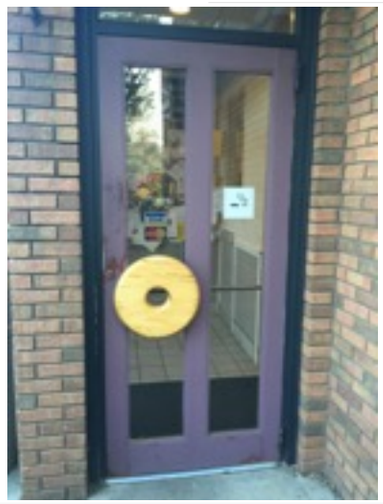
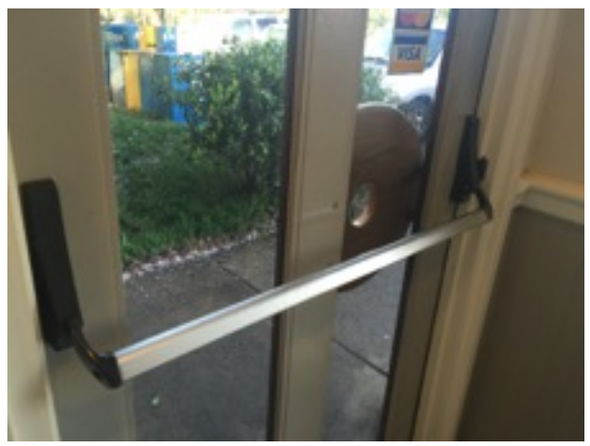
DESIGNANDUSABILITY

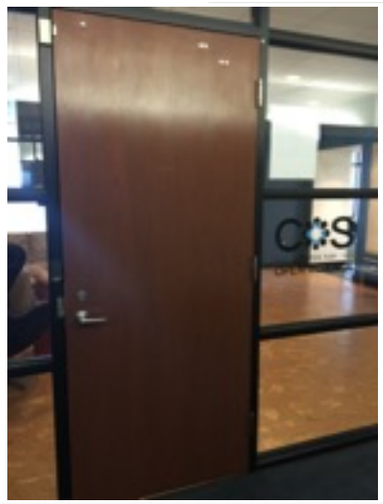
THEDOORSATBODOS

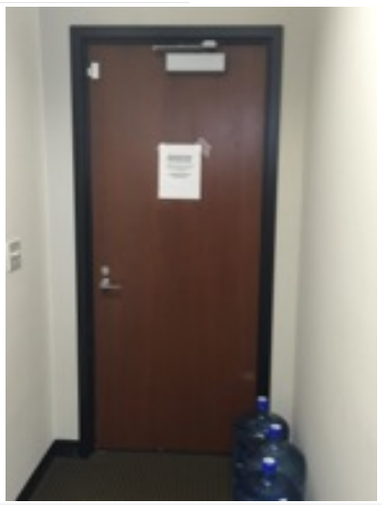




I go to Bodo’s a lot. Usually three times a week. I go into Bodos, enjoy some carby goodness, and then leave. So, every week, I go in this door 3 times, and out this other door three times. Simple, right? And look, its got a bagel on it!

THEDOORSATCOS





What is a door's purpose? What is its Zen nature? To let the right people enter and exit a space, and prevent everyone else. In this, our door does not always succeed in its mission. Flowdock lists 7 conversations in the last 5 months involving door problems. I have personally had or heard 10 more in the office in the last month. I continue to fail when leaving COS because I forget to hit the button first. Am I an idiot because I can't open a door? Probably. Is everyone else here also an idiot? That's a little less likely. Our doors have a design problem.

WHATISGOODDESIGN

DESIGNERS BUILD RELATIONSHIPS TO CREATE A POSITIVE EXPERIENCE

Designers build relationships. This could be the relationship between person and object, person and machine, between people, or even between machines.

WHO IS A DESIGNER?

- FRONT END DEVELOPERS
- BACK END DEVELOPERS
- QA
- HR
- GRANT WRITERS
- MANAGEMENT
- EVERYONE

When you think of design, you might think of front end development, or perhaps making advertisements or banners and whatnot. This is true, but everyone designs. Back end developers design API's, databases, code structures and object. They know people, machines, and other programs will have to interact with them, and design accordingly. QA writes bug reports to get problems fixed, and points out the design mistakes to make the site stronger. Human Resources designs interviews to get the best people, and onboarding to make their integration smooth. Grant writers design their proposals. Management designs the work environment to increase efficiency. Everyone writes email.

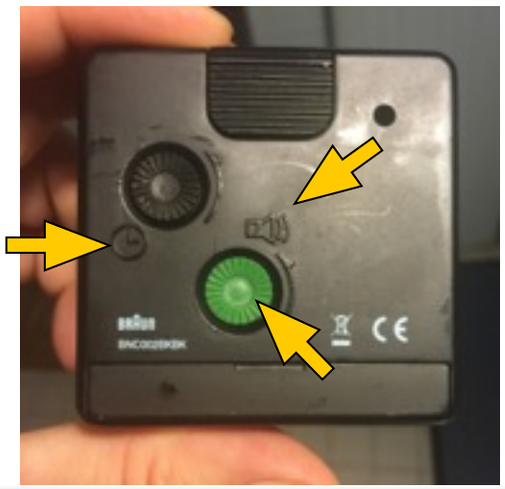
SIGNIFIER

A SIGNAL THAT COMMUNICATES WHERE AN INTERACTION TAKES PLACE

Signifiers are signs. They communicate where interactions can take place. The color of the pills that Morpheus offered Neo are signifiers. Without the color signifier, the robots might have won.

Title Text

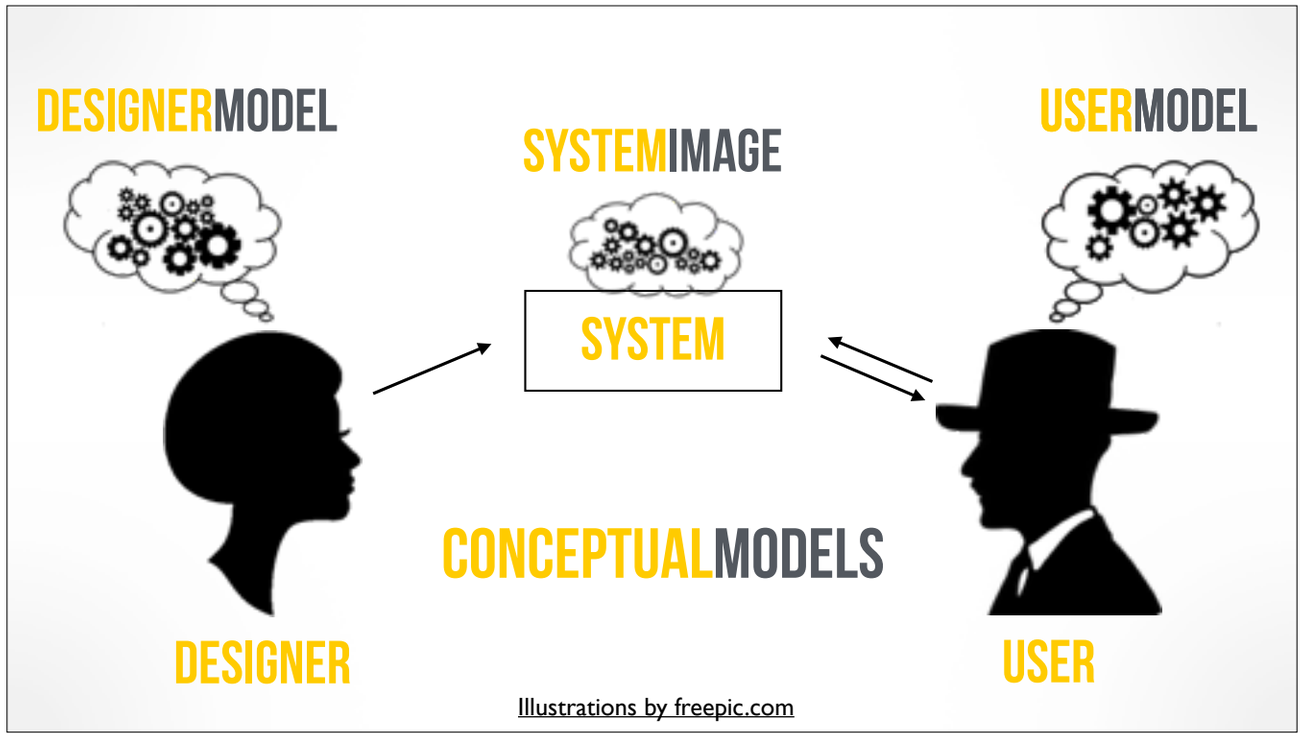
EXAMPLES OF SIGNIFIERS



The icons on the back differentiate which dial controls which function. Also, in this example, the color green is also a signifier. Do you see any others?

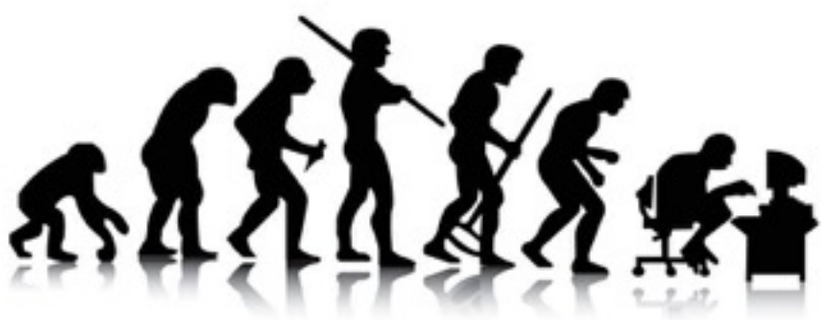
SIGNIFIERS

THIS PUZZLE BOX
HAS NO SIGNIFIERS,
HILARITY ENSUES

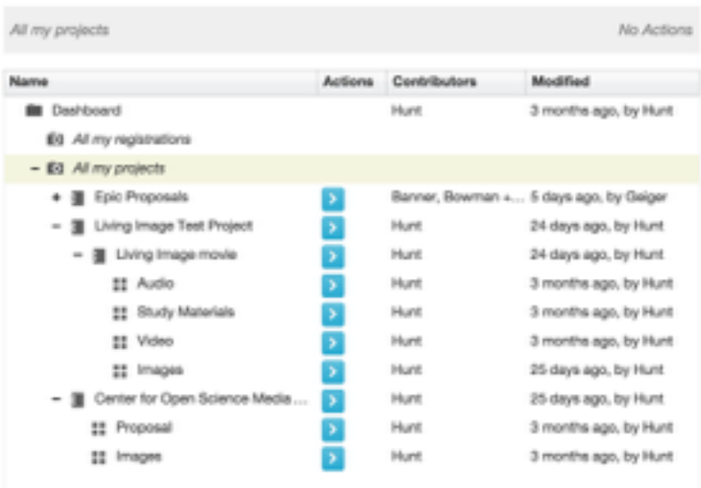


So you have a user, a designer, a system. The designer has an idea in their head as to how the system should be used. That idea is a Conceptual Model. The user has no idea how to use the system, no conceptual model. How can the designer let the user know how to use the system? She can't talk to the user directly. She has to communicate through the system. She creates a "System Image," which the user interacts with to develop his own model of how to use the system.

EXAMPLES OF CONCEPTUAL MODELS



EXAMPLES OF SYSTEM IMAGES



EXAMPLESOFSYSTEMIMAGES

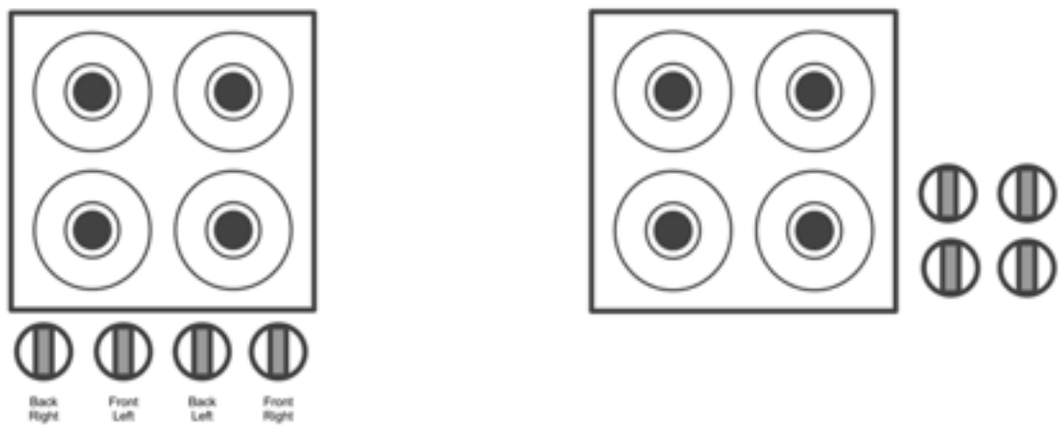
COMMUNICATE WITH THE USER

- INSTRUCTIONAL VIDEOS?
- MAPPINGS
- FEEDBACK
- CONSTRAINTS

How can we create a system image to let the user know what to do? You might thing about our many instructional videos on the “getting started” page, but how much are they used? The most popular OSF instructional video has 89 views. The least has 3. As with user manuals, most people are not using them.

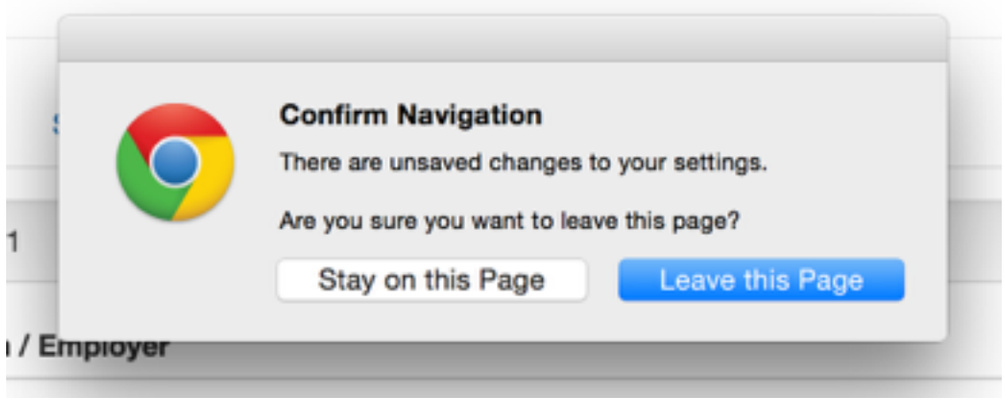
We need to communicate to the user with design. How do we do it? Three possibilities are Mappings, Feedback, and Constraints.

NATURALMAPPINGS



Mappings are the relationships between things. When designing an interface, you want to take advantage of physical analogies and cultural standards. Doing so will create a natural mapping.

FEEDBACK



Users require timely feedback when they preform an action.

CONSTRAINTS

The best way to prevent errors is to prevent them from happening. Constraints are a way to force a user to do the correct thing by limiting actions.

THINK LIKE A USER

1. WHAT DOES THE USER WANT TO DO, AND HOW CAN YOU HELP THEM DO IT?
2. CAN YOU USE SIGNIFIERS, MAPPINGS, AND CONSTRAINTS TO ADD CLARITY AND LIMIT INAPPROPRIATE CHOICES?
3. IS THE USERS PROCESS MORE COMPLICATED THEN THE ACTION? HOW CAN IT BE STREAMLINED?
4. DO YOU GIVE UNDERSTANDABLE FEEDBACK WHEN A USER DOES SOMETHING RIGHT? HOW ABOUT WHEN IT'S SOMETHING YOU DIDN'T EXPECT?
5. IS THE LANGUAGE IN YOUR DESIGN APPROPRIATE FOR THE USER?

Title Text

WHATSWRONG WITHOURDOOR?

BAD SIGNIFIER

Our exit button has a blinking green light when it is unnecessary to use, and a solid green light when it is necessary. In our culture, blinking means pay attention and green means go and red means stop. This signifier is double-terrible.

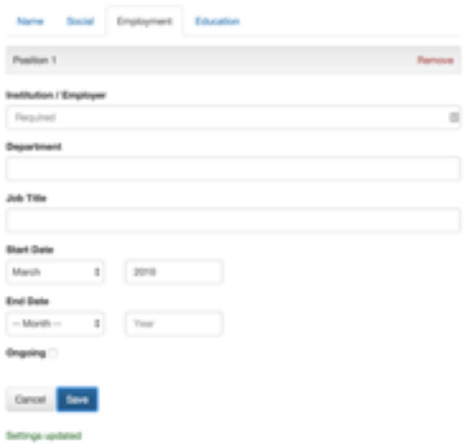
Title Text

WHATSWRONG WITHOURDOOR?

TOO FAR APART

BAD MAPPING

MYEXAMPLE



I have been working on the user profile. Specifically a bug in production where if a user tries to save a blank profile, it creates an error.

What I did:

- If there is nothing filled in in any field, then a single blank job object is saved.
- if there is a filled in job object and another blank job object, the blank job object is deleted
- added ‘remove’ signifier for single object
- If there is a blank Required field in any school or job, then the add another button is removed.
- If any non required field is filled in but not the required, then an error occurs.
- Made error messaging more user friendly.

What I didn’t do:

- unify the error messaging. there are currently 3 types.
- delete growl messages after a given time
- add save and cancel messages to error messaging
- put focus in problematic field after hitting save

EXTRACREDIT

WATCH SOMEONE USE YOUR PRODUCT FOR THE FIRST TIME. IF THEY HAVE PROBLEMS, IMPROVE THE DESIGN.

DESIGNHAIKU

THE SPRING WINDS BLOW CHANGE
A USER CANNOT SIGN UP
WE CAN DO BETTER

ADDITIONAL RESOURCES

THE BOOK “THE DESIGN OF EVERYDAY THINGS” CAN BE FOUND IN THE COS LIBRARY. A LINK TO THE MOOC, THE BOOK, AND THIS PRESENTATION CAN BE FOUND AT

WWW.BILLYHUNT.COM/DESIGN