purposes

after this class you’ll understand some criteria for evaluating concepts

key ideas
concept-purpose mapping
uniformity within a concept
generic concepts & their importance
Mitchell and Webb: “Unity of Purpose”
a flawed concept design
my camera fuji x100s
image quality setting

- FINE
- NORMAL
- FINE+RAW
- NORMAL+RAW
- RAW
image size setting
non-standard ratio + raw?
what you can’t do

non-standard aspect ratio + raw
even though raw images get nice nondestructive crop!
the one-to-one rule
four ways to fail

unfulfilled purpose

unmotivated concept

overloaded concept

redundant concepts
exercise: camera settings
exercise: evaluating a design

what’s wrong with Fuji’s design?
can you identify some concepts and purposes?
how well aligned are they?

image size menu

image quality menu

can’t have 1:1 in raw

http://www.yellkey.com/slack
kinds of overloading
overloaded concepts

No one can serve two masters. Either you will hate the one and love the other, or you will be devoted to the one and despise the other. [Matthew 6:24]

4 forms of overloading:
- **piggybacking** new purpose hacked onto old concept
- **false convergence** two purposes looked the same
- **emergent purpose** second purpose emerged with use
- **denial** designer believes second purpose unnecessary
piggybacking fuji camera

new purpose hacked onto old concept

image size
aspect ratio piggybacked on JPEG dimensions
piggybacking epson driver

result: can’t create custom size for front loading
also, page size presets in Lightroom hold feed setting
false convergence facebook friend

two purposes looked the same

filter incoming posts
control access to my posts

**distinct purposes**

2011: Facebook added subscribe/follow
users find second purpose for concept

initial purpose: summarize content

To: Daniel Jackson <dnj@mit.edu>
Re: Catch me if you can in real life!

emergent purpose: show sender
if you bcc a list, subject reveals to-address

thanks to Shriram Krishnamurthi

emergent purpose: group by conversation

To: csail-related@lists.csail.mit.edu
Re: [csail-related] turn off the lights?

can’t label reservations from Expedia by trip

thanks to Eunsuk Kang
designer believes second purpose unnecessary
exercise: categories in Gmail
<table>
<thead>
<tr>
<th>Gmail's Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
</tr>
<tr>
<td>Google</td>
</tr>
<tr>
<td>Keith Muhammad at DeMont.</td>
</tr>
<tr>
<td>AT&amp;T High Speed Internet.</td>
</tr>
<tr>
<td>Keith Muhammad at DeMont.</td>
</tr>
<tr>
<td>betterbatonrougejobs.com</td>
</tr>
<tr>
<td><strong>Social</strong></td>
</tr>
<tr>
<td>New sign-in from Chrome on Mac - New sign-in from C’t</td>
</tr>
<tr>
<td>DeMontrond Auto Group - 14101 North Freeway Housto</td>
</tr>
<tr>
<td>AT&amp;T High Speed Internet Service Activation - Your A1</td>
</tr>
<tr>
<td>DeMontrond Auto Group - 14101 North Freeway Housto</td>
</tr>
<tr>
<td>Job Update -- 2015-08-26 - Looking For An Advantage W</td>
</tr>
<tr>
<td><strong>Promotions</strong></td>
</tr>
<tr>
<td>100+ new</td>
</tr>
</tbody>
</table>
Choose which message categories to show as inbox tabs. Other messages will appear in the Primary tab.
Google gets it terribly, terribly wrong with Gmail tabs and makes me angry

By Mark Wilson | Published 2 years ago | Follow

71 Comments

Like many Gmail users, I greeted the news of the introduction of tabs to the interface with a degree of anticipation -- now it was just a matter of waiting for the feature to roll out so I could try it for myself. Earlier today I was randomly signed out of my Gmail account, and after signing back in and checking the settings menus, I could see that tabs were now available to me. Excitement was short-lived, however; it quickly became apparent that this new feature is a disaster.
Using labels

Labels help you organize your messages into categories -- work, family, to do, read later, jokes, recipes, any category you want. Labels do all the work that folders do, but with an added bonus: you can add more than one to a message.
what you can’t do

associate tabs with labels
feature available only for categories

create new categories
only new labels

use tabs outside inbox
tabs disappear when you filter on a label
what design rule is violated here?
explain the problem in terms of purposes & concepts
give names to concepts
formulate purposes carefully
the uniformity rule
what makes a usable concept?

operational principle is uniform
always the same actions, irrespective of context

concept: **Group** (Keynote)

*purpose*: treat set as one

*OP*: ... select(objs); group(); mutate()...

quantified over state & args

unless **objs** contains a text body object
concept: **Range** (Numbers)

**purpose:** define formula over adjustable group of cells

**OP:** ... define formula over range... select(c) in range... add(direction)... formula updated

**unless** range cell c is at top of range and dir is above or....
non-uniformity conversation

action applied to every message in conversation unless message in other folder or action is reply ...
kinds of non-uniformity

- **varies over type**
  - Keynote grouping unless objs contains a text body object

- **varies over mode**
  - Fuji aspect ratio setting unless set to raw only mode

- **varies over state**
  - Dropbox share folder unless folder is ancestor or descendant of shared folder

- **varies over state**
  - Git branch unless working directory contains uncommitted file or...

- **varies over arg**
  - Twitter mention unless mention includes first character of tweet
generic concepts
how concepts get applied
why reuse a concept?

- familiarity
  users will get it
- save work
  design options known
- no surprises
  misfits anticipated

- options for upvote?
- misfit of notification?
reusing vs. inventing

in Keynote

what concept is this?

in Powerpoint

what's better or worse about the Powerpoint concept?

Powerpoint commands

where does this do exactly?
summary

one-to-one rule
really about purpose being central
overloading: surprising that it’s bad

uniformity & genericity
you knew this already perhaps?
but gives you a framework to put into practice