

CS181DT Class 21: Critical forms of design



Tree digester by Dunne & Raby as part of their Foragers speculative design project. 2009

Class 21 agenda

- Zipcrit
- Announcements: last third of the class!
- Lecture: Waves of HCI & critical design
- Seminar: research through design
- Seminar: feminist design & uncomfortable interactions

Code Party

- Next Monday 4/8 7:00-9:30pm (?), Edmunds 105
- Come work on P2 implementation! I'll be around to help or answer questions
- You can also come to OH any time

Course thirds

We made it to the last third!

1 Making

Make a thing with many tools to establish proficiency at using tools

(Project 1: Design for protest)

- Maker movement
- Design activism
- Analog fabrication
- Digital fabrication
- Creative coding

2 Tools

Make a tool
(Project 2, wizard of oz prototype)

- Brainstorming
- Needfinding
- Low fidelity prototyping
- Software systems design
- Evaluation

3 Craft

Be critical of computational tools
(Project 2, implemented)

- Design noir
- Feminist design
- Materiality
- Art
- Power & politics

PM4: Design Noir

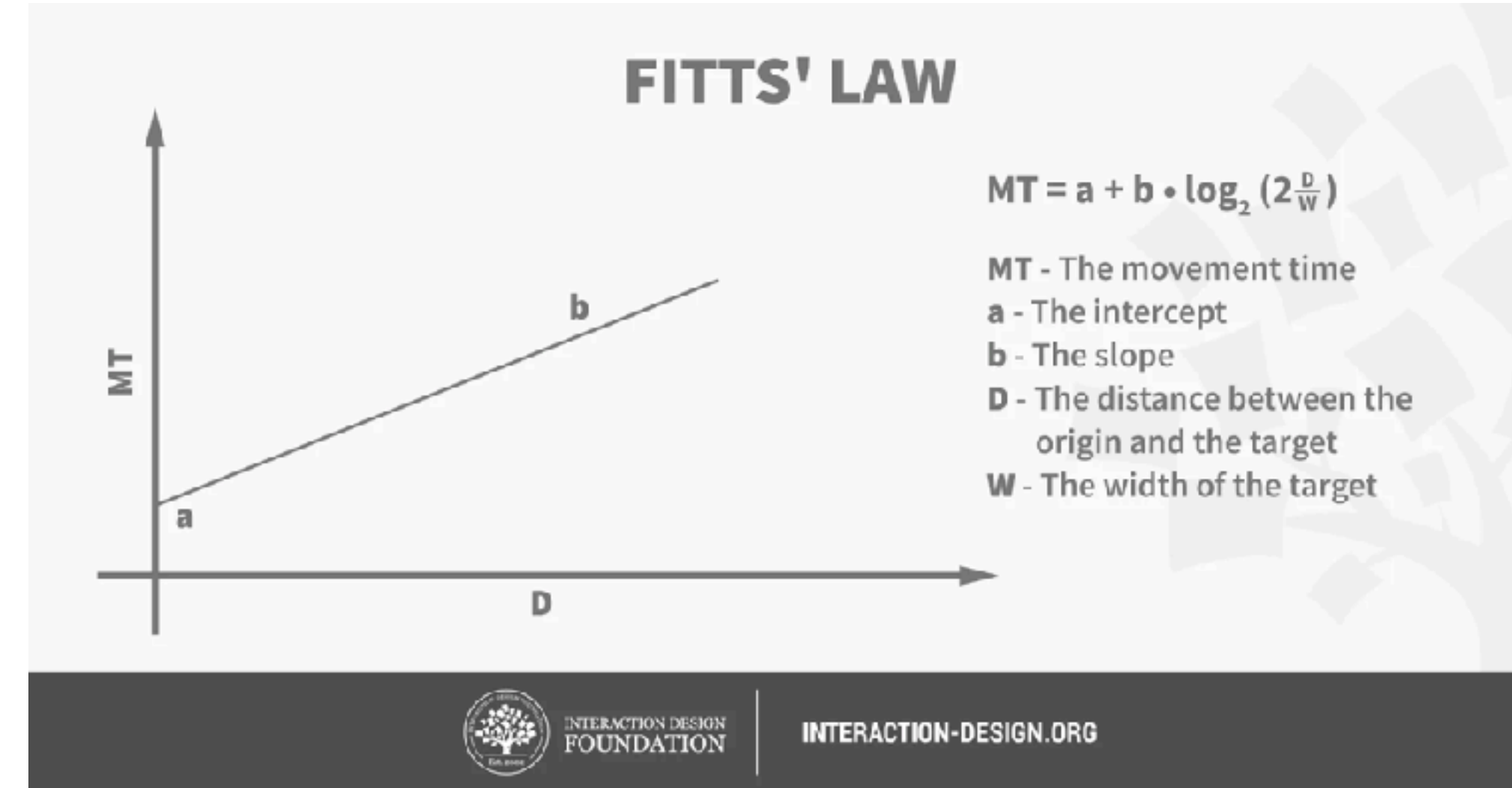
- The remaining 3 PM assignments will be shorter and more conceptual focused: less about making objects and more about applying critical theories and practicing different forms of design
- PM4: 3 ideas (title, 250 word description, storyboard or sketch) of a tool or object that...
 - Facilitates emotions of loss, abandonment, loneliness
 - Encourages users to be as wasteful as possible
 - Helps new college grads make as much money as quickly as possible no matter the ethical circumstances

12A	Apr 2	<p>Critical design, feminist design, design noir</p> <p>ZC SEMINAR</p> <hr/> <p>Readings: <i>Hackathons as Participatory Design: Iterating Feminist Utopias, Uncomfortable Interactions; The Origin and Purpose of Research through Design, What Should We Expect from Research through Design?</i></p>	P2: System diagram
12B	Apr 4	<p>Materials</p> <p>ZC SEMINAR</p> <hr/> <p>Readings: <i>Tangible Bits, A Brief Rant on the Future of Interaction Design; The textility of making, Materiality matters</i></p>	
13A	Apr 9	<p>Benton Museum visit</p> <p>PM4 CRIT STUDIO</p>	PM4: Design noir
13B	Apr 11	<p>Project 2 MVP in class evaluation</p> <p>ZC STUDIO</p>	
14A	Apr 16	<p>Power, art, politics</p> <p>ZC PM5 CRIT SEMINAR</p> <hr/> <p>Readings: <i>Power as a lens for CSTs, Tools for Conviviality: Pgs 16 - 30 in the PDF</i></p>	PM5: A material conversation
14B	Apr 18	<p>Careers panel; Project work time</p> <p>ZC STUDIO</p>	
15A	Apr 23	<p>Project work time</p> <p>ZC PM6 CRIT STUDIO</p>	PM6: Seeing
15B	Apr 25	<p>Project 2 final in class evaluation ZC STUDIO</p>	
16A	Apr 30	<p>Final project presentations P2 CRIT</p>	
	May 1		Proj 2 (EOD)

Critical forms of design

First, historic context: waves of HCI

- First wave: 1970-1980s
- Influenced by cognitive science & human factors
- Model driven: Fitt's law, Model Human Processor
- Computers were relatively new things, so let's "scientifically" figure out how people can optimize using them



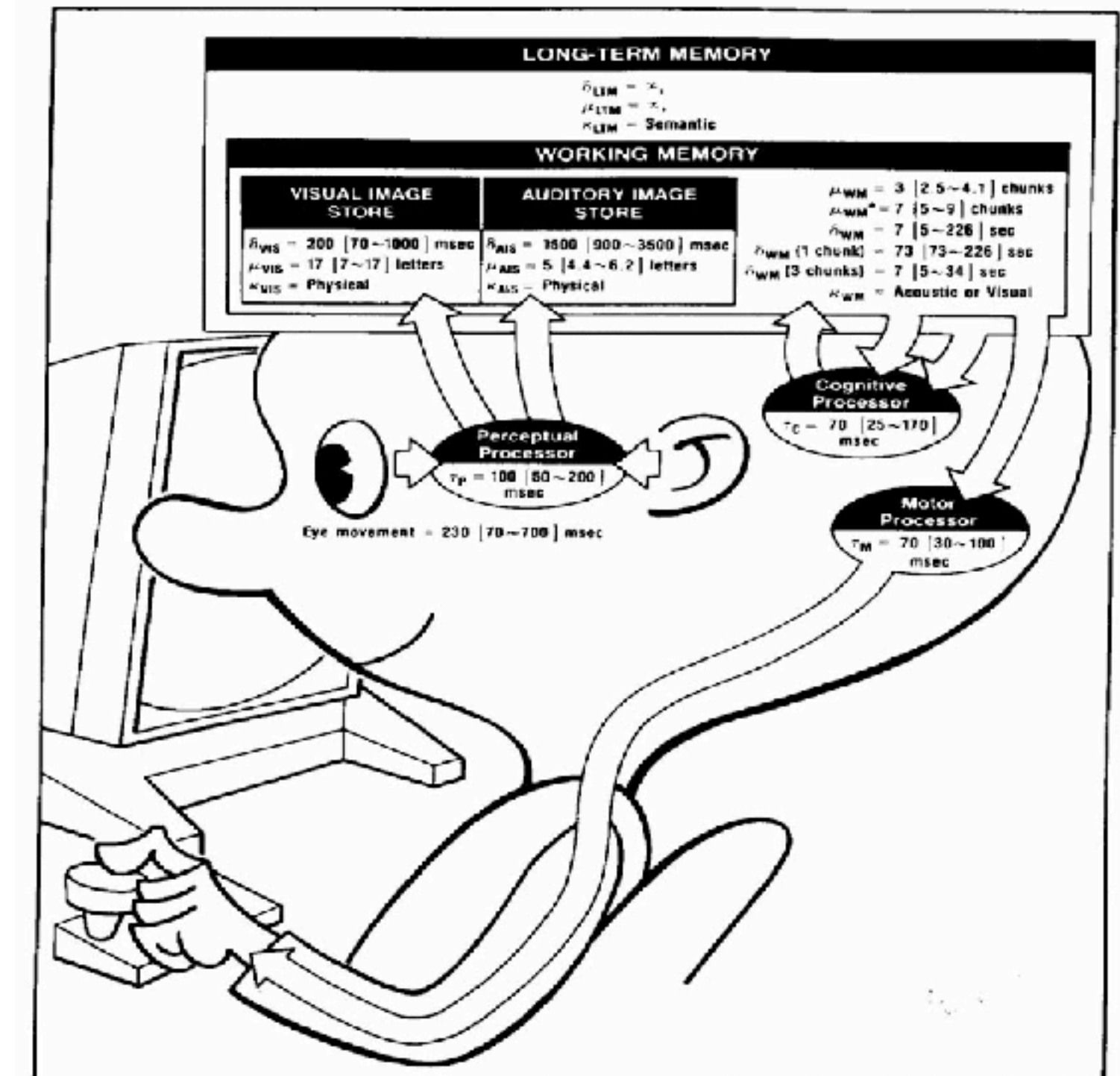
Paul Fitts



Stuart Card



Allen Newell



Second wave

- Second wave: 1990s-2000s
- Focused on computers being used collaboratively in the work place
- Used theories that emphasized *context*: situated action, distributed cognition, activity theory
- Adding methods that also emphasized context like contextual inquiry, participatory design



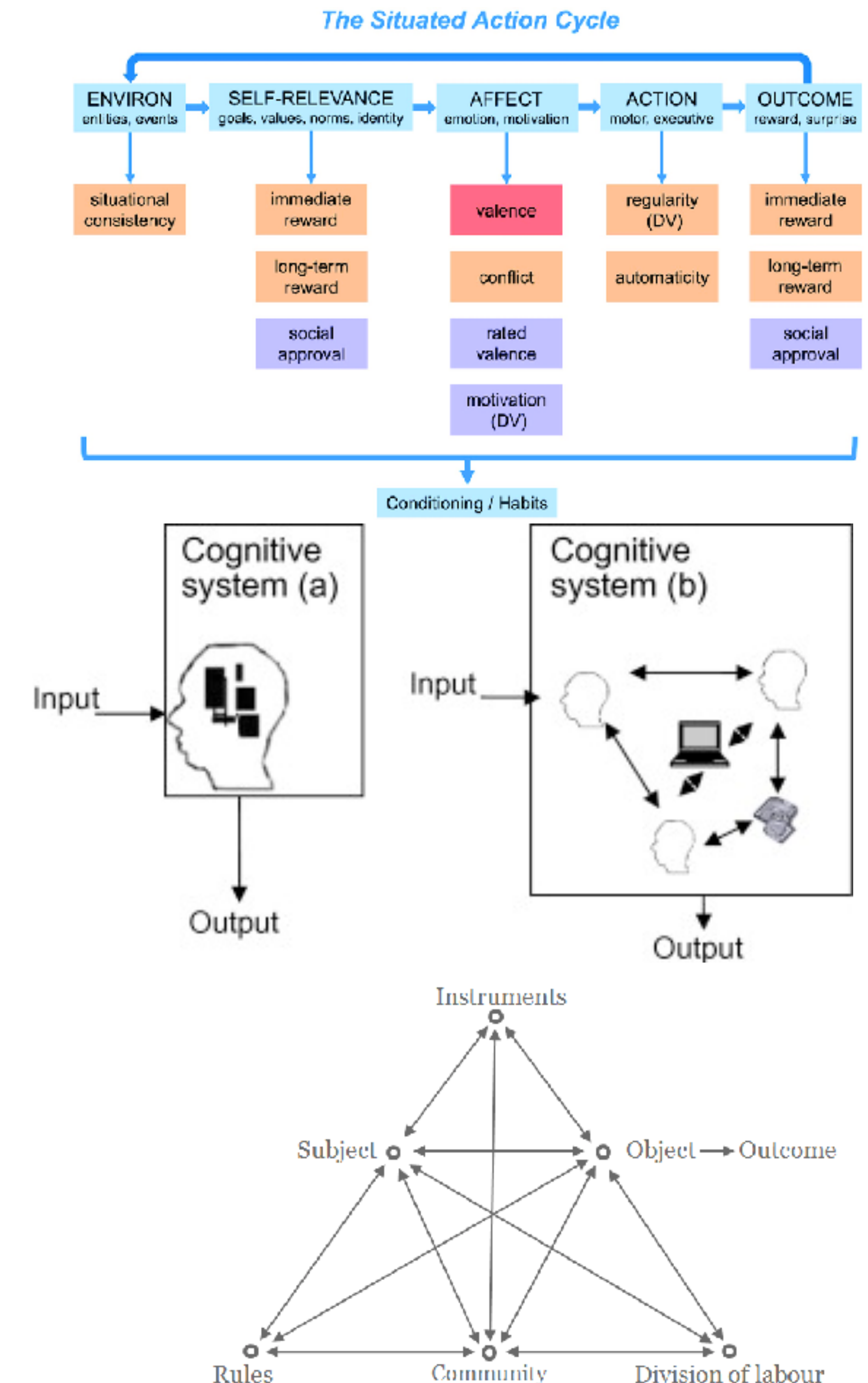
Edwin Hutchins



Susanne Bødker



Lucy Suchman



Third wave

- Third wave: 2000s - Present?
- Computers are not just in the office and used all throughout our homes and lives
- Challenged efficiency as a value, embraced instead meaning making
- Design—and research through design—really shone through as it was a method to engage with socioculturally significant topics (e.g., gender, accessibility, labor rights)



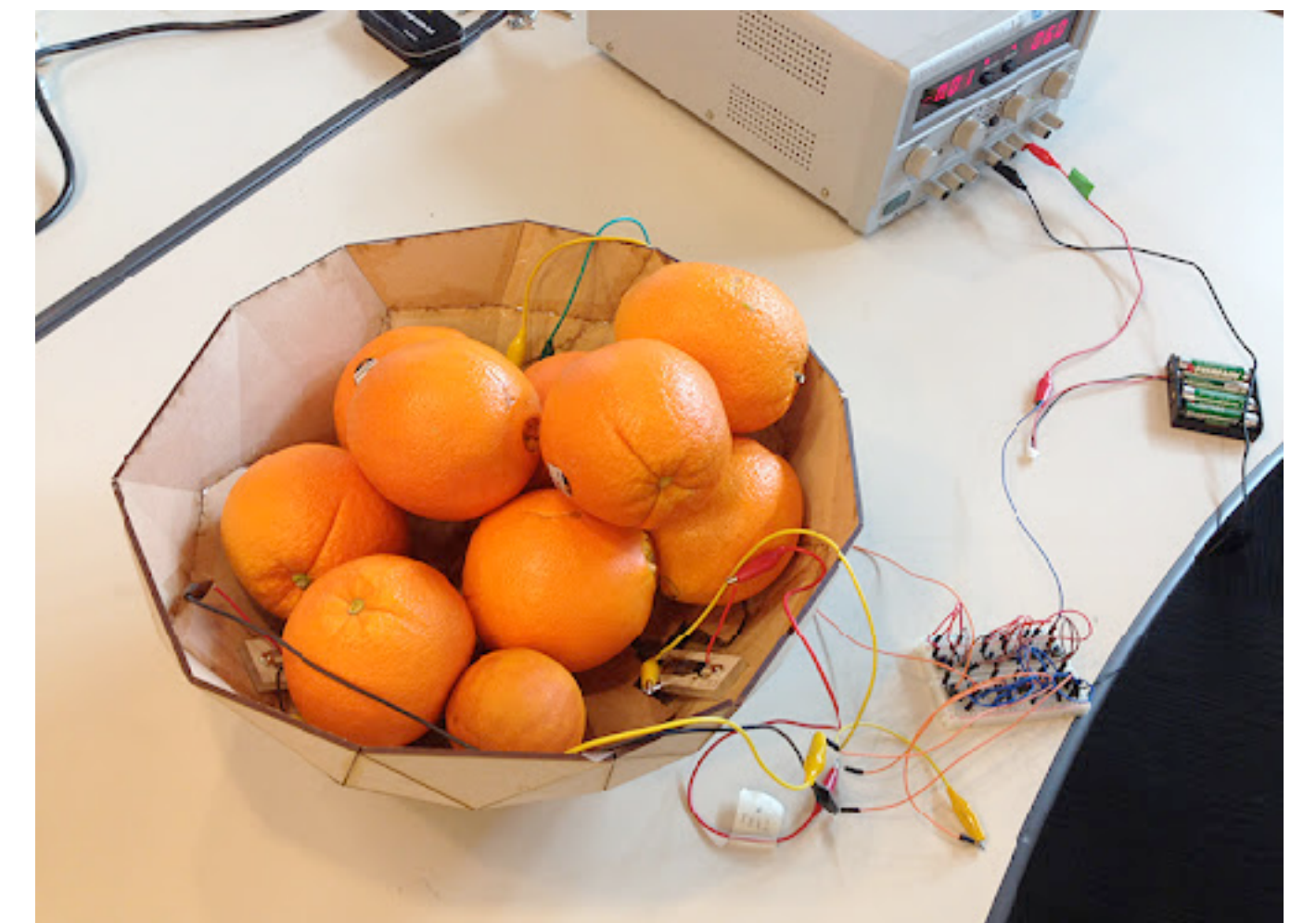
Jodi Forlizzi



Hiroshi Ishii



Shaowen Bardzell



What is critical design?

- Critical design is a form of *research through design*
- Uses design methods to explore ethics, surface hidden agendas and values, and explores alternate design values
- “Make consumers more critical about their everyday lives, and in particular how their lives are mediated by assumptions, values, ideologies, and behavioral norms inscribed in designs.” - founders Dunne & Raby, 2001
- Critical design “needs to be closer to the everyday, that’s where the power to disturb comes from.”
- Beyond concerns about *usability* and *professional support tools*, supports third (fourth?) wave HCI goals of social justice, value-oriented design, etc.

What is “Critical” about Critical Design?

Jeffrey Bardzell
Indiana University
919 E 10th Street
Bloomington, IN 47401
jbardzel@indiana.edu

Shaowen Bardzell
Indiana University
919 E 10th Street
Bloomington, IN 47401
selu@indiana.edu

What are related areas of knowledge?

- Feminist design
 - *Feminist HCI: taking stock and outlining an agenda for design* by Shaowen Bardzell
- Speculative design
 - *Speculative Everything: Design, Fiction, and Social Dreaming* by Dunne & Raby
- Design justice
 - *Design Justice Community-Led Practices to Build the Worlds We Need* by Sash Costanza-Chock
- Postcolonial design
 - *Ubicomp's colonial impulse* by Dourish & Mainwaring
- Critical race theory + design
 - *Critical race theory for HCI* by Ogbonnaya-Ogburu et al.

Seminar:
Research through Design

**Seminar:
Feminist design &
Uncomfortable interactions**

Class 21 recap

- TODO
 - Start coding!
 - Thurs:
 - ZC from Larry
 - 1 sketchnote and seminars from Kovit & Cassidy; Vitor & Rediet
 - Next Tuesday: PM4 Design noir