A Palette-Mixing Model of Information Seeking for Complex Queries

SIGIR Workshop on "entertain me": Supporting Complex Search Tasks.
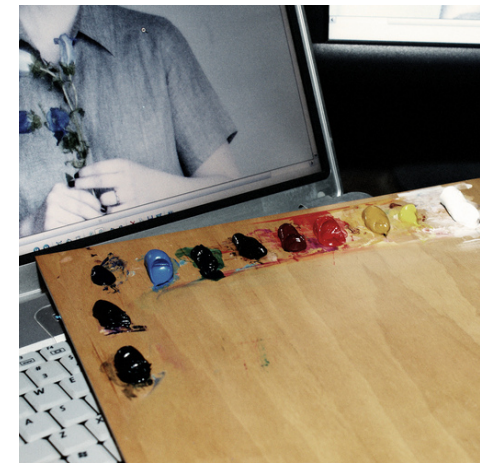July 28, 2011. Beijing, China.

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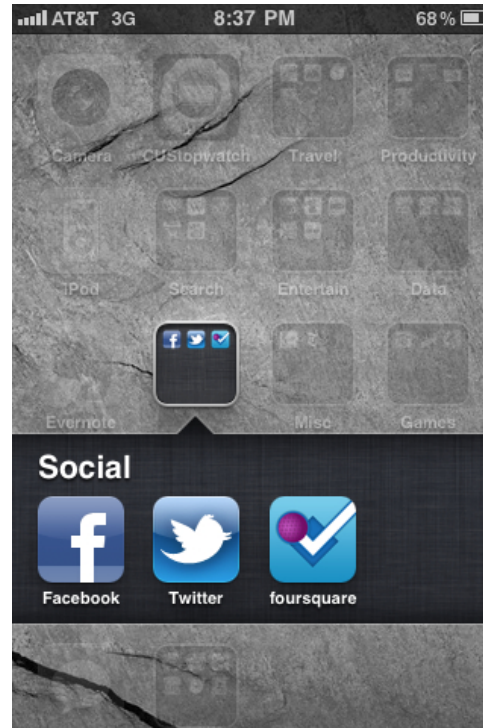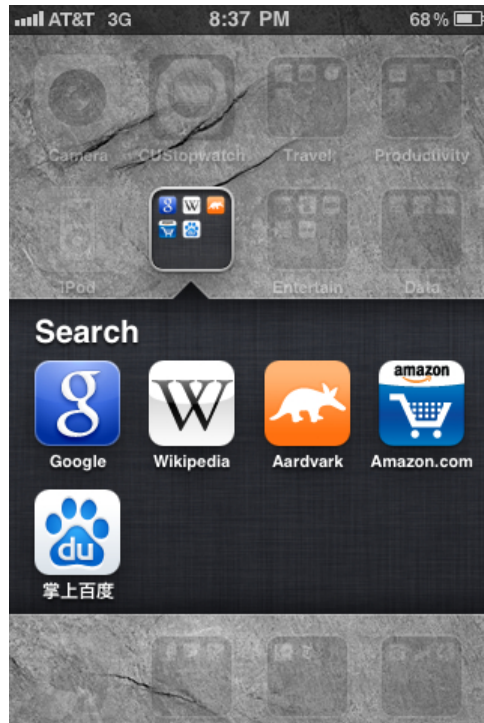{mefron, organis2}@illinois.edu

The Information Seeking Palette

...a palette carefully built. [Robert Henri. *The Art Sprit.* p. 33.]

In painting, the palette is:

- Highly personal with respect to habits and skills
- Often task-specific
- Designed to work towards a short-term goal (mixing a color) and a long-term goal (building a painting)

What Does this Metaphor Buy Us?

Basic Operations

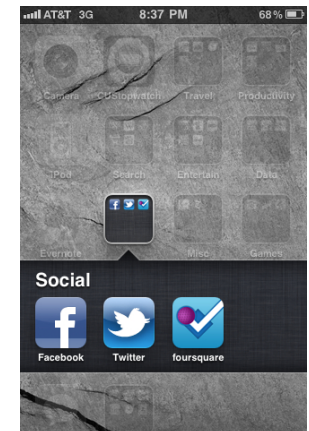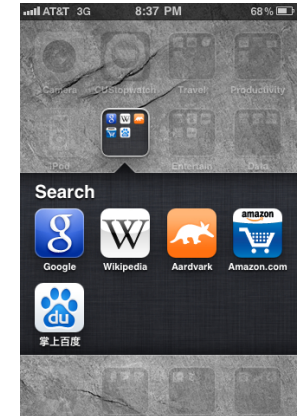1. **Assembling the palette**
   a) Choosing the systems that entail the scope of the user's attention. (Long-term).
   b) Choosing systems that apply to the immediate task.
2. **Arranging the palette**. Which systems are "near" each other and what does this imply?
3. **Mixing.** The user samples from each application, taking output for one as input for another.
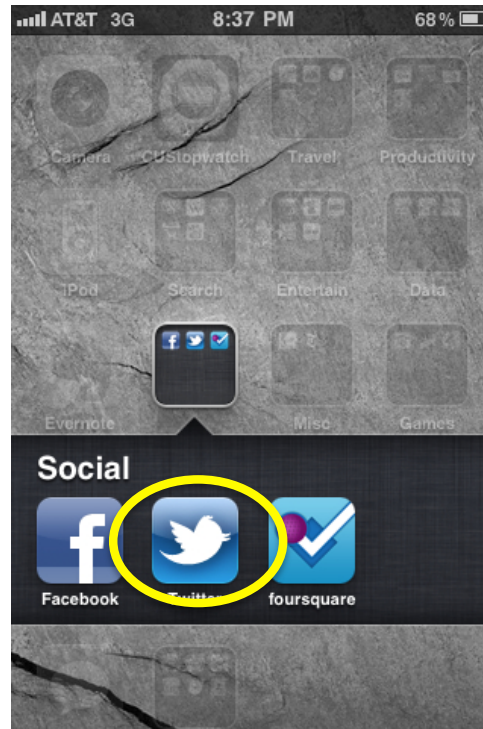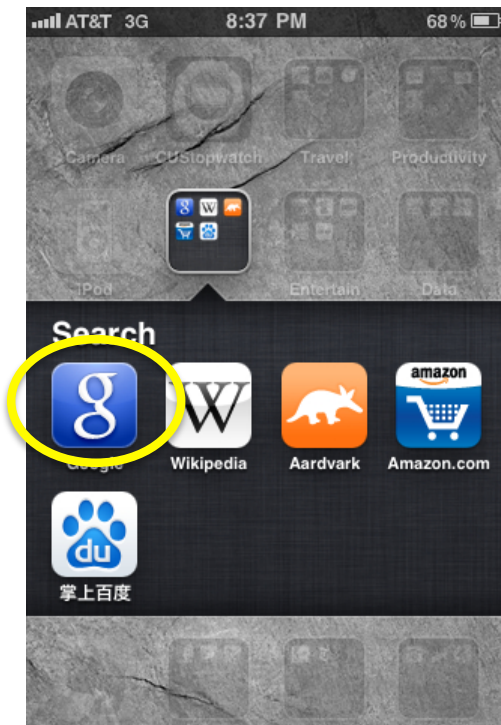4. **Actions outside the palette**. Imagine matching a color on a canvas. Does that currently mixed color work right?
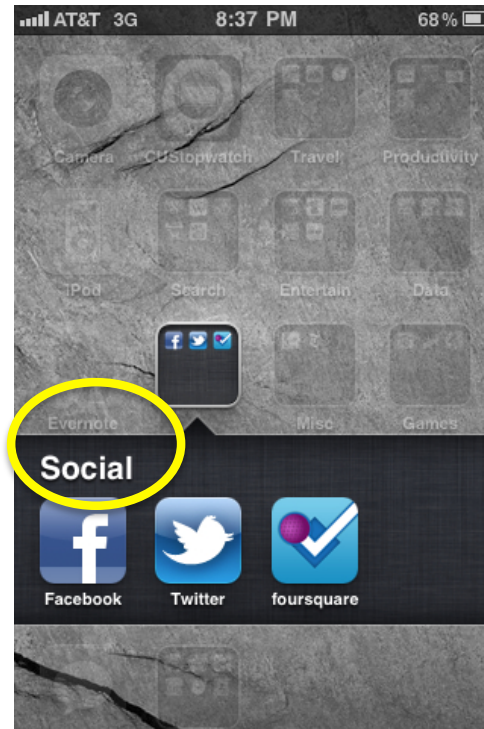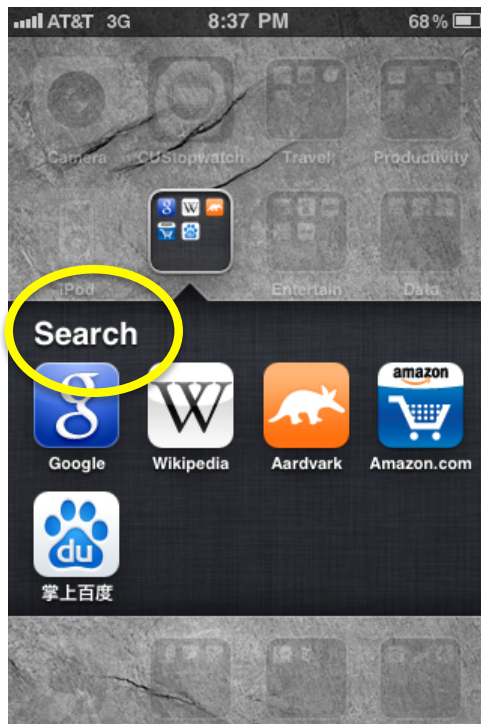5. **Changing the palette**. Adding or removing items.

A Searcher's Information Palette

Where are SIGIR attendees meeting for drinks tonight?

What are good restaurants near my hotel?

I hate the theatre. What else can I do tonight?

What train do I take to get from here to Chaoyang?

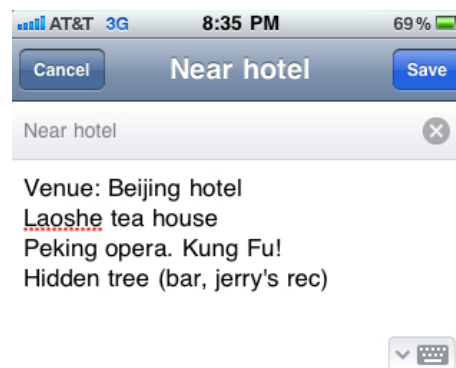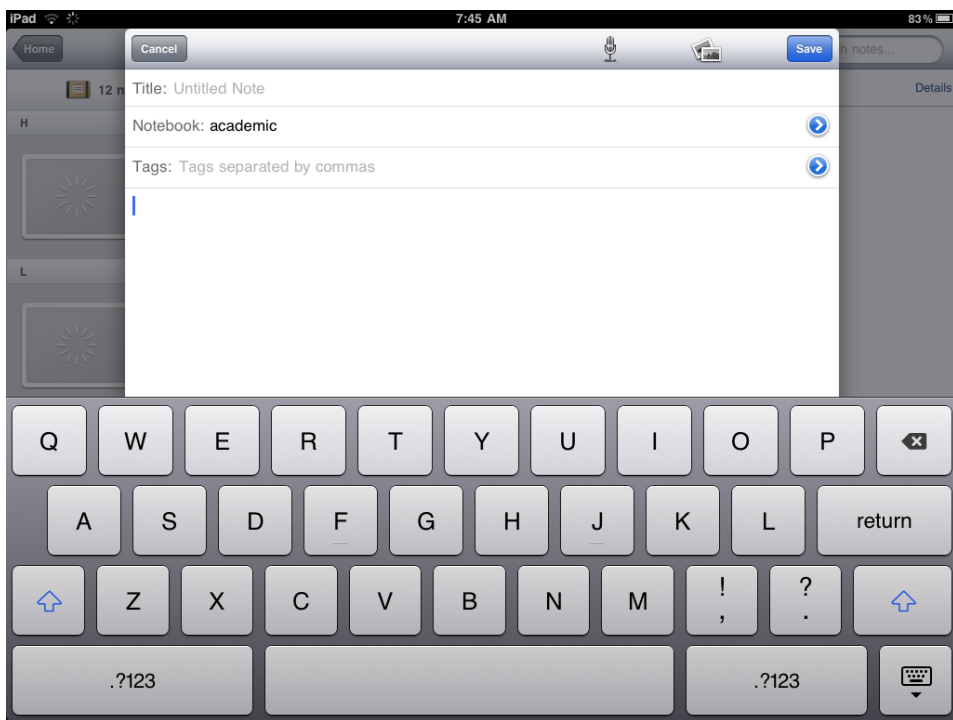# What Does this Metaphor Buy Us?

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Challenges

1. Design decisions
    1. Reducing cognitive load via intermediary spaces
    2. Handling **persistent** complex information needs
2. Capitalizing on new sources of evidence
3. Guidance in palette design
    1. Micro-II retrieval (find relevant systems)
    2. Suggestions for effective sequences / chains.
4. …

Thank You

- ***Other challenges?***

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