

Prototyping II

MANEESH AGRAWALA AND MICHAEL BERNSTEIN

CS 247

Let's design an ad for learning to code

30-minute activity

Find a critique partner

- Pair up with a partner. You'll be critique partners (but will create ads individually).
- I will be announcing timepoints for critiques every few minutes. Do the critiques, then keep designing!

Critiquing

- You have a set of critique feedback items on the page.
- When you critique a poster, choose one critique from each category (1), (2), and (3) on the page. Three total.
- Never repeat a critique item in a later stage.
- Read all the critiques now.

Split into 2 groups

- Half the tables in Group A and half in Group B.

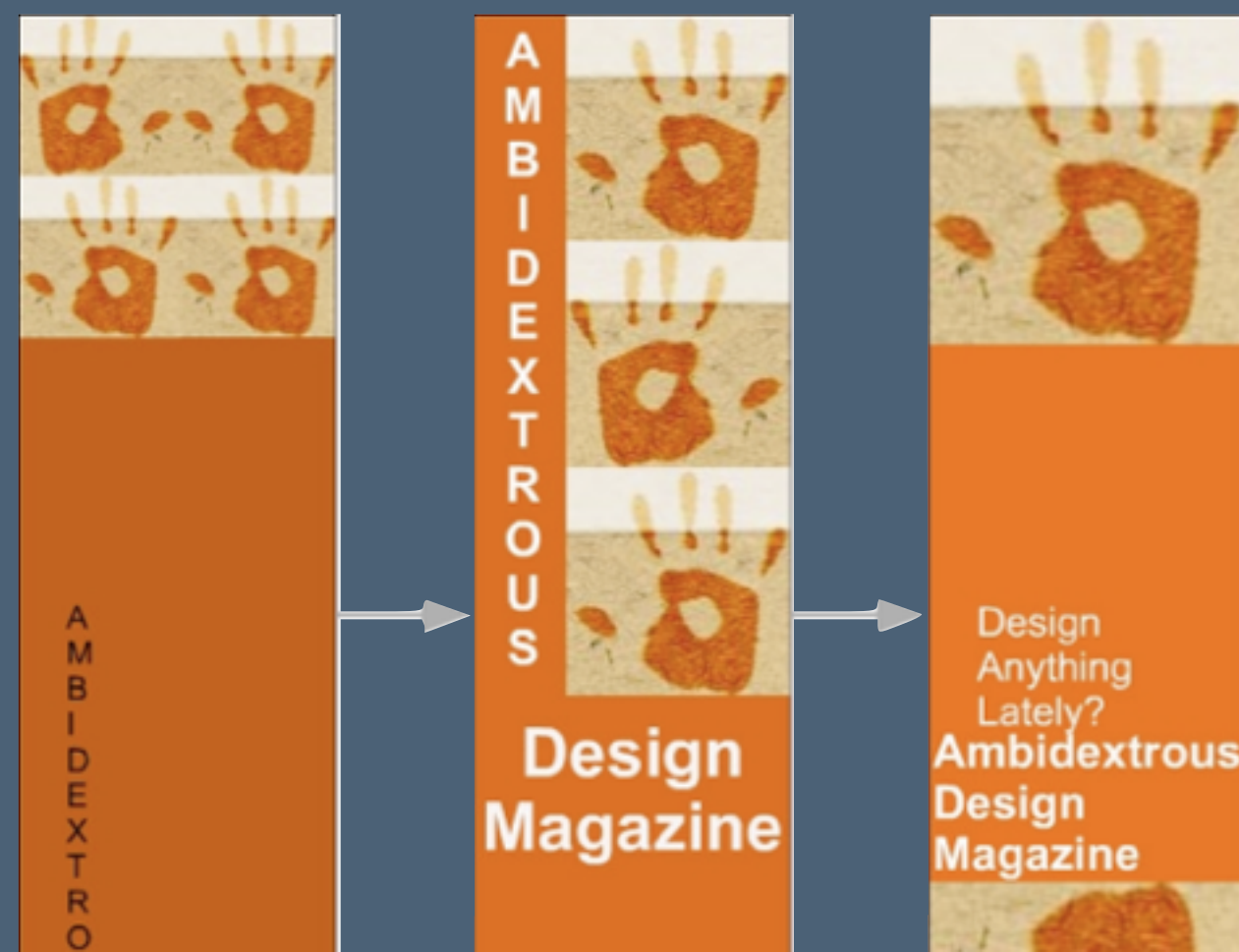
Design process

- When you are out of room sign up at www.canva.com
- Click through the tutorial
- Choose a “poster” type to create the file
- Make a learn to code poster

- Take three minutes now to sign up and create your poster files

Group A

- For every Group A timepoint (every 10min), you must complete a new draft of your poster. 30min total.
- When I call the timepoint, show it to your partner.
- Your partner will choose a critique from each category.
- Based on the feedback, revise for the next timepoint.



Group A

timepoint 1

(this is an example)

Design process

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Group B

- By the first Group B timepoint (at 20min), you must complete **two different** concept drafts of your poster.
- When I call the timepoint, show them to your partner.
- For each draft, your partner will choose a critique from each category. $2 \text{ drafts} \times 3 \text{ critiques} = 6 \text{ total critiques}$
- Based on the feedback, revise for the next timepoint.



Group B (part 2)

- By the second Group B timepoint (at 30min), complete one final draft of your poster.
- 2 in 20min, then 1 in 10min. Got it?



Group B

timepoint 1

(this is an example)

Design process

- Sign up at www.canva.com
- Click through the tutorial
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Design process

- Sign up at www.canva.com
- Click through the tutorial
- Choose a “poster” type to create the file
- Make a learn to code poster
- Take three minutes now to sign up and create your poster files

Design!

Start!

Group A
timepoint 1

Design!

Group A timepoint 2

Group B timepoint 1

Design!

STOP

Download your final poster as an image.

Submit to your group's link: hci.st/groupA or hci.st/groupB

Prototype science

Acknowledgments to Steven Dow and Scott Klemmer

Quantity or Quality?



Bayles and Orland, 2001

Quantity or Quality?

“While the quantity group was busily churning out piles of work—and learning from their mistakes—the quality group had sat theorizing about perfection, and in the end had little more to show for their efforts than grandiose theories and a pile of dead clay”

Does creating parallel
prototypes improve the final
design?

Task: design an advertisement



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STANFORD UNIVERSITY'S JOURNAL OF DESIGN
ISSUE ELEVEN
SENSATIONAL SPRING 2009
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issue 11

Spring 2009: Space

As children some of you may have dreamed of becoming astronauts, or at least vied for a spot in Space Camp. Maybe you were inspired by the worlds of Flash Gordon or those created by Frank Lloyd Wright. In this issue of *Ambidextrous*, we tackle space and beyond in all of its frontiers.

SPACE

ROBOTS IN SPACE • GET LOST • WHITE SPACE
HOLDECK • ORIGAMI • DESIGNER WORKSPACES

An Ode to White Space
Ellen Lupton

Procedure

serial prototyping condition



parallel prototyping condition



AMBIDEXTROUS
JOURNAL OF DESIGN



CULTURAL FOODS

THOUGHT FOR FOOD
FOOD FOR THOUGHT
AND COMICS

**DESIGN PROCESS
FOR ANYTHING**

RESEARCH LABS

**WRITER'S CRITICISM
ON TODAY'S
TECHNOLOGY**

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Spring 20
Space




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practice,

Thinking.
Processing.
Designing.



Ambidextrous

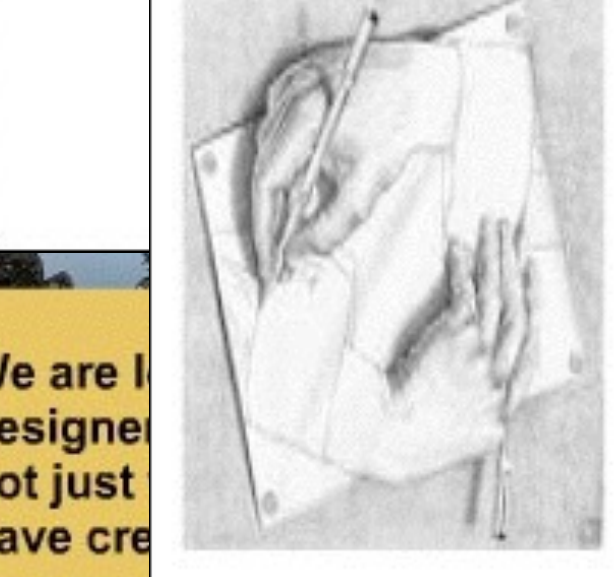
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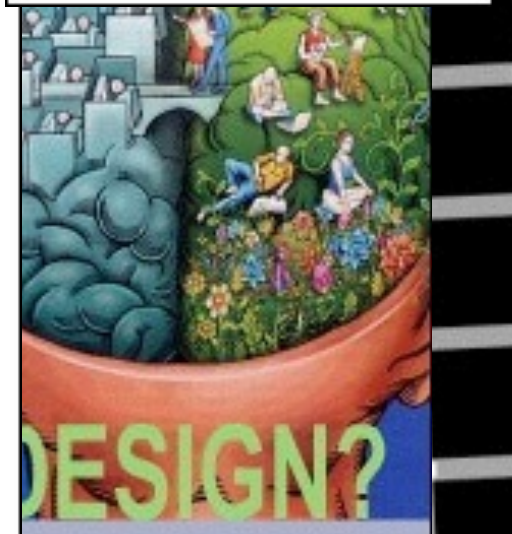


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A creative magazine
for creative people.



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stanford university's
journal of design



DESIGN?

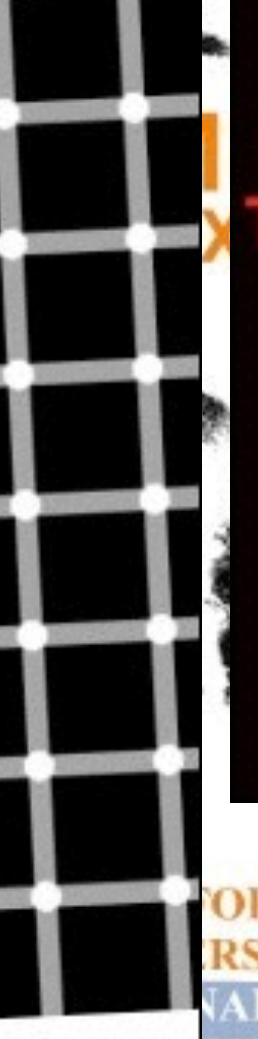
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People

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ambidextrous

Are you
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A journal about
**DESIGNING
THE FUTURE**



both hands
at a time

**STANFORD
UNIVERSITY'S
JOURNAL
OF DESIGN:**
written, illustrated,
photographed, and
edited by volunteers



AMBIDEXTROUS
Fall 2008
Lucky Issue

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a forum for design
researchers,
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and thinkers



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AMBIDEXTROUS
fifth Issue

**DESIGNERS
WANTED**

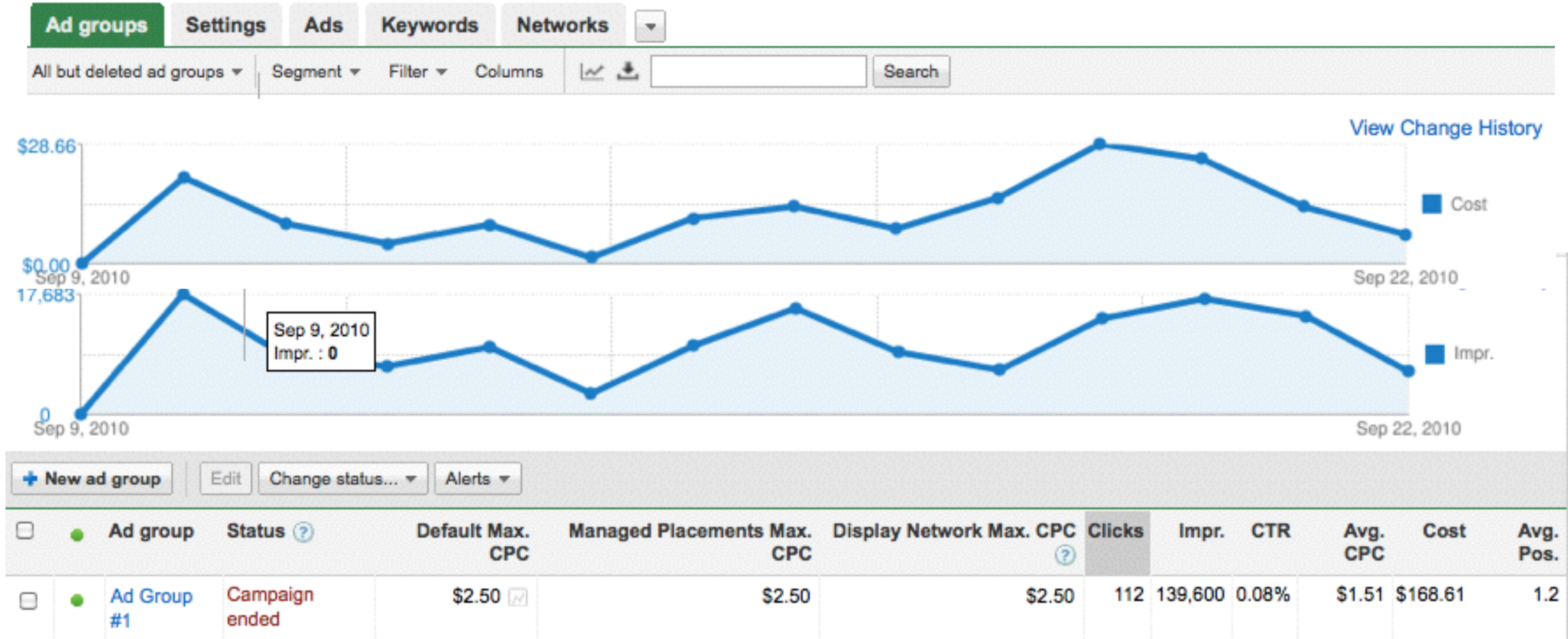


Perspectives for
the next decade!
Where are we going?

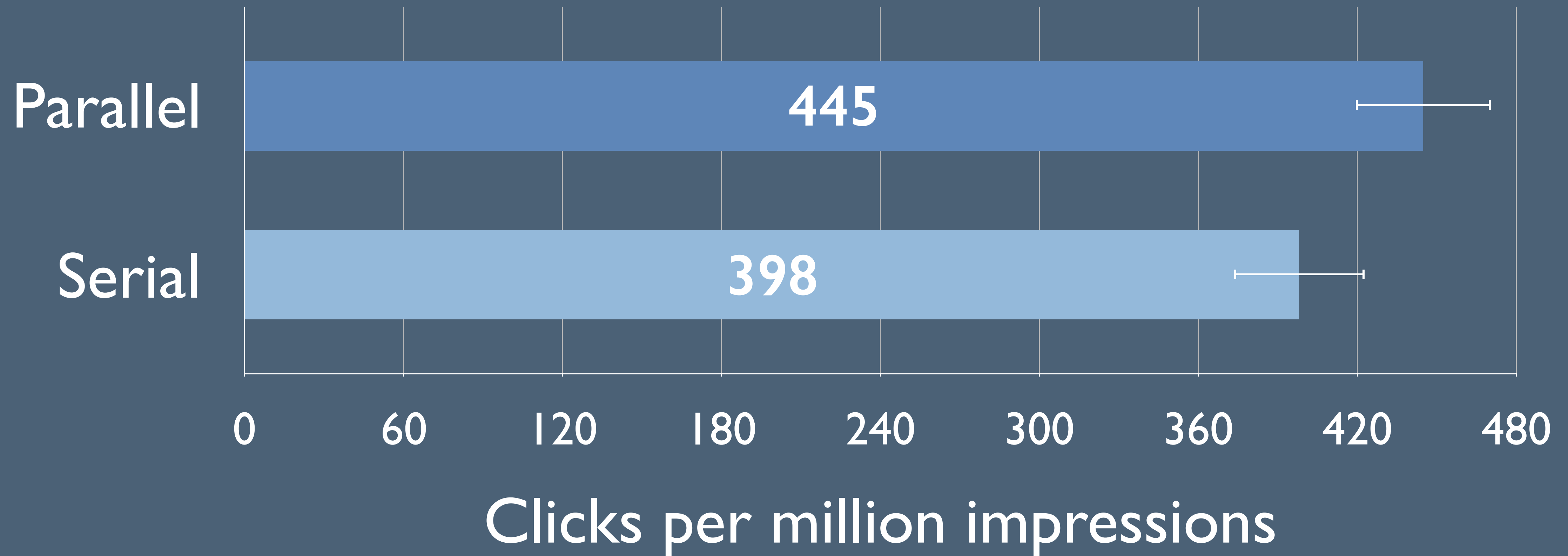
Which group did better?

- I'll be getting your ads evaluated by paid crowd members on Amazon Mechanical Turk.
- Next week, let's revisit the results.

Web advertising analytics

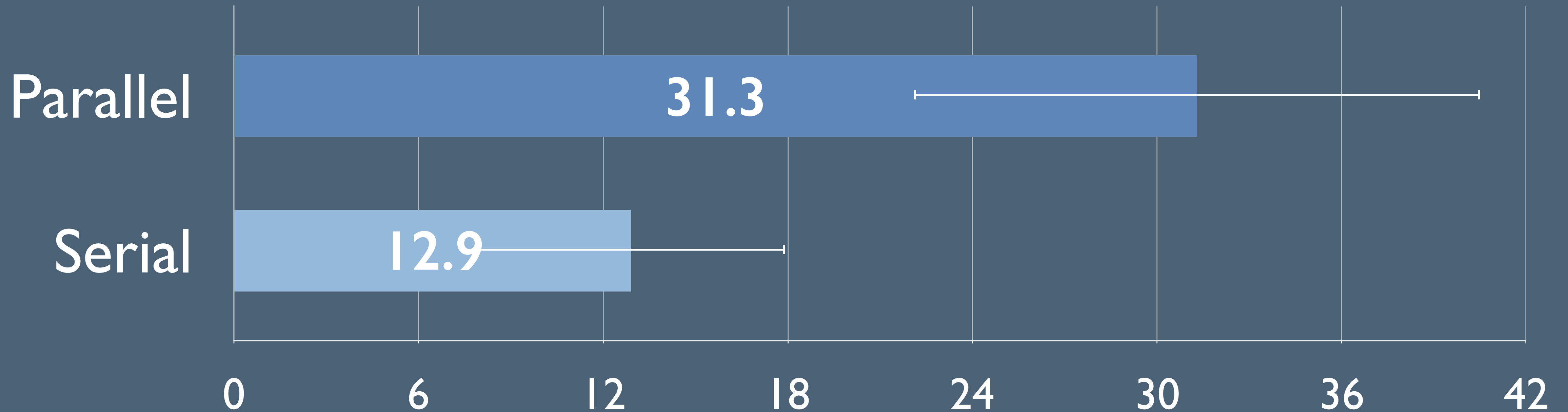


Parallel design → more clicks



$F(1,30)=4.227, p<.05$

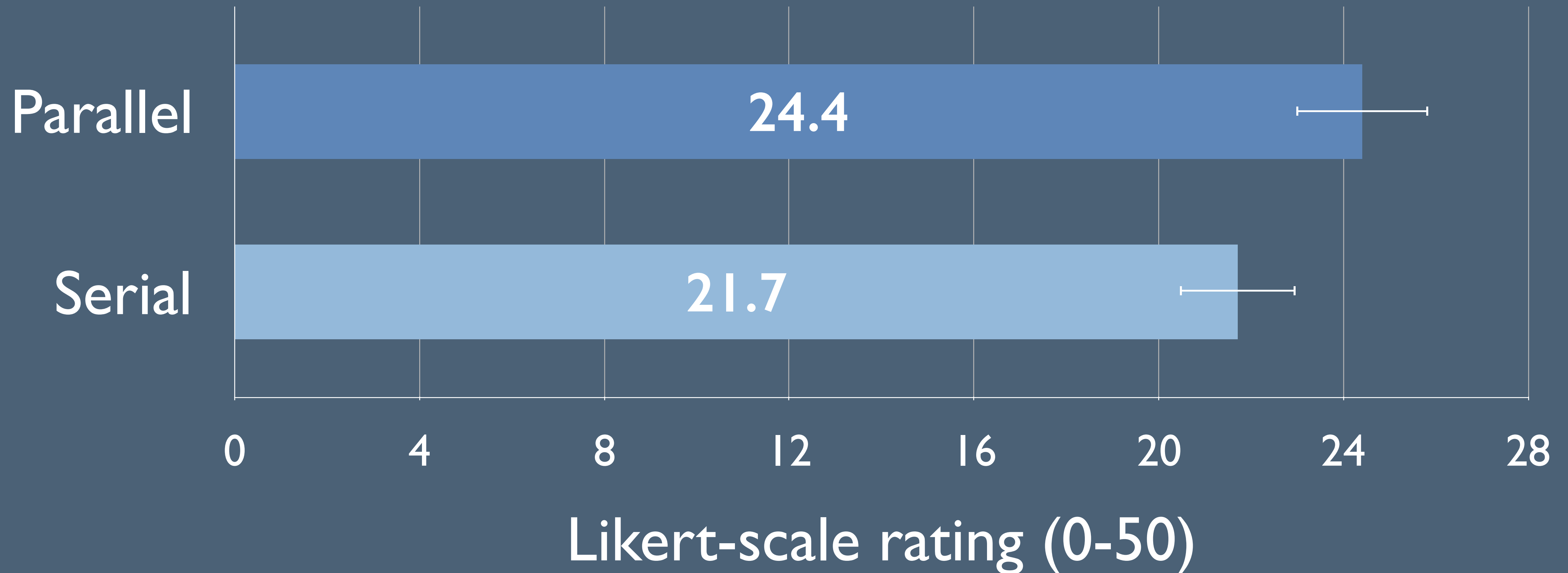
Trend toward more time on site



Average time on client site per visitor (seconds)

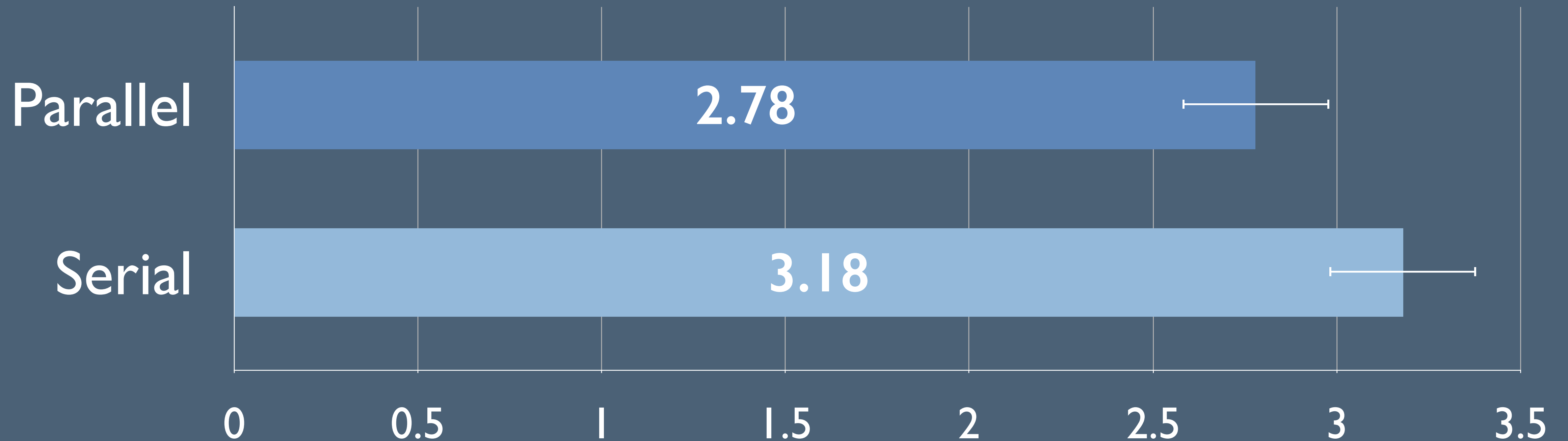
$F(1,493)=3.172, p=0.076$

Higher expert ratings



$F(1,5)=7.948, p<0.05$

More diverse designs



0 = not at all similar, 7 = highly similar

$F=182, p<0.001$

Comparison aids learning

Serial case condition

case 1

“Describe the solution.”

case 2

“Describe the solution.”

Face-to-face negotiation

Parallel case condition

case 1

case 2

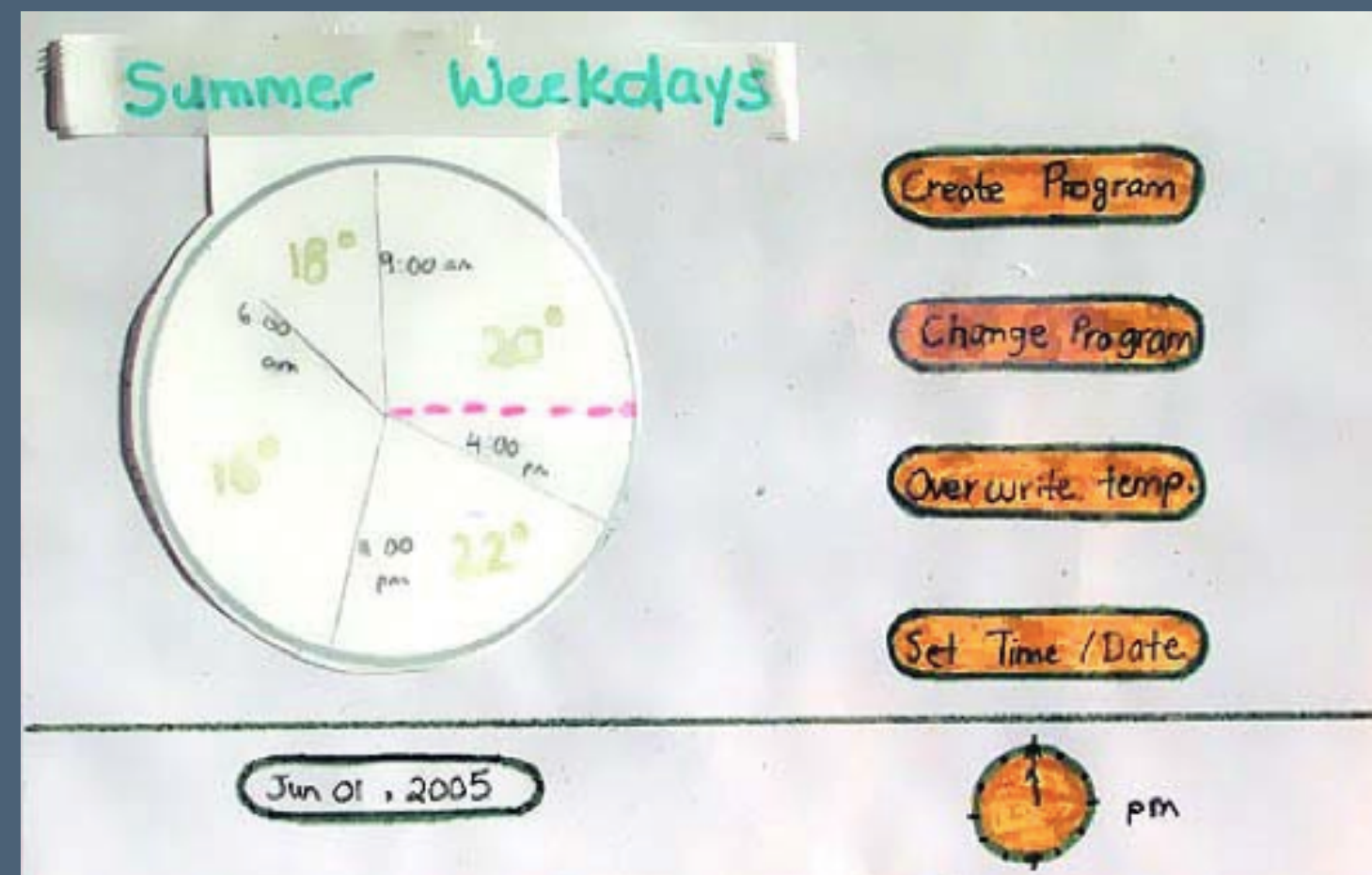
“Describe the parallels of these solutions.”

Face-to-face negotiation

>3x more likely to transfer the technique from training

Get better feedback, too

- Having alternatives lessens the pressure to be nice



Program Summer on Vacation

	from	to	temperature
Morning	7:00	9:00	15
Day	9:00	5:00	15
Evening	5:00	12:00	16
Night	12:00	7:00	15

Date: Jun 01 2005 Time: 12:00 pm Temperature: 23

Detailed description: A hand-drawn interface for a thermostat. At the top, a title 'Summer on Vacation' is written in blue. Below it is a table with four rows and three columns: 'from', 'to', and 'temperature'. The rows are labeled 'Morning', 'Day', 'Evening', and 'Night'. Below the table, there are three fields: 'Date' (Jun 01 2005), 'Time' (12:00 pm), and 'Temperature' (23).

