

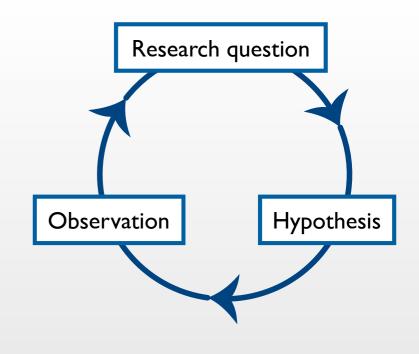
Chat Wacharamanotham Media Computing Group RWTH Aachen University

Summer Semester 2014

http://hci.rwth-aachen.de/cthci

Review

- Three steps in the empirical approach
 - Why iterate?
- Variables
- Research question vs. research hypothesis
- Operational definition
- Three strategies in the empirical approach
 - Descriptive vs. Relational
 - Relational vs. Experimental (Third variable)
- Relationship patterns and strength



Times:

Tue 10:15h - 11:45h	Room 2222	lecture
Wed 13:15h - 14:45h	Room 2222	lab

Exam:

Midterm Tue 03.06.2014 10:15 – 11:45. 2222 Ahornstraße 55 Final (1st Chance) Tue 29.07.2014 10:15 – 12:00. AH6, Ahornstraße 55 Final (2nd Chance) Tue 12.08.2014 10:00 – 11:30. AH6, Ahornstraße 55

Lecture	Topic	Presenter	Lab	Topic	Reading Assignment	Written Assignment
08.04.	Research literacy 1: Research approaches in HCI Slides: [1up] [4up] [Literature]	Jan	09.04.	Literature searching and reading techniques Slides: TBA [In-class exercise] [Declaration of compliance]	(Wobbrock, 2014) 7 Research Contribution Types in HCI	None

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Literature in this Class

- Do I need to know what problems that GPS creates while driving?
 - No.
- Required reading: Examinable, must be read by everyone
 - The list will be published on our website and on L2P this week
- Recommended reading: Not examinable
- Other example papers: Not examinable
 - Examples to illustrate the concepts explained in the class.

In-Class Exercise: Binning HCI Papers

Approaches



Test

Look

Make

Seven Research Contribution types

- Empirical
- Artifact
- Methodological
- Theoretical
- Dataset
- Survey
- Opinion

In-class exercise

Research Example: CommandMaps

• Scarr et al., Best paper CHI '12

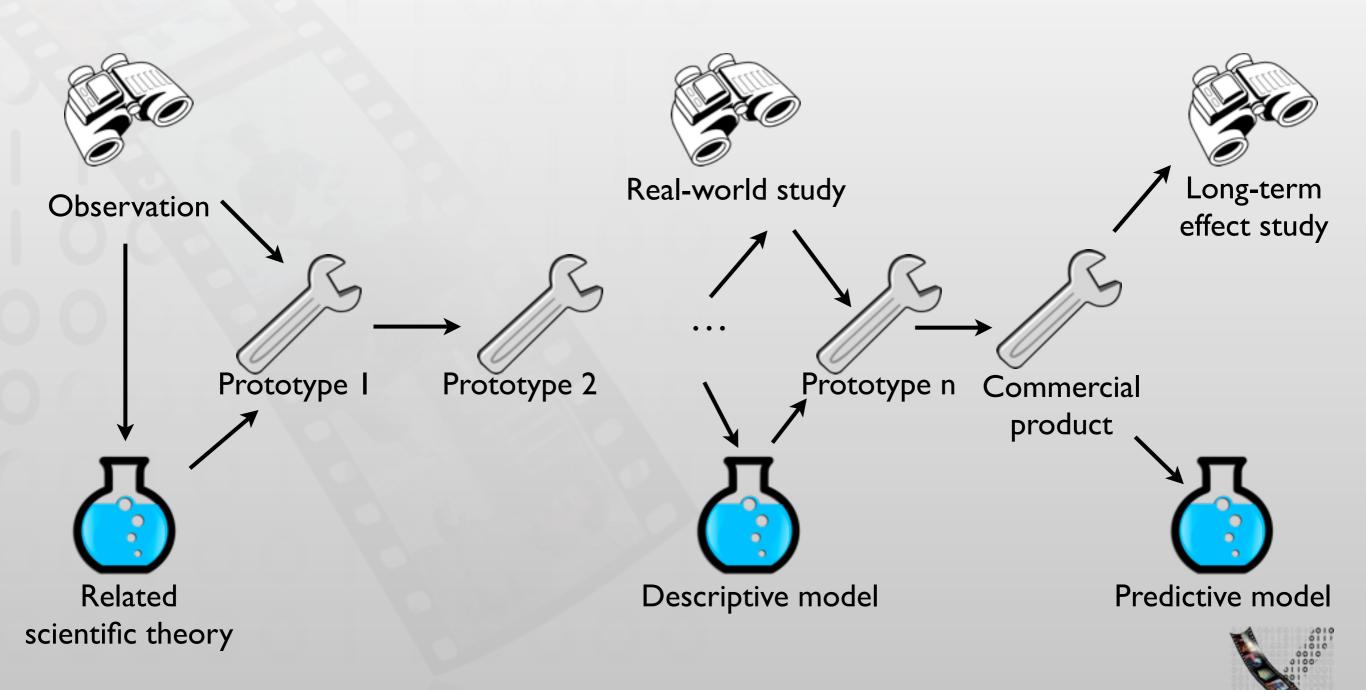


- Improve toolbar (specifically Microsoft's Ribbon interface)
- In-class exercise:
 - Contributions?
 - Benefits?
 - Which part uses empirical science, ethnography, and engineering/design approach?

CommandMaps, CHI '13

Available at: http://dl.acm.org/citation.cfm?id=2207713

The Messy Truth



CommandMaps

Contributions & Benefits:

"Introduces CommandMap interfaces for mouse-based command invocation.
 Theoretically and empirically demonstrates that their defining properties — spatially stable command locations and a flat command hierarchy — improve user performance."

[Scarr et al., CHI'12]