Web and Navigation Design

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Overview:

- Design Principles Revisited
- Web design
- Navigation design

- Reading
  – ID book 1.7.3, 7.2.2, 7.2.5,

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5 Key Design Principles
from Chapter 1

1. Visibility
2. Feedback
3. Constraints
4. Consistency
5. Affordance

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Design principles

- Generalizable abstractions for thinking about different aspects of design

- The do's and don'ts of interaction design

- What to provide and what not to provide at the interface

- Derived from a mix of theory-based knowledge, experience and common-sense

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Visibility principle

- Visibility
  - A control should be visible so users know it is available
  - Should provide immediate feedback to indicate it is responding
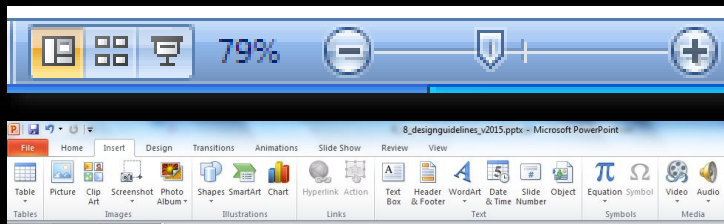
Feedback

- Sending information back to the user about what has been done
  - Equally important to indicate failure and success
- Includes sound, highlighting, animation and combinations of these
  - e.g. when screen button clicked on provides sound or red highlight feedback:
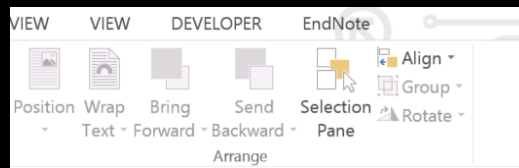
    Previous ⟶ "ccclichhk"

    Previous ⟶ Previous

Constraints

- Restricting the possible actions that can be performed

- Helps prevent user from selecting incorrect options

- Physical objects can be designed to constrain things
 – e.g. only one way you can insert a key into a lock

Consistency

- Design interfaces to have similar operations and use similar elements for similar tasks

- Main benefit is consistent interfaces are easier to learn and use

- Inner consistence – within the system
  - To make it easy for the user to user actions that they have not used before.

- Outer consistence – With other systems
  – Exploiting prior knowlegde
    - Also knowlegde of other equipment f.x. Calculator
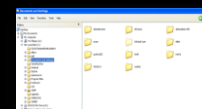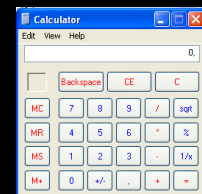
Affordance principles

- Affordance
  - The appearance of any control should suggest its functionality
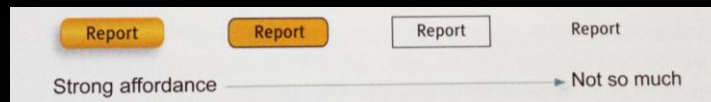
Web Design

Web Design

Three specific areas:

1. Designing the structure
   – According to the user's goals
   – The grouping of information is very important
2. Helping users know where they are
   – E.g. on the web, the logo is placed in the upper left hand corner
3. Helping users navigate

These three areas are all taken into consideration even while designing low fidelity prototypes

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1. Designing the structure

What is the web site supposed to communicate?
- Content rich
- Web application

Need for structure
- What is on each page?
- The layout on each page?
- Where the things are placed?

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# For content rich web sites content is king

- Structure of the website is directed by the structure of the content
  - Information science
  - Taxonomy
- Content matters in SEO (leitarvélabestun)
- An example of content put in the driver's seat:
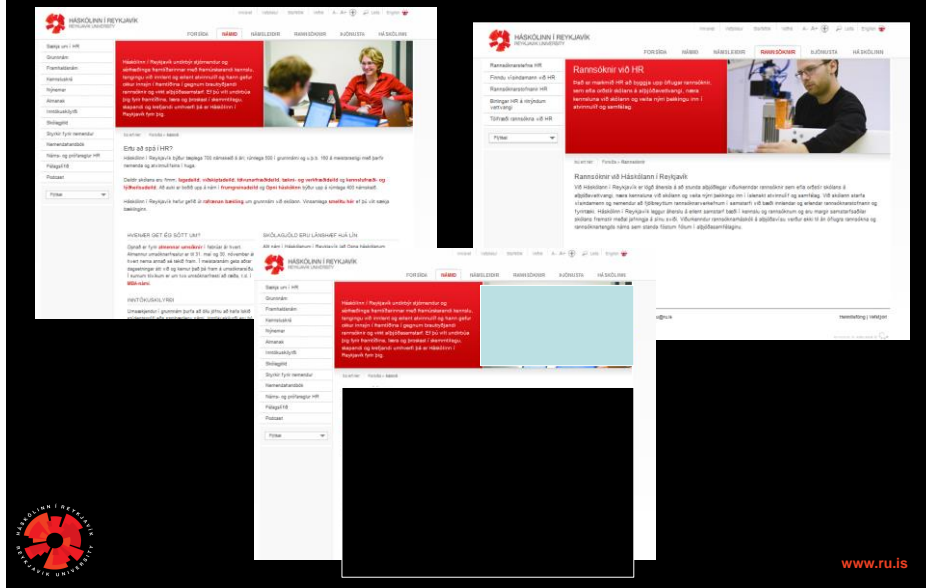 - https://www.gov.uk/
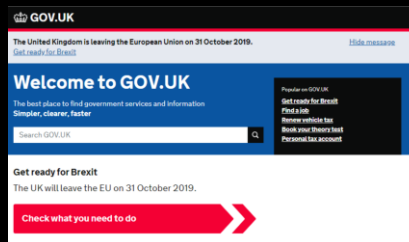
Grid

- Using a grid based layout helps structure and organize the content
- Also real handy for responsive design
- More:
 - https://www.creativebloq.com/design/grid-based-web-design-beginners-guide-9107116
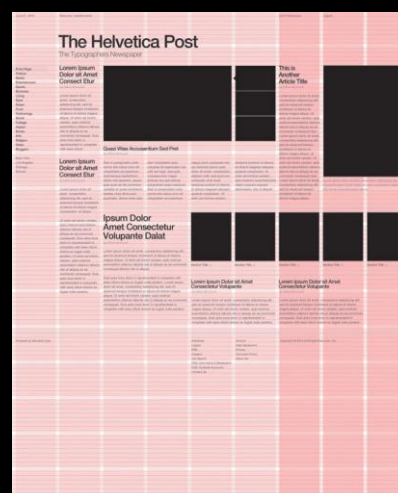
Consistent Layout

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„Home page" design

- The front page of the web, unique from the rest of the site
- Two main goals
  - Tell the user where he/she is
  - Tell the user what is on the web
- Most of the web site have:
  - The organization's logo
  - The name of the organization
  - Short introduction of the purpose of the organization/website
  - Access to most important tasks
 - Some sort of navigation aids
  - Search
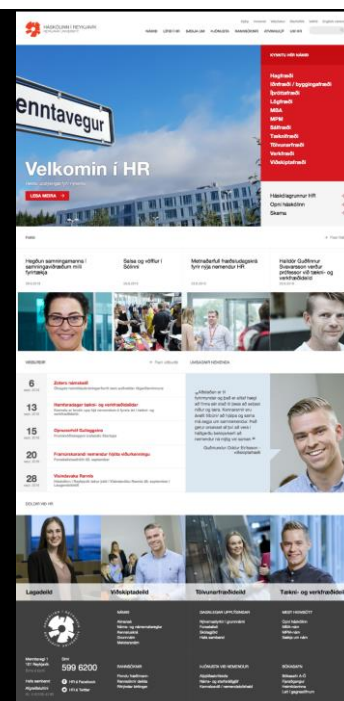
Below the fold

- The whole home page is not visible when you open it
- Anything that is not immediately visible is called "below the fold"
  - Indicate that there is more
- Above the fold content is the most important content
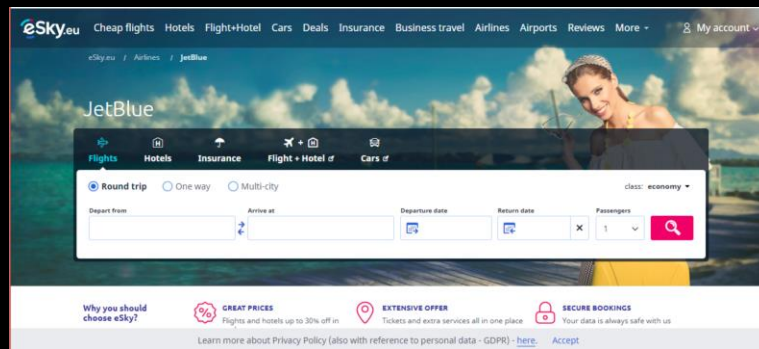 - Scrolling very common, if people know there is more to come
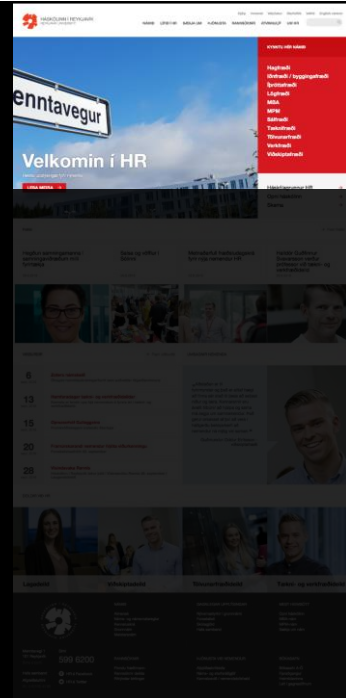
One track mind

- The way you see your website
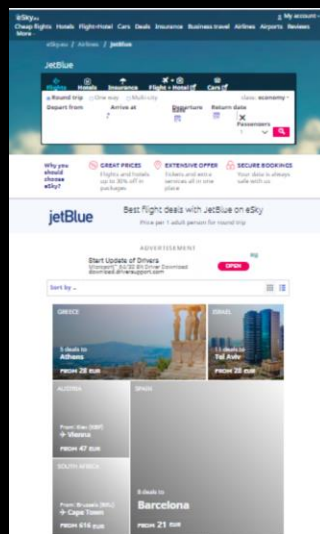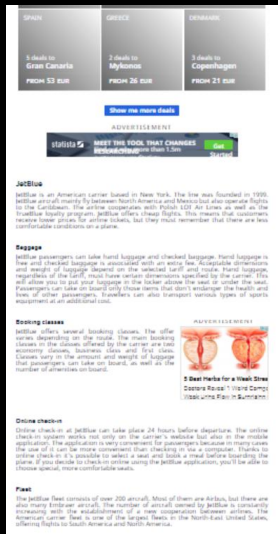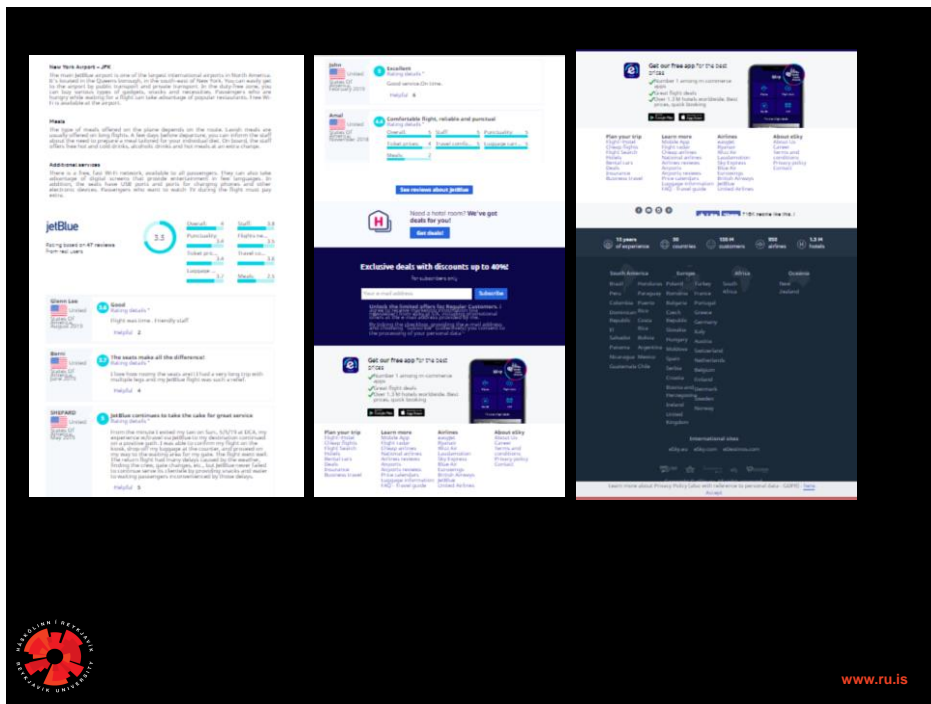- The way your users see your website
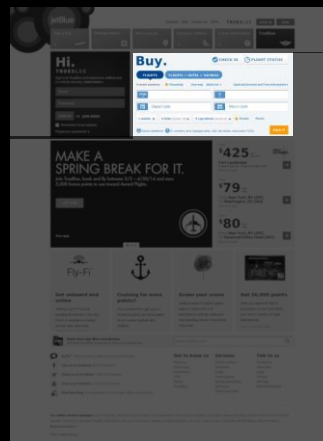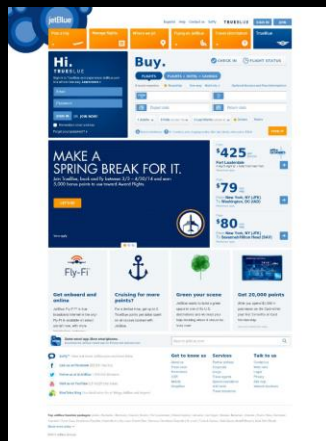
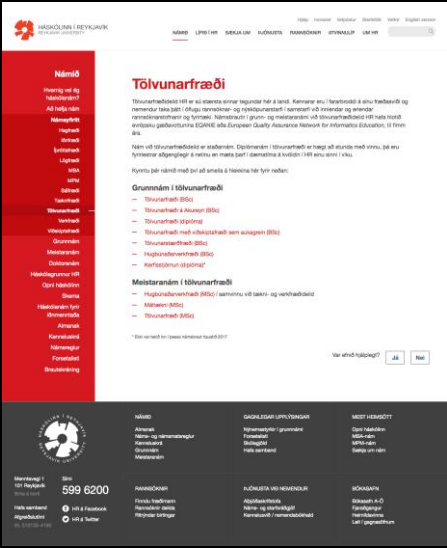www.ru.is

Now the Design is Different

Designing Interior Pages

- Getting to the purpose of the website
- More content
- Common features
  - Menu
  - Header and footer from the first page
    - Unless it distracts from the task
- Consistency is key
- Also consider sectional pages (milli-forsíður)

Sectional pages

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Smart phones and pads

- People expect to be able to access any website on their smart phone or pad.
- To design for these different screen sizes is tricky
  - Endless resolution considerations...
  - A consideration for all software, be it content sites or apps.
  - Mouse/keyboard vs finger
- All about tradeoffs
  - Different constraints

Steve Krug (Don't make me think, 2014):
Managing real estate challenges **shouldn't**
be done at the cost of usability

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Designing for different screen sizes

- Two opposing schools of thought:

  – **Repurposing**: make as few designs as possible —
  preferably only one — and reuse the same material across
  as many platforms as possible (*responsive design*).
  – **Platform optimization**: design different user interfaces for
  each main platform, integrating the user experience layers as
  tightly as possible.

- http://www.nngroup.com/articles/repurposing-vs-optimized-design/

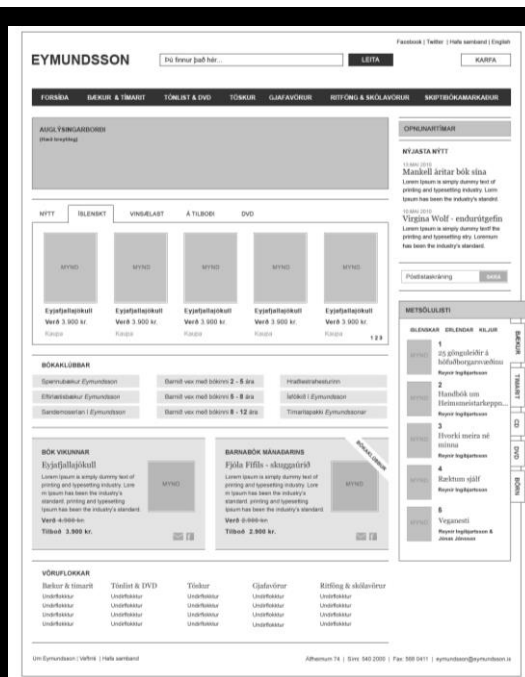
Responsive design

- Design for different screen sizes
  – One codebase
  – Breakpoints
  – Smooth transitions
- Easier to maintain
- Sacrifices the
  capabilities of the
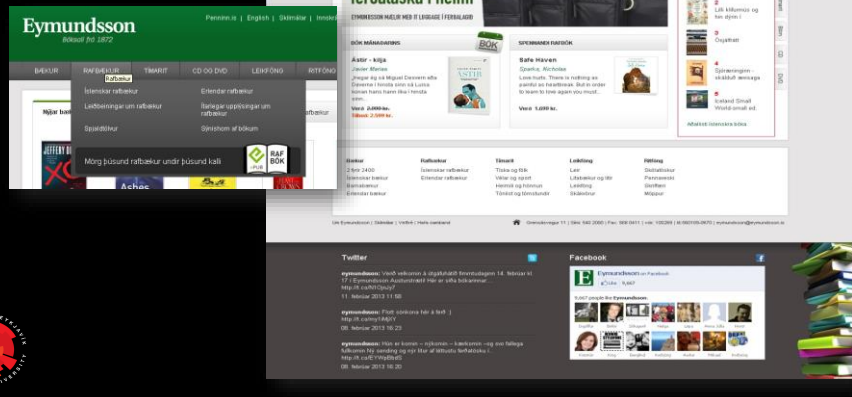 operating system
  – Location
  – Notifications

New Design

- First designed by a new wireframe
- New structure
  - Page – users tasks
  - Menu tree

In Detail

- New webtree shown in megamenu

2. Help Users Know Where They Are
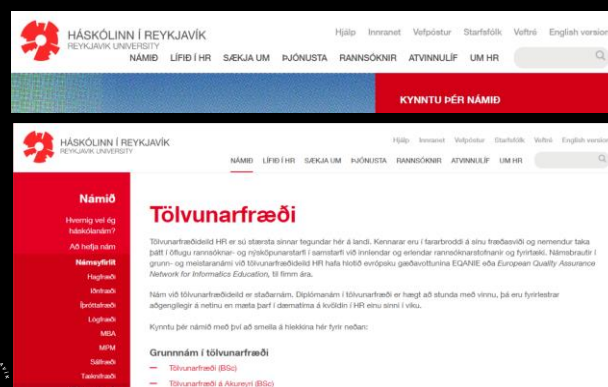

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Know Where You Are

- Sometimes users jump directly to a page
  - A search may bring them deep into the website
  - How can they know where they are, the context of the information they are looking at?
- Breadcrumbs / Menu indicators
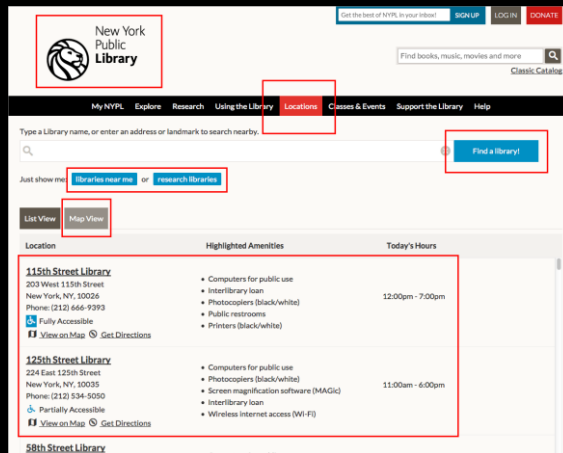 - Shows where the information has been classified on the website.

Help Users Know Where They Are

- Allow users to find the home page
  - Logo in the top left hand corner
  - Include the name of the organization

3. Helping Users Navigate

From: https://www.nngroup.com/articles/navigation-you-are-here/

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3. Helping Users to Navigate around the Site

- Navigational aids
  - How do we get there?
  - Some of navigation aids
    - Menus
    - Links
    - Header and Footer
    - Breadcrumbs

- Navigation design
  - What belongs where and with what?

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Navigation aids in content

- **Menus**
  - The first place people look to understand what is included on the site. Important to for situational context. Many users do not land on the homepage, so orientation is essential.
- **Links**
  - Help users make connections between related content.
    - http://www.freshconsulting.com/navigation-ui-design/
- **Header and Footer**
  - Information-heavy sites can be made manageable with grouping of information
- **Breadcrumbs**
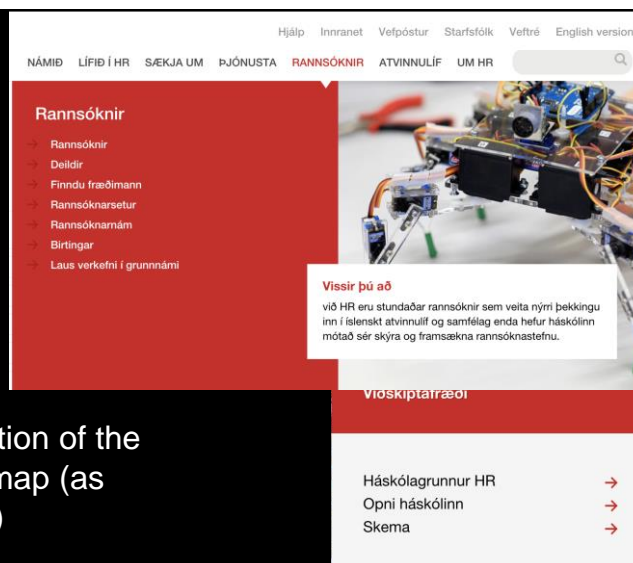 - Like chapter headings in a book, breadcrumbs give situational context.

Navigational aids: Menus

- Representation of the navigation map (as appropriate)

Navigation aids: Links

- Three types of links
  - "Structural navigational links"
    - Reflect the structure of the web site
    - Direct users to other parts of the web
  - "Associative links" (bookmarks)
    - Group the information within the page
    - Direct users to other parts of the same page
  - "See also" links
    - Direct users to related content

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Navigation aids: Links

- What words should we use?
  - Which is better:
    - "Visiting?"
    - "How to find us"

- Instead of link we can use:
  - Button
  - Selectable graphical images
  - Drop-down lists

- Guidelines
  - www.usability.gov

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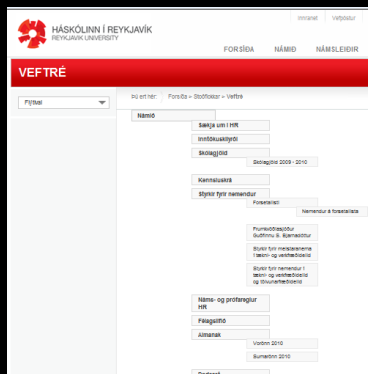## Navigational aids: Header and footer

- Header
  - Top level navigation

- Footer
  - Allow direct access to common content needs

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More navigational aids

- Site map

- Breadcrumbs

- Map

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BBC News indicates where you are with (1) logo and branding, (2) navigation-bar change, (3) headings, and (4) contextual cues. The page title and URL include the article's title and website's name.
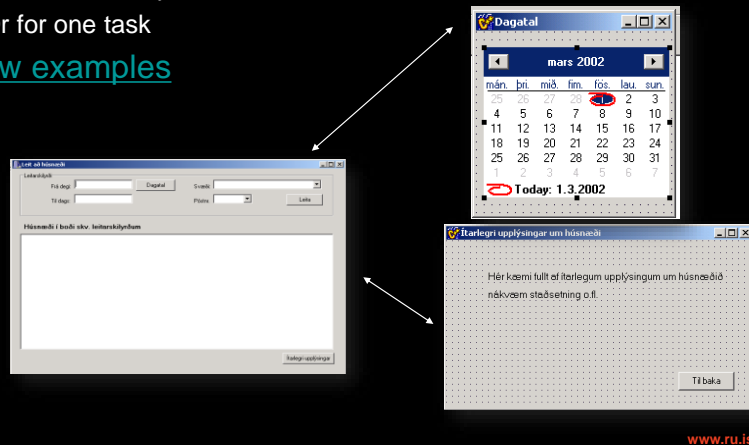
From: https://www.nngroup.com/articles/navigation-you-are-here/

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Navigation Design

https://www.uxmatters.com/mt/archives/2014/04/navigation-design-and-wikipedia/the-navigation-is-like-a-road-sign.php
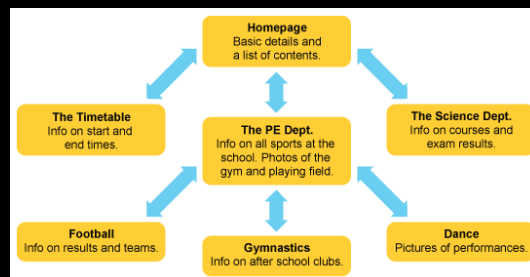
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Navigation design (Navigation diagrams/Site maps)

- Shows how you travel from one window to another
  - For the whole system
  - Or for one task
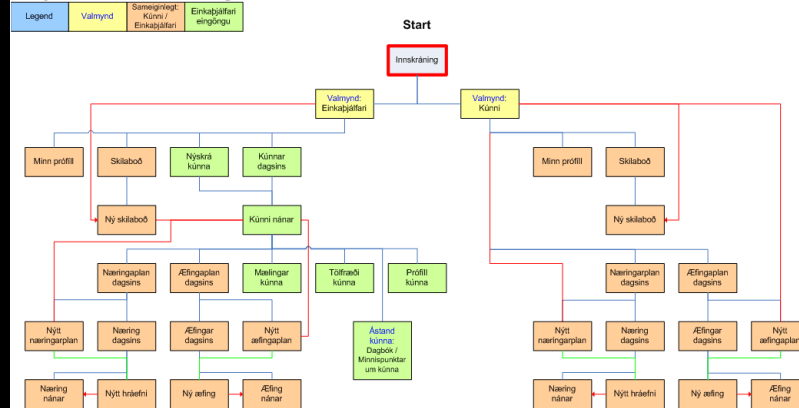- A few examples

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Some examples of navigation diagrams

- Good to show arrows
- Good to show various access
- Good to mark what is the main window
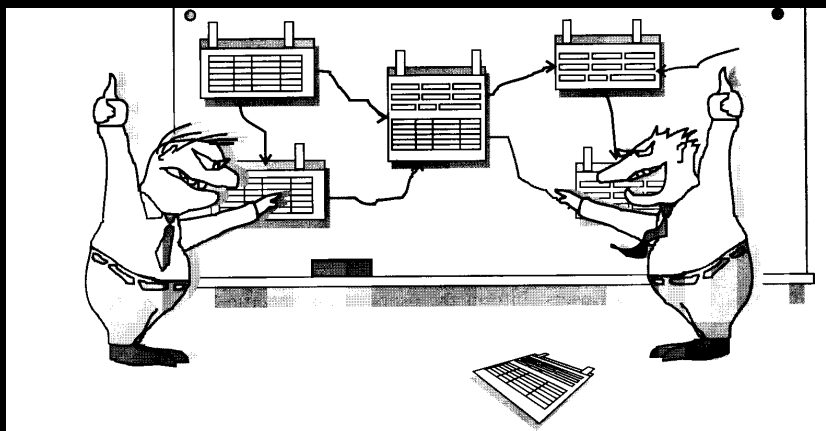- Good to put a legend of what means what

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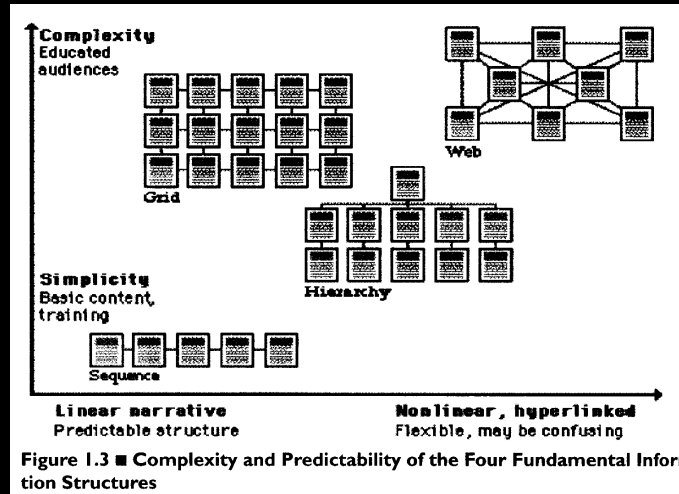
Different Access

PhysicalLink Navigational Map

Can be used to evaluate the structure
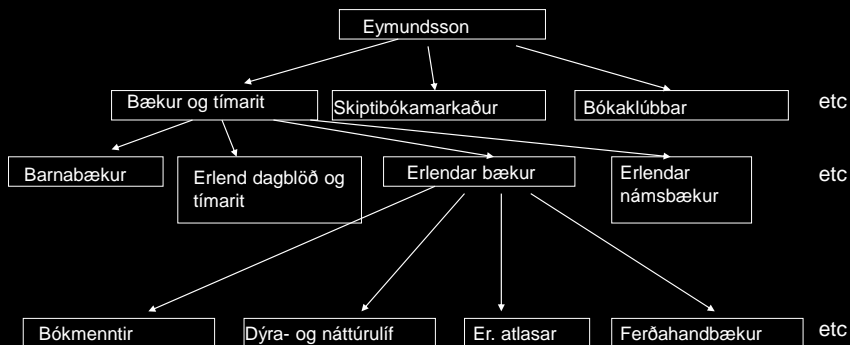
The look of the navigation diagrams

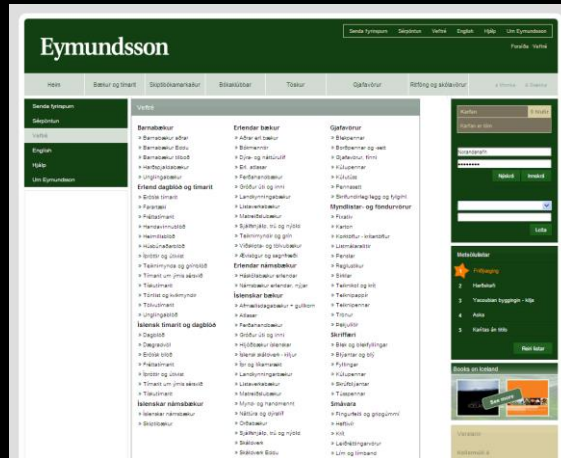Figure 1.3 ■ Complexity and Predictability of the Four Fundamental Information Structures

To group the information – make a site map

- Look at the normal grouping of information
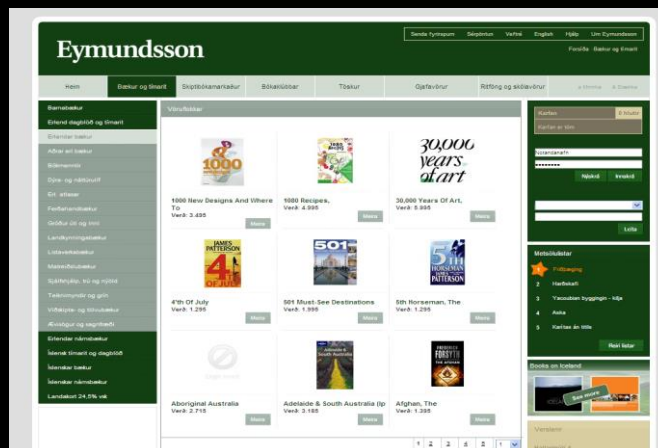
Was displayed this way

The grouping is to the left,
easier direct access to content

Then we have many questions

- How deep and wide should the web tree be?
  - Often better to have rather wide than deep
  - Mega menus, show 2-3 levels at a time – very good to orient the user quickly

- Is it better to divide a block of information into several short pages or leave it as one long page?
  - Consider context and continuity
  - Load time in the beginning, but not in between
  - Keep together it naturally belongs together

More questions

- Is it ok to combine pages?
  - For example information on many books on the same page?
  - If the information is related then, yes
  - Use of tabs very popular, gives us a shallower site sometimes
  - Pagination vs. continuous scrolling

- Does the structure of the site reflect the structure of the tasks the users want to carry out?
  - Look at what books are available – Browsing
  - Look for a particular book – Searching
  - The structure needs to support both
  - Should not reflect the internal organization of the company

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