Lecture 28

Principles of Design and Practical Implications: Part 1

About This Lecture

➢ Is the lecture content dated?
  ➢ Some of it.

➢ Do fundamental principles change?
  ➢ Not Really!

➢ Do platforms & enabling tech change?
  ➢ Absolutely!

So pay attention to dates and movement as this lecture bounces from 2009 to 2011 to 2016 an in particular try to spot what is transient and what is fundamental.

About Design Principles

➢ General concepts & recommendations

➢ Illustrated with examples

➢ Main topics:

    ➢ Why a website – audience

    ➢ Organization & Human Perception

    ➢ Screen size and the use of Space

    ➢ Color and layouts

    ➢ Navigation

Why? To inform.

Same Site 2006

Why? To Amuse (2009)

Same Site 2016

Why? To Sell.

Why? To Confuse – or not.

CSU CT 310, Web Development, ©Ross Beveridge

Consider your audience!

- ➢ Small
- ➢ Large
- ➢ Young
- ➢ Old
- ➢ Restricted
- ➢ Broad

CT 310 2016

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CT 310 Web Development
Computer Science Department
Spring 2016
CT 310 : Homepage

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9:00-9:50, MWF, CSB Room 130
Recitation 1 Time and Place:

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CT 310 is a one semester course on web development. Emphasis is placed o essentials needed to create fully functional websites including rich graphica content and dynamic content. The course will cover HTML, Cascading Styl Sheets and graphical content. Dynamic web pages will be developed using and JavaScript. MySQL and SQLite are introduced for website data management. Asynchronous JavaScript (AJAX) is introduced for fine-grain client-server interaction. Students will develop their own dynamic websites to manage authentication, transactions and user updates.

This course's web presence has a public side which you are viewing as well private side managed through CSU's Canvas system. General information concerning lectures, schedule, assignment posting, etc. are managed throug public side. Student specific information such as grading, quizzes, etc. are managed through Canvas.

Site Organization: Hierarchical

Organization – Linear (2009)
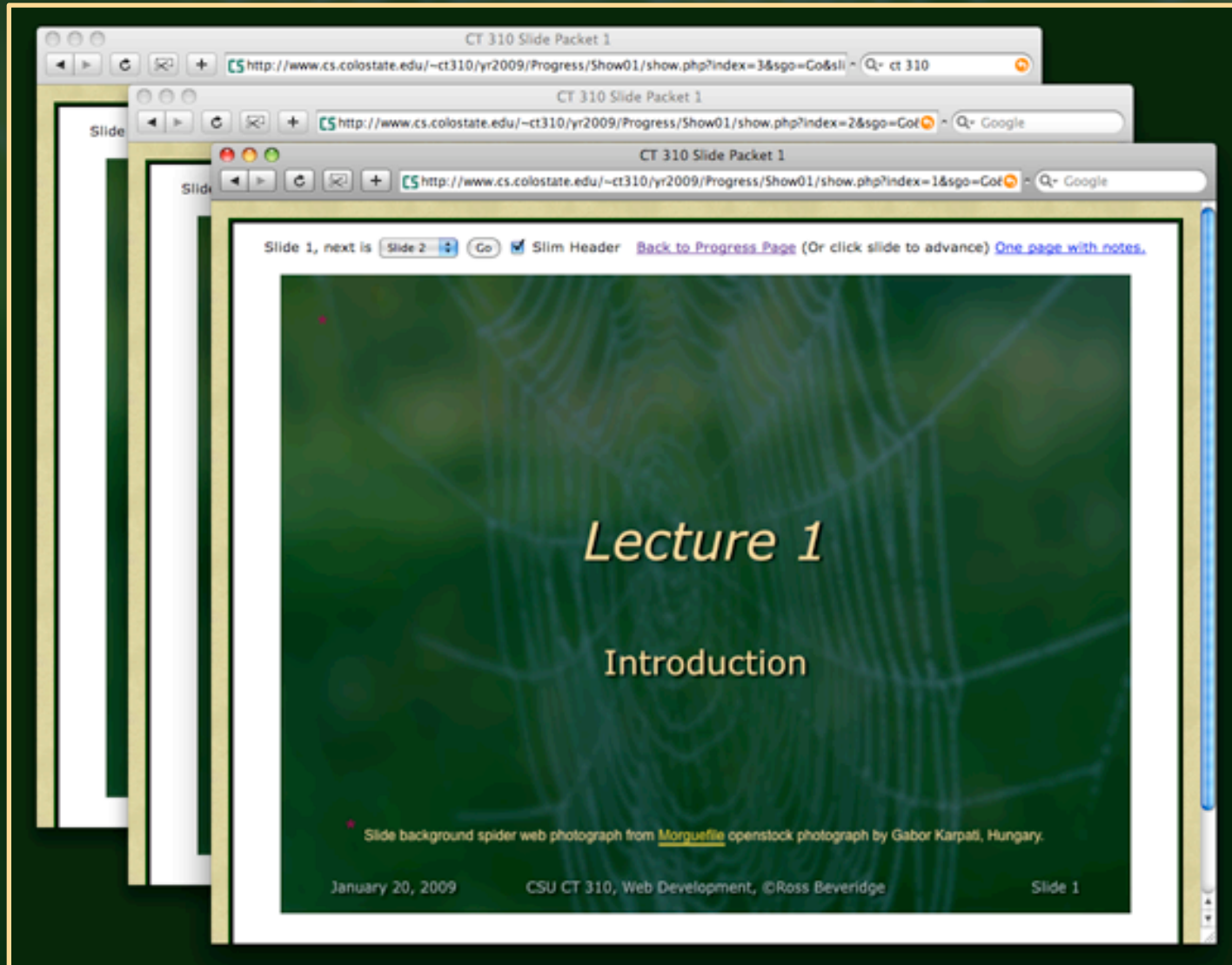
Linear Updated

Think about 2 ways to see more content

1. Scroll down the page
2. Push/click to see next

Here are examples of linear (scrolling)

Gracefully handling width changes is still a challenge in 2016.

Organization - Random
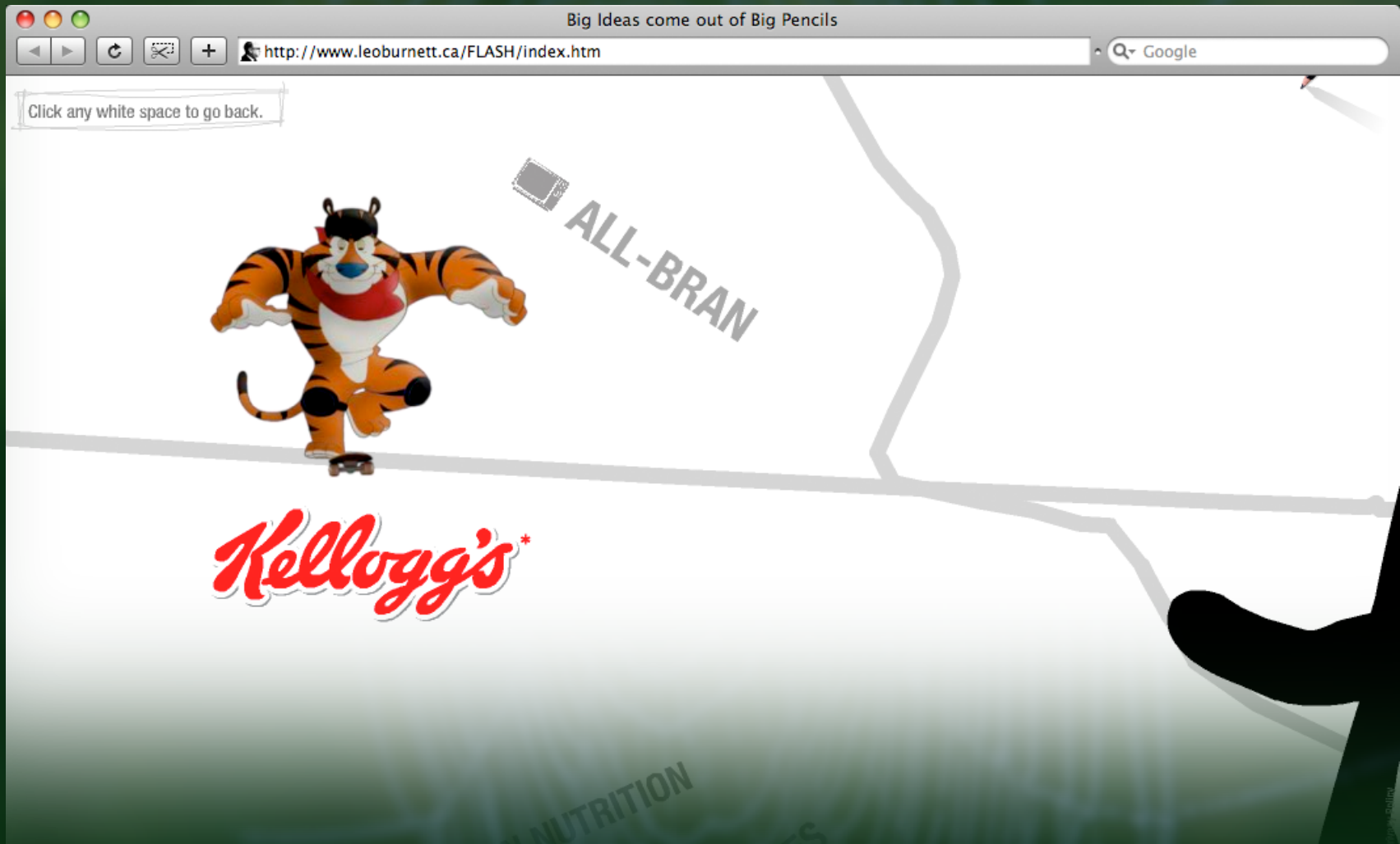
➢ Webby – best visual design 2006

Structure And Organization

- Structure doesn't happen naturally
- Explicitly planned and designed
  - People naturally try to find order and structure, even if none was intentionally designed
- Must help the user build a model!
  - Content structure matches expectation.
  - Visual layout guides and reinforces.

For Visual layout Use Gestalt principles to create structure...

How is Content Structured?

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Assignments

Resources

Show

Show

Show

Gestalt Grouping Principles

➢ Proximity

➢ Similarity

➢ Continuity

➢ Closure

➢ Area

➢ Symmetry

Proximity

Individual elements associated more strongly with nearby elements than with those further away.
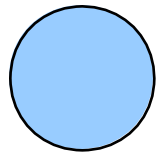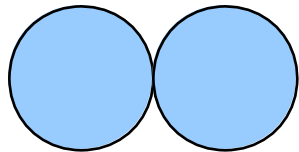
Similarity

➢ Elements associated more strongly when they share basic visual characteristics

    ➢ Shape

    ➢ Size

    ➢ Color

    ➢ Texture

    ➢ Orientation
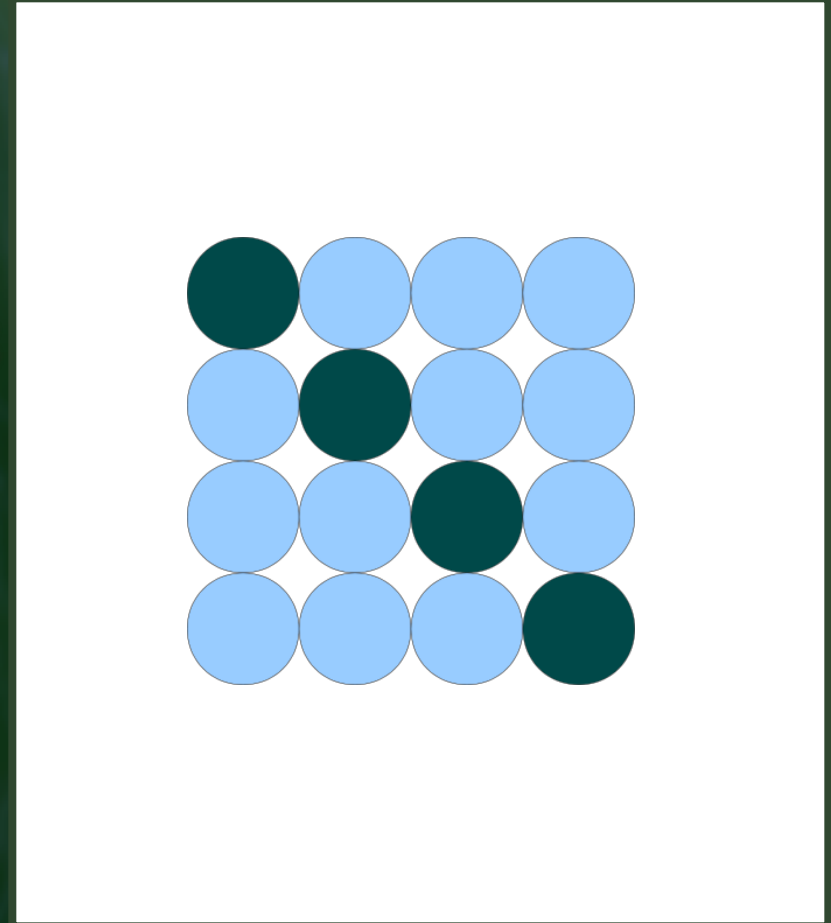
Continuity

- ➤ Our Visual system prefers continuous, unbroken contours

- ➤ We will seek out simplest possible explanation for abstract drawings

- ➤ Even if several, plausible combinations exist
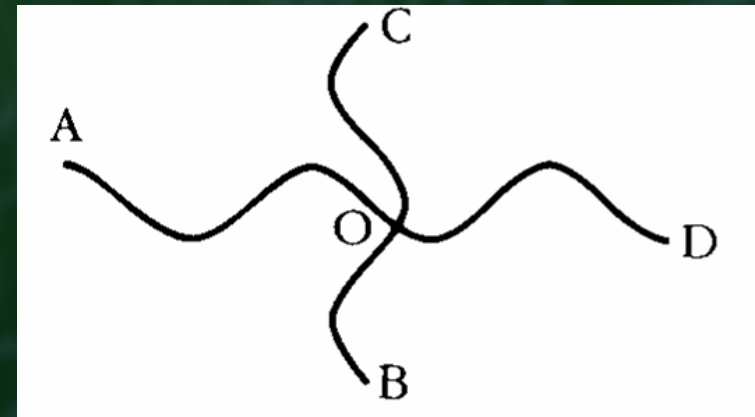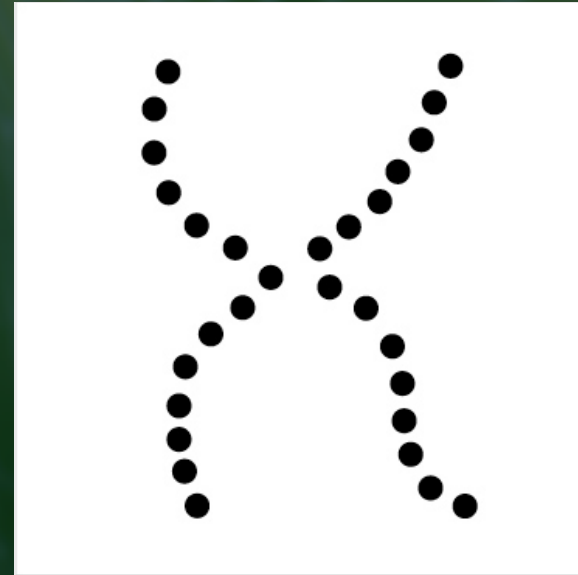
Closure

➤ Visual system will "fill in holes" to create a complete picture

➤ Will close figures when information absent

Area

- ➤ Figure is element that is interpreted as object of interest

- ➤ Ground is area on which figure rests

- ➤ Principle of area suggests that smaller of two overlapping elements seen as the figure while larger element is seen as ground
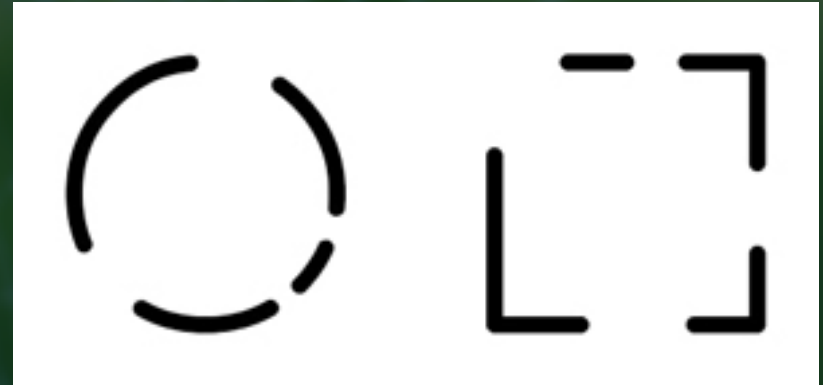
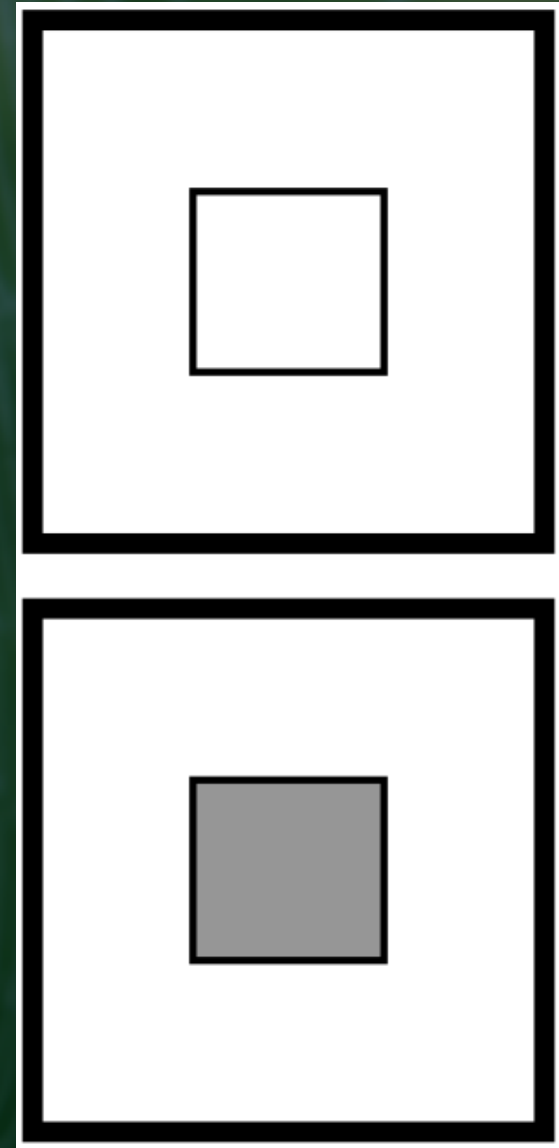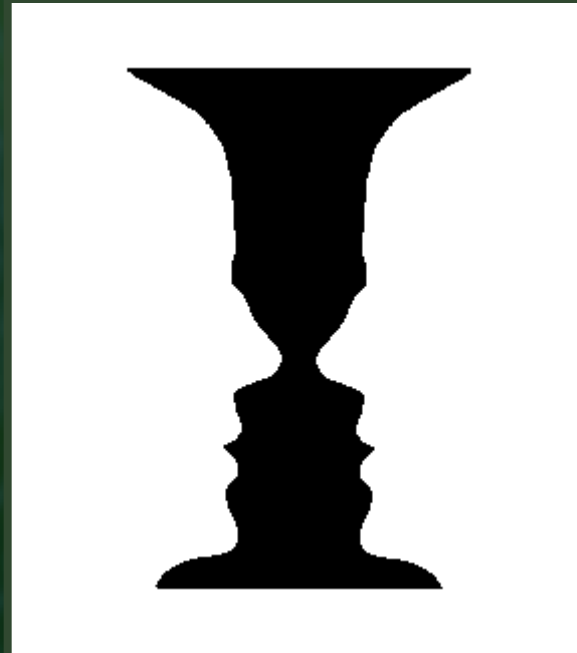- ➤ Also, darker objects appear more often as figure with lighter areas seen as ground

Figure Ground (Reversal)

Competing visual interpretations

Face it, you are seeing a vase ☺

Symmetry

➢ We prefer symmetry

➢ The greater the symmetry, the more we ascribe meaning, relationships in the composition

➢ Symmetrical, unconnected elements are integrated into one coherent object

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