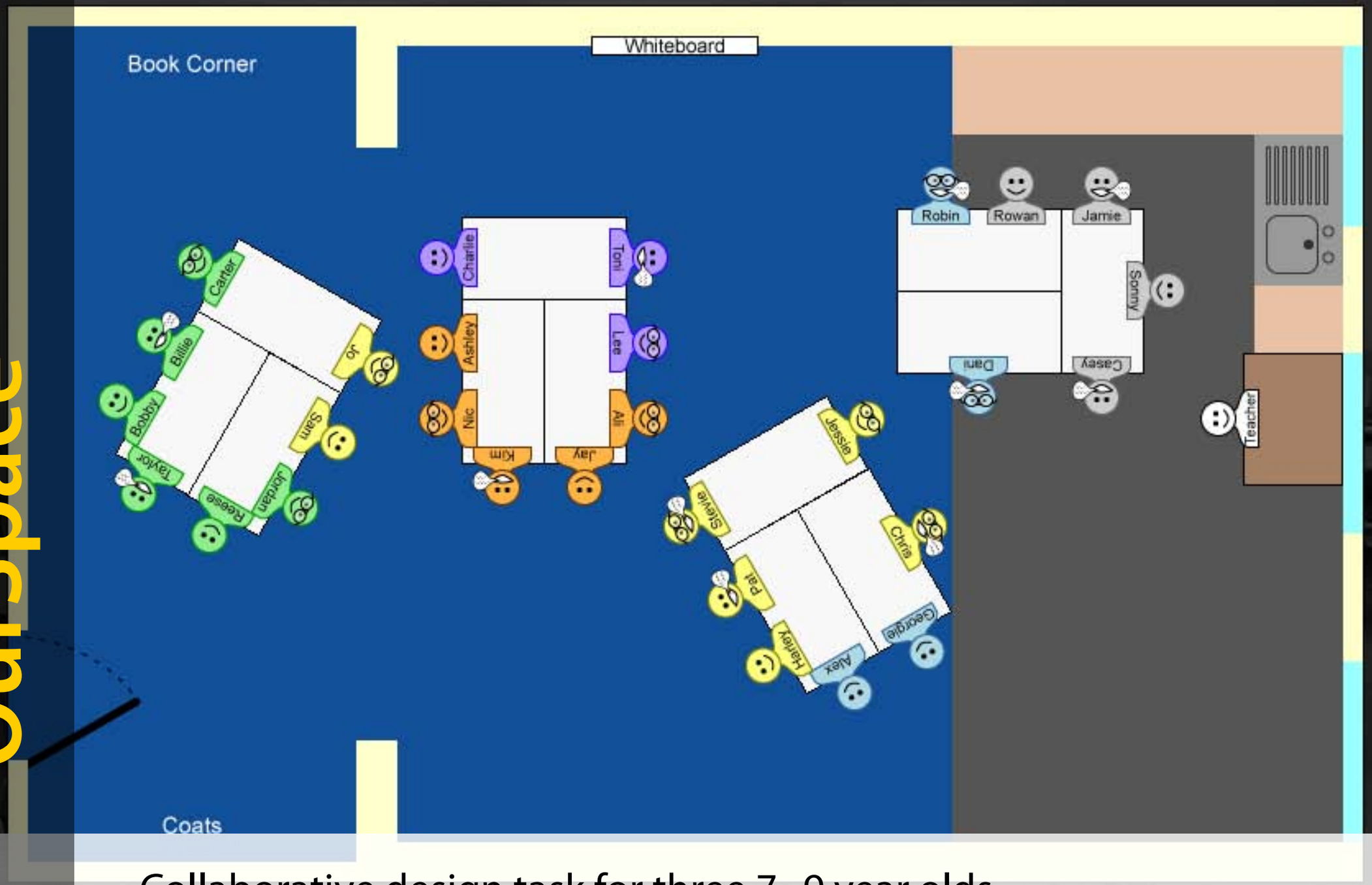
motivation

collaborative learning

motivation

shareable interfaces

OurSpace File Seating



OurSpace

Collaborative design task for three 7–9 year olds.
Adult vs child. Multiple touch vs single touch.

DigiTile

Collaborative learning task for two 8–9 year olds.
Learning about fractions through constructing colorful mosaic tiles.

TransTime

Collaborative puzzle task for two 5–6 year olds.
Learning about different notions of time progression (e.g., baking a cake).

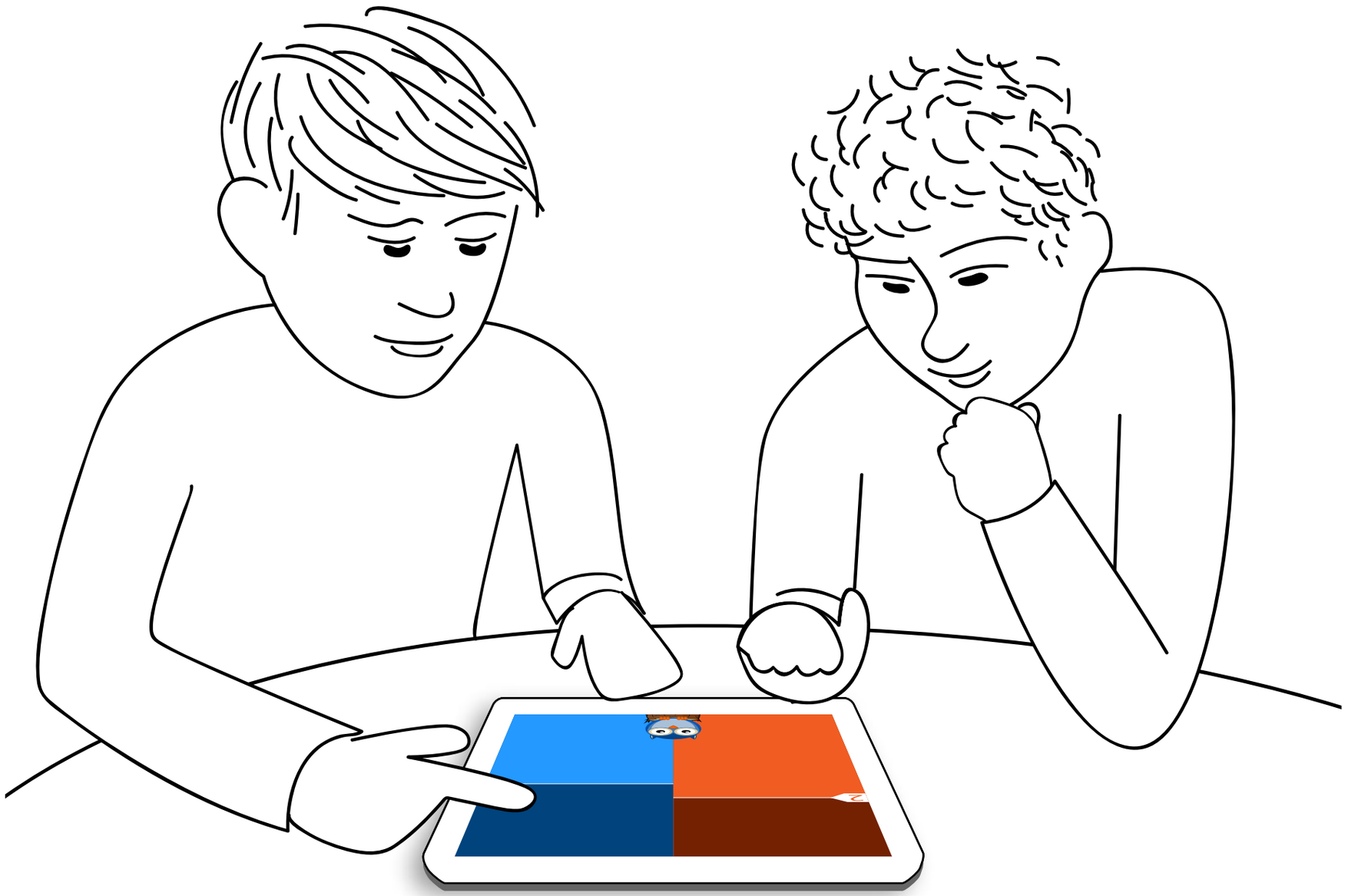
The Diamond Mystery

Collaborative game for adults, gathering clues to solve a mystery.
Ecology of devices (multiple personal handhelds, one shared tabletop).

Pass the iPad

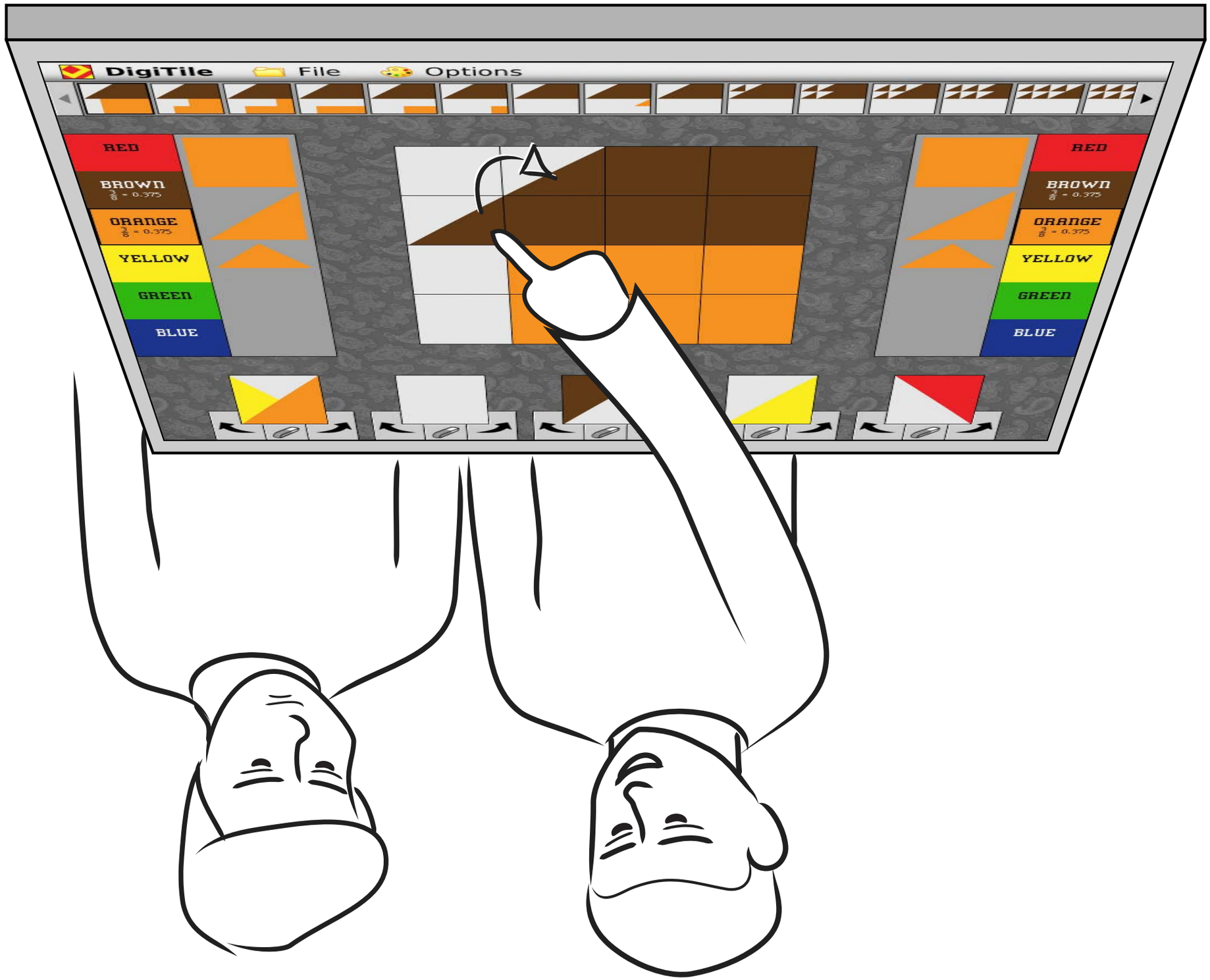
"Consequences" collaborative drawing task for groups / families.
Tablets as scrap computing: As both personal and group devices.

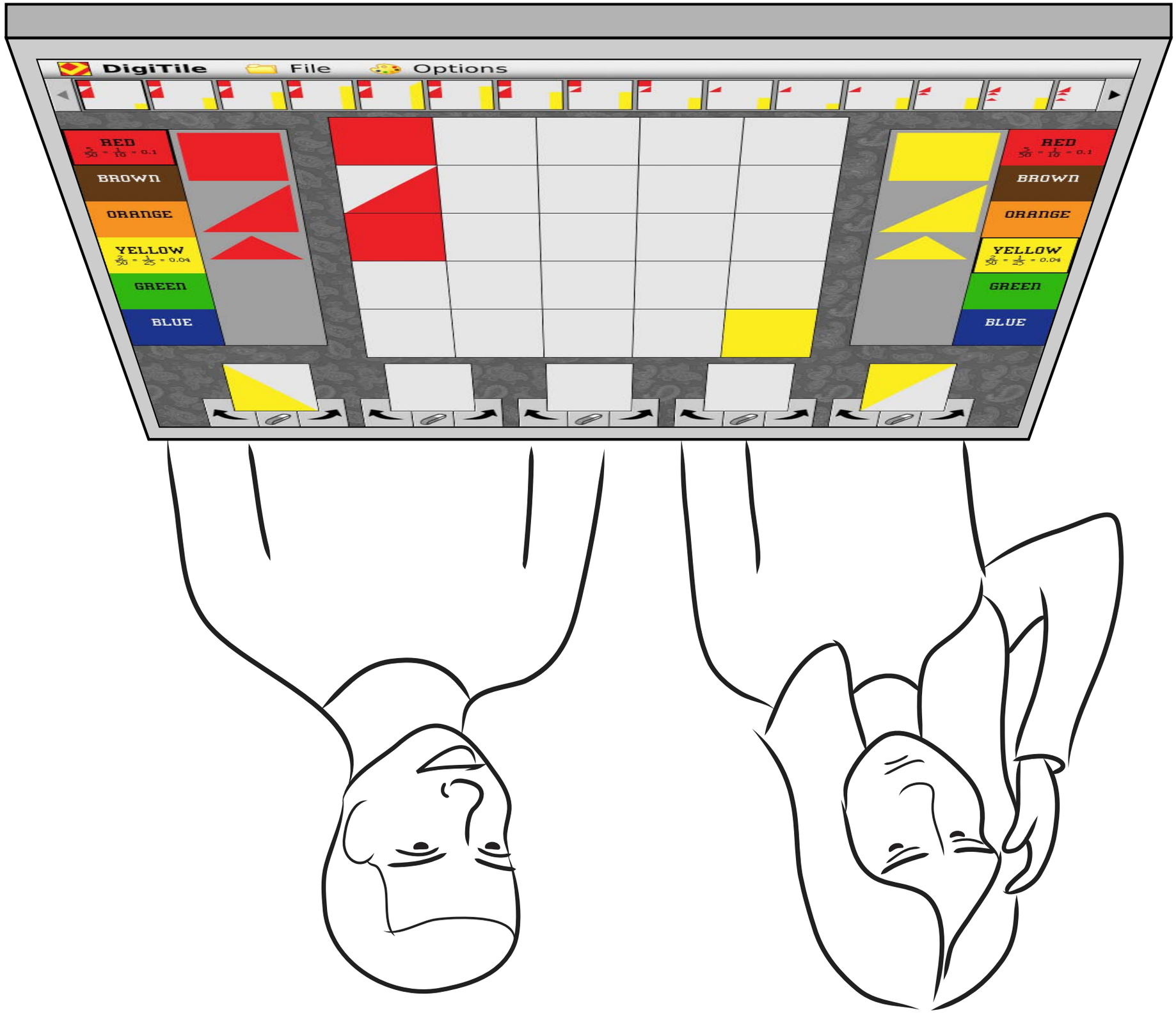
Proportion



Collaborative learning task for two 8–9 year olds sharing one iPad.
Engaging proportional reasoning through a sequence of problems.

why does it work?


DigiTile
File
Options
RED
BROWN
3/8 = 0.375
ORANGE
3/8 = 0.375
YELLOW
GREEN
BLUE
RED
BROWN
3/8 = 0.375
ORANGE
3/8 = 0.375
YELLOW
GREEN
BLUE


DigiTile
File
Options
RED
5/50 = 1/10 = 0.1
BROWN
ORANGE
YELLOW
3/50 = 1/25 = 0.04
GREEN
BLUE
RED
5/50 = 1/10 = 0.1
BROWN
ORANGE
YELLOW
3/50 = 1/25 = 0.04
GREEN
BLUE

natural user interfaces

why does it work?

embodiement

tangibility

Eva Hornecker

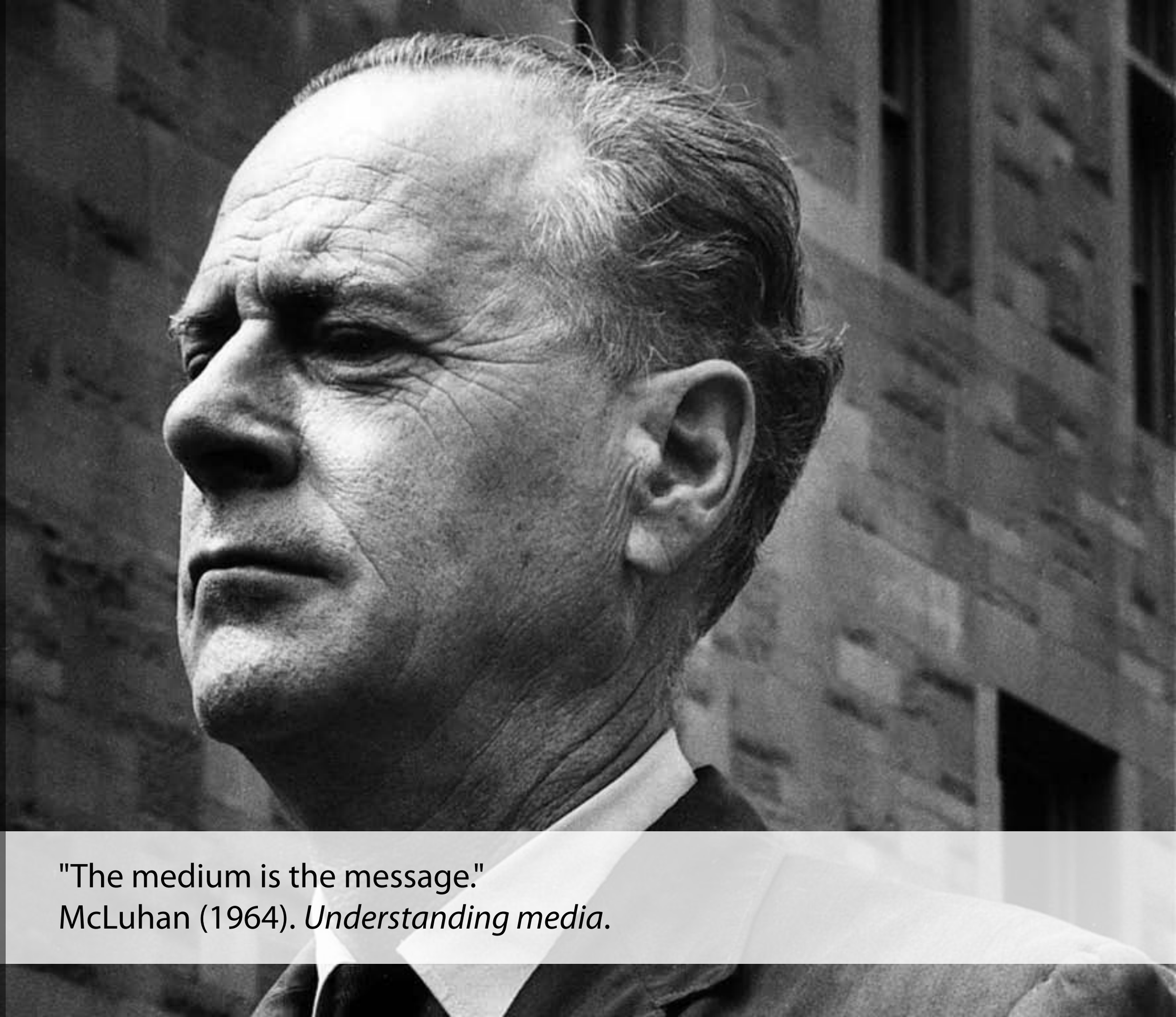
Hornecker & Dünser (2009). Of pages and paddles: children's expectations and mistaken interactions with physical-digital tools. *Interacting with Computers, 21*(1–2):95–107.

the media we behold

Harold A. Innis

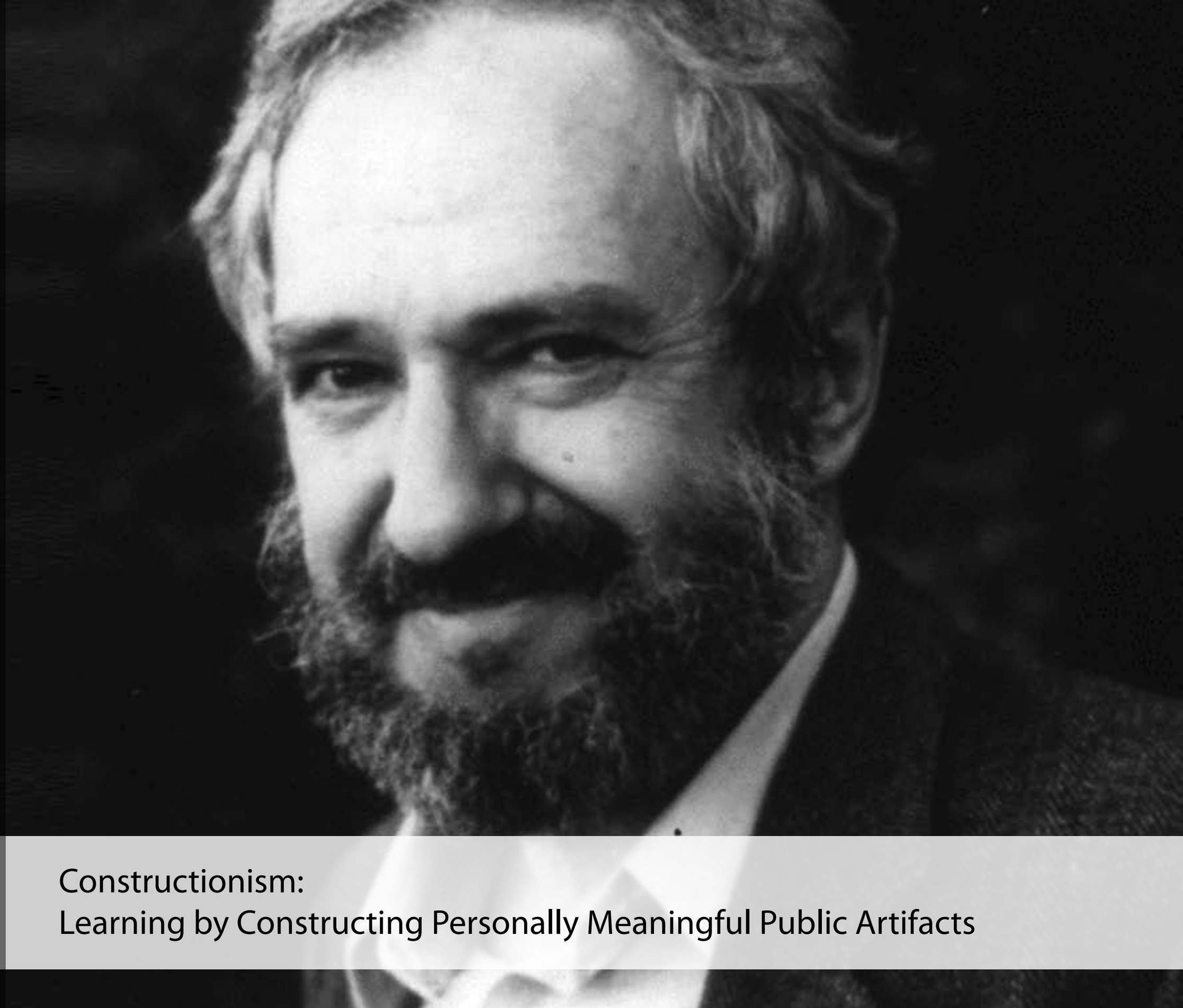
New media dramatically change society.
Innis (1951). *The bias of communication*.

H. Marshall McLuhan



"The medium is the message."
McLuhan (1964). *Understanding media*.

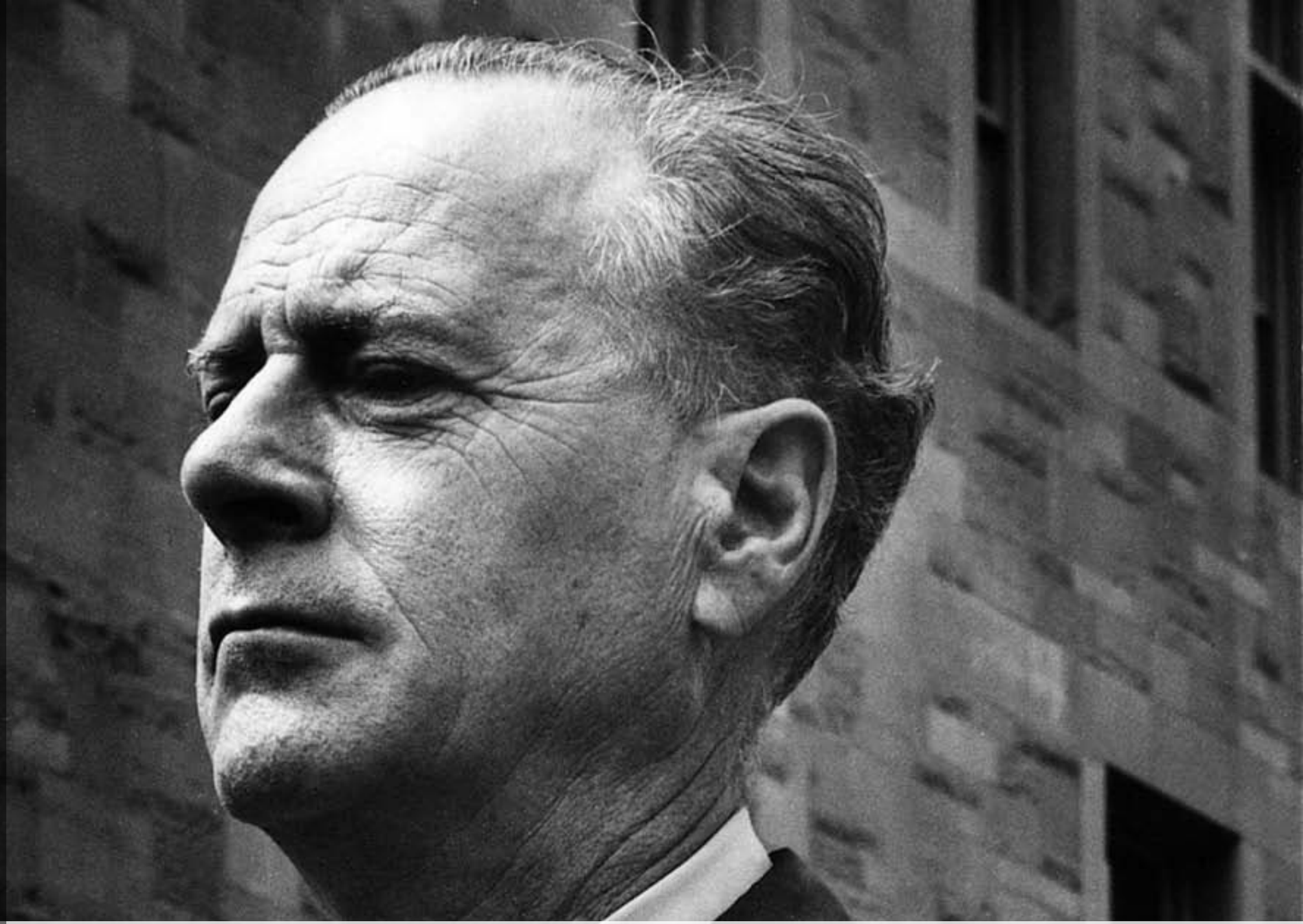
Seymour Papert



Constructionism:
Learning by Constructing Personally Meaningful Public Artifacts

what is a medium?

H. Marshall McLuhan



media: extensions of man

turtle graphics

body syntonic movement

remediation

Bolter & Grusin (1999). *Remediation: understanding new media*. The MIT Press: Cambridge, MA.

Uri Wilensky

The more connections we make between an object and other objects, the more concrete it becomes for us. The richer the set of representations of the object, the more ways we have of interacting with it, the more concrete it is for us. Concreteness, then, is that property which measures the degree of our relatedness to the object, (the richness of our representations, interactions, connections with the object), how close we are to it, or, if you will, *the quality of our relationship with the object*.

Wilensky (1991). Abstract meditations on the concrete and concrete implications for mathematics education. In Harel & Papert, *Constructionism*.

the media we hold

should compose

the media we behold

Alan Kay

The computer as the first metamedium.
Kay & Goldberg (1977). Personal dynamic media. *Computer*, *10*(3):31–41.

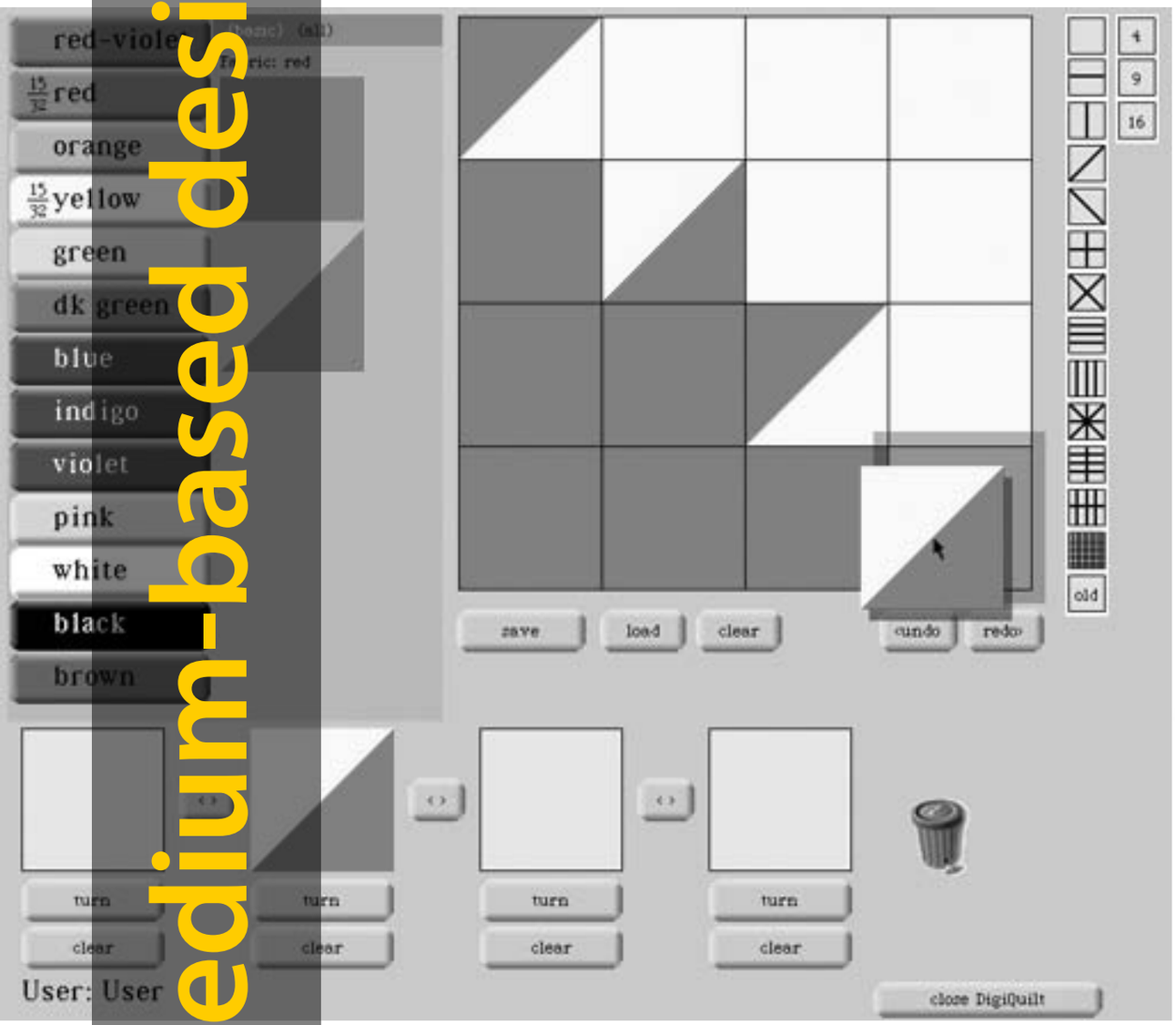
Mike Eisenberg

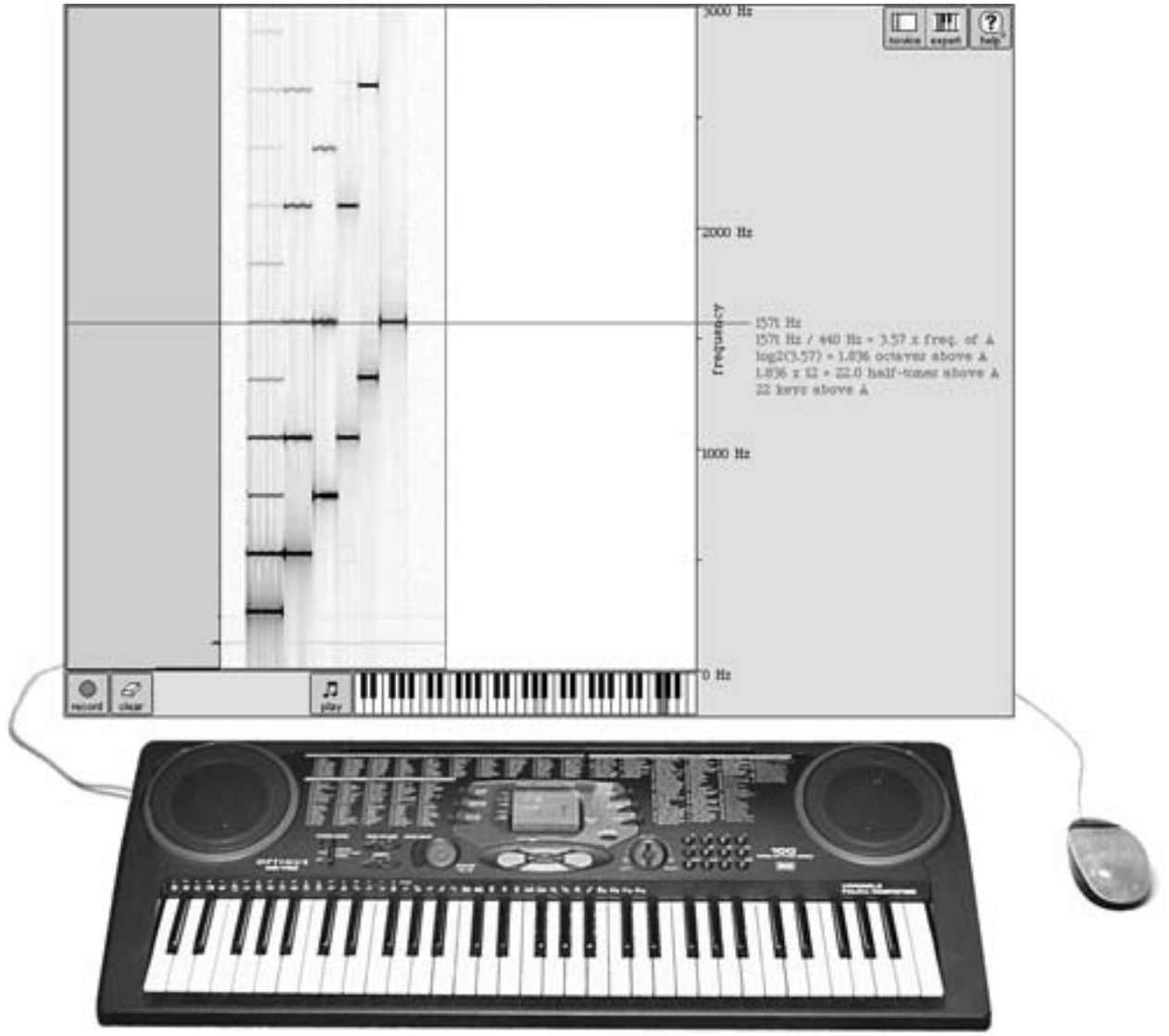
digitally created artifacts

Ward Cunningham

"*Simple* and interesting is much better than *complex* and interesting, because others can more easily adopt and use the former than the latter."

medium-based design





Rick & Lamberty (2005). Medium-based design: extending a medium to create an exploratory learning environment. *Interactive Learning Environments, 13*(3):179–212.

situating a medium

My office hours tomorrow (Wed) will be moved to 2-5 in the same place, College of Computing Commons. After tomorrow, I will be available for office hours by appointment basically all the time until the final. Just send me an email and we can set something up.

Hotspots: Announcements • This Week's Comments • Lab 4 and 5 Questions • Final Exam Review

view edit attach history home changes search help

Fall2003 HW2 Collages

Upload your Collages here to share.

2 CoOL

Hotspots: Pritzker Prize Winner | CoOL Lights | constructor | What's with the link colors?

Soapbox: "You know the world is going crazy when the best rapper is a white guy, the best golfer is a black guy, the tallest guy in the NBA is Chinese, the Swiss hold the America's Cup, France is accusing the US of arrogance, Germany doesn't want to go to war, and the 3 m

edit — history — search — attachments — recent changes — help

Archive | sloped scapes

project 1 project 2 project 3

Rick & Guzdial (2006). Situating CoWeb: a scholarship of application. *International Journal of Computer-Supported Collaborative Learning, 1*(1):89–115.

I chose the lake as my
specifically the dock,
the visitors? center and the
surrounding area. I decided
to create an enclosure, a
secluded nook for adults to
go, for children, for whoever

紙Wiki

a paper-based wiki