



Drupal Camp Chicago - Dec 12 & 13, 2009

new adventures in drupal theming

.info

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palantir.net

Designing for Drupal

- ▶ Overview of the Drupal Theming Layer
- ▶ Implementation Details
 - ▶ Templates
 - ▶ Preprocessors
 - ▶ Base Themes
- ▶ Where to go for help

Herron School of Art and Design

Search

User login

Username: *

Password: *

- [Create new account](#)
- [Request new password](#)

Local stories

- Local story #1
Joe Thompson '08, Wooden Crane and Silent
[more](#)
Local
- IUPUI Duke Energy Center, Columbus, IN
Joe Thompson '08, Wooden Crane and Silent
[more](#)
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Local

National stories

- National story #1
Lifejackets, Eric Nordgulen (sculpture faculty), permanent
[more](#)
National
- Piedmont Park, Atlanta
Lifejackets, Eric Nordgulen (sculpture faculty), permanent
[more](#)
National
- Piedmont Park, Atlanta
Lifejackets, Eric Nordgulen (sculpture faculty), permanent
[more](#)
National

Theming Example

HERRON SCHOOL of ART and DESIGN

International story #1 Clifford the Big Red Dog (children's television series.) Norman Bridwell '64... more

National story #1 Lifejackets, Eric Nordgulen (sculpture faculty), permanent... more

Local story #1 Joe Thompson '08, Wooden Crane and Silent... more

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IUPUI Duke Energy Center, Columbus, IN Joe Thompson '08, Wooden Crane and Silent... more

BBC, London Clifford the Big Red Dog (children's television series.) Norman Bridwell '64... more

Piedmont Park, Atlanta Lifejackets, Eric Nordgulen (sculpture faculty), permanent... more

[Site index](#) [Site credits](#) [Ceramics, 2007](#)

The page last modified on November 14, 2007
Indiana University | Purdue University | IUPUI Columbus
Copyright © 2003-2004 The Trustees of Indiana University - Copyright Complaints
The page last modified on November 14, 2007

Theming Example



More Zen Examples

Q: Should a news organization be able to charge a copyright license fee for a quotation that is in the public domain?

"The public domain is sold every day. That is precisely the nature of the public domain: anyone can use it for whatever they want, including selling it."
— Professor Randy Picker

"All they are selling is a license, ... a promise not to sue for infringement. A license is only valuable if the licensor held a copyright in the first place."
— Tim Lee



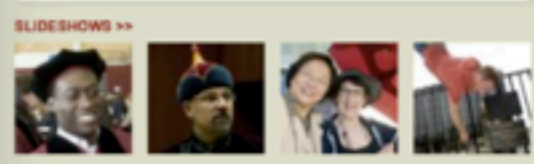
Feature: Schill Appointed 14th Dean of the Law School



- RECENTLY ADDED VIDEO**
- Bernard Harcourt, "Neoliberal Penalty: A Genealogy of Excess"
 - M. Todd Henderson, "The Nanny Corporation"
 - Albar Ganj, "Solutions to the Problem of Gender Discrimination in Islam"
 - James G. Whitman, "The Venet of Battle"
 - Shakespeare and the Law: Scenes

RECENTLY ADDED AUDIO

- Douglas Baird, "Eero Saarinen's Law School"
- Alison Siegler and Students, "Clinics in Action: The Federal Criminal Justice Project"
- M. Todd Henderson, "The Nanny Corporation"
- Richard Epstein, "On the Record about Off-Label Drug Uses"
- M. Gregg Bloche, "Doctors and Interrogators: Implications of the CIA Torture Memos"



- NEWS** More >>
- 09.23.09: Richard Posner, "How I Became a Keynesian"
 - 09.22.09: Epstein on Health Care Reform and H.R. 3200
 - 09.17.09: Chicago Lawyer Magazine Highlights Mendel Clinic
 - 09.15.09: Epstein Criticizes Sumner's Critic

- EVENTS** More >>
- 09.29.2009: Autumn Quarter Classes Begin
 - 09.30.2009: CBI: M. Todd Henderson, "Unsafe Harbors and Other Regulatory Oddities"
 - 10.02.2009: Student Organizations Activity Fair and Welcome BBQ
 - 10.05.2009: First Monday Lecture: Chicago
 - 10.13.2009: CBI: Omri Ben-Shahar, "One-Way Contracts"
 - 11.03.2009: CBI: Saul Levmore, Title TBA

DID YOU KNOW?

On October 22, 1964, the Today Show featured the Law School. [More >>](#)

More Zen Examples

HOME ABOUT WATCH IT GET INVOLVED MEDIA PARTNERS



"Tickell knows how to grab an audience..."
- John Anderson
VARIETY



BLUE WATER ENTERTAINMENT AND OPEN PICTURES PRESENT FIELDS OF FUEL A JOSH TICKELL FILM

FIELDS OF FUEL

CHANGE YOUR FUEL CHANGE THE WORLD

More Zen Examples

Drupal Design



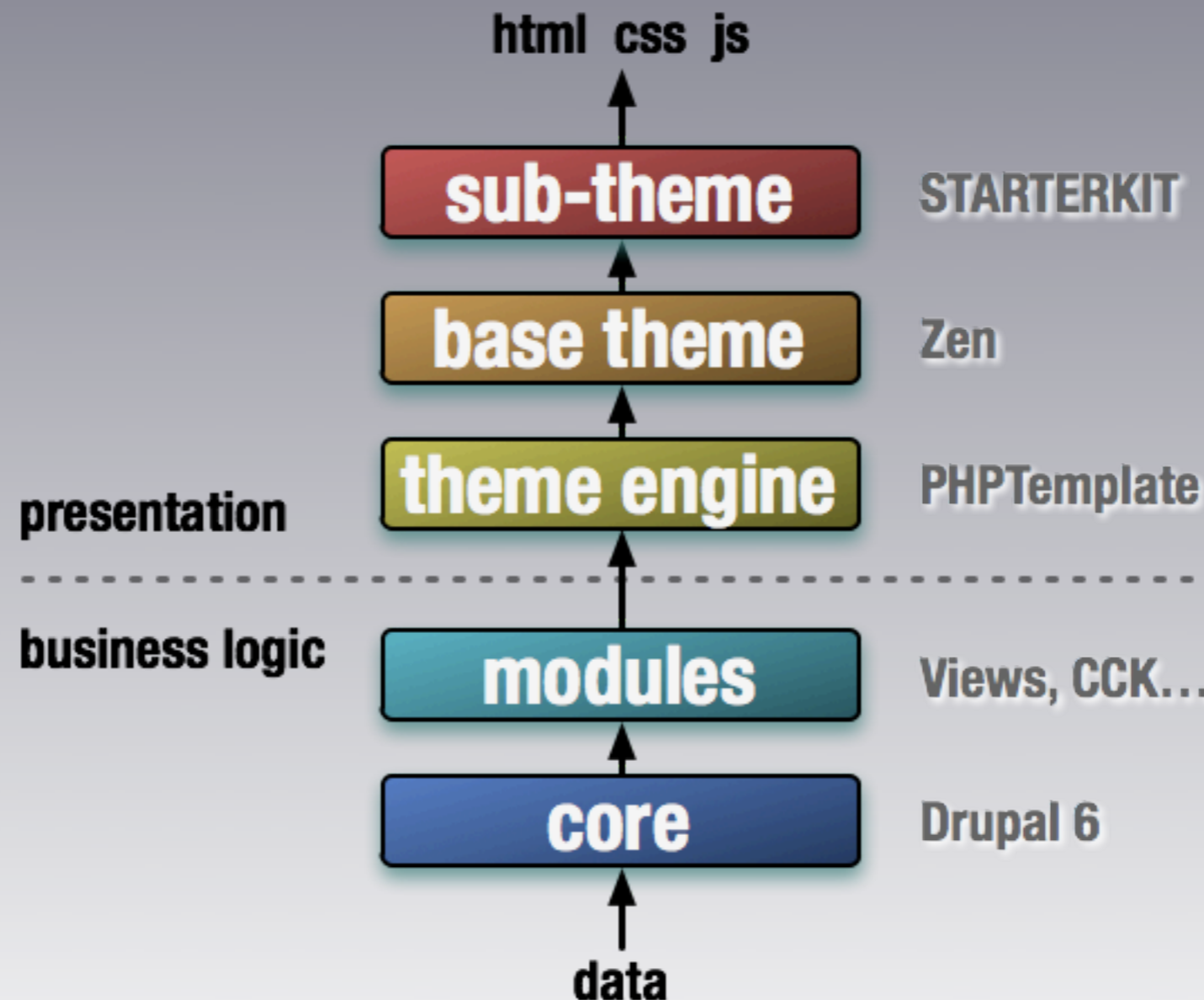
HTML

<?php print "with some PHP" ?>

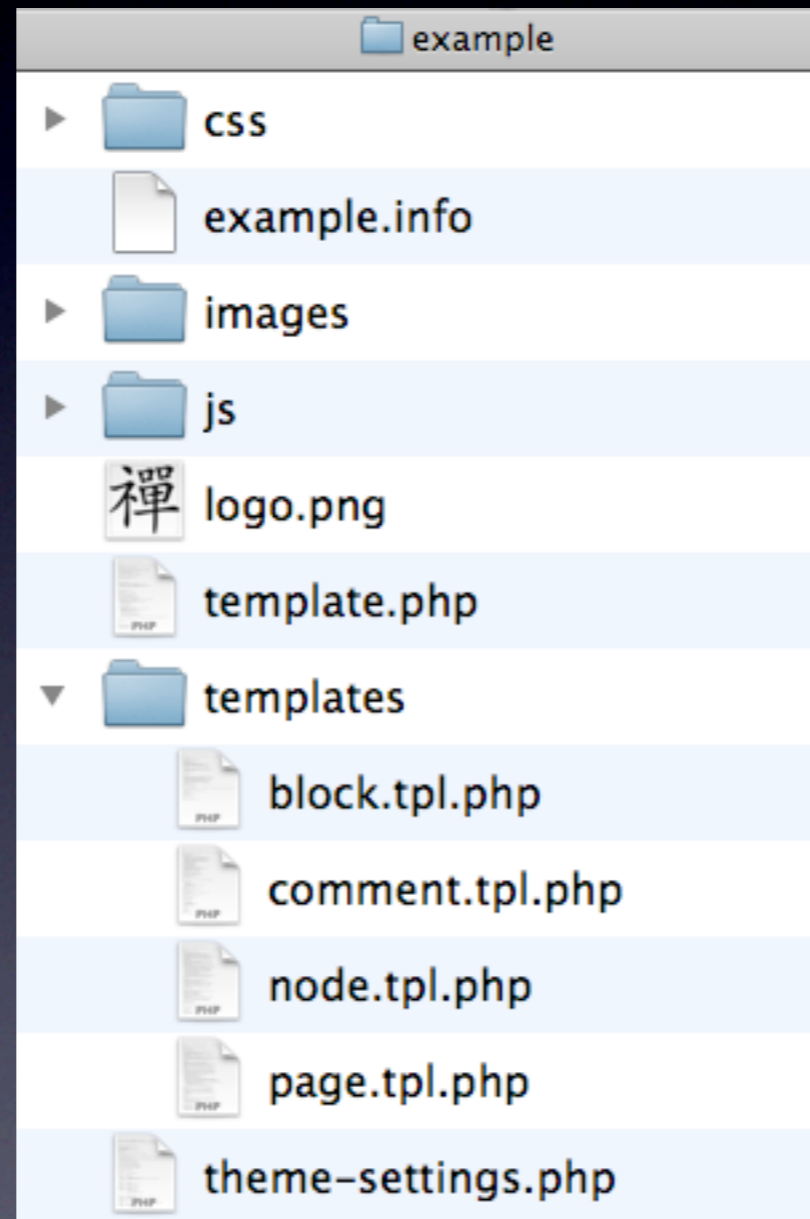
CSS

Drupal's Theme Layer

(the big picture)



Example Theme



Structure of page.tpl.php

The screenshot shows a Drupal 6 page with the following structure:

- Header:** Drupal logo and navigation links: `$primary_links` (download, Support, Forum, Contribute, Contact), `$search_box` (Search).
- Breadcrumbs:** Home » Theming Guide » Drupal 6 theme guide » Overriding themable output
- Left Sidebar (Theming Guide):** `$left` containing a list of links: About theming, Drupal 6 theme guide, Anatomy of a Drupal 6 theme, Specifying theme components and settings, Working with CSS, Overriding themable output (Beginners guide to overriding themable output, About overriding themable output, Setting up variables for use in a template (preprocess functions)).
- Main Content Area:** `$title` (Architectural of theming) with tabs: View, Edit, Outline, Revisions. Last modified: August 25, 2009 - 11:05. `$content` (This page provides background information on the underlying architecture of theming. It will be of interest to people who need a deeper understanding of how overrides work. A common software practice is to compartmentalize the programming layer from the presentation layer. There are numerous reasons for this, the most obvious being that the skill set required for programming the back-end business logic is very different from creating a visually appealing and effective user interface. As a theme developer, you can control certain aspects of the available data, but it is limited to the output and presentation. Only Drupal core and modules should work with input. For example, a module can implement a form with a default look and feel and handle user input, saving it to the database. The theme's role is only to override the look and feel. This abstraction in Drupal is achieved through the theme function. It is a conduit to the theming subsystem. It allows theme engines to provide an optional middle layer for tagging languages such as PHPTAL or Smarty. It also allows themes to control all presentation markup. Theme engines are optional as are tagging languages. PHPTemplate is the default engine. As the name suggests, it uses the language PHP when outputting variables mixed in with the xHTML markup.)
- Right Sidebar (JohnAlbin):** `$right` containing a list of links: Issues, My account, My projects, Create content, Recent posts, Feed aggregator, Administer, Log out.
- Contributor links:** Community initiatives, Queues (My issues, 448 Pending bugs (D7), 414 Critical issues (D7), 1743 Patch queue (D7), 255 Patches to review (D7), Performance issues (D7), Usability issues (D7), Fields in Core).

Structure of page.tpl.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="<?php print $language->language; ?>"
lang="<?php print $language->language; ?>" dir="<?php print $language->dir; ?>">

<head>
  <title><?php print $head_title; ?></title>
  <?php print $head; ?>
  <?php print $styles; ?>
  <?php print $scripts; ?>
</head>
<body class="<?php print $body_classes; ?>">

  <div id="page"><div id="page-inner">

    <?php if ($search_box): ?>
      <div id="search-box"><?php print $search_box; ?></div>
    <?php endif; ?>

    <?php print $breadcrumb; ?>
    <?php if ($title): ?>
      <h1 class="title"><?php print $title; ?></h1>
    <?php endif; ?>
    <?php print $messages; ?>
    <?php if ($tabs): ?>
      <div class="tabs"><?php print $tabs; ?></div>
    <?php endif; ?>
    <?php print $help; ?>

    <div id="content-area">
      <?php print $content; ?>
    </div>

  </div>
</body>
</html>
```

← CSS style sheets

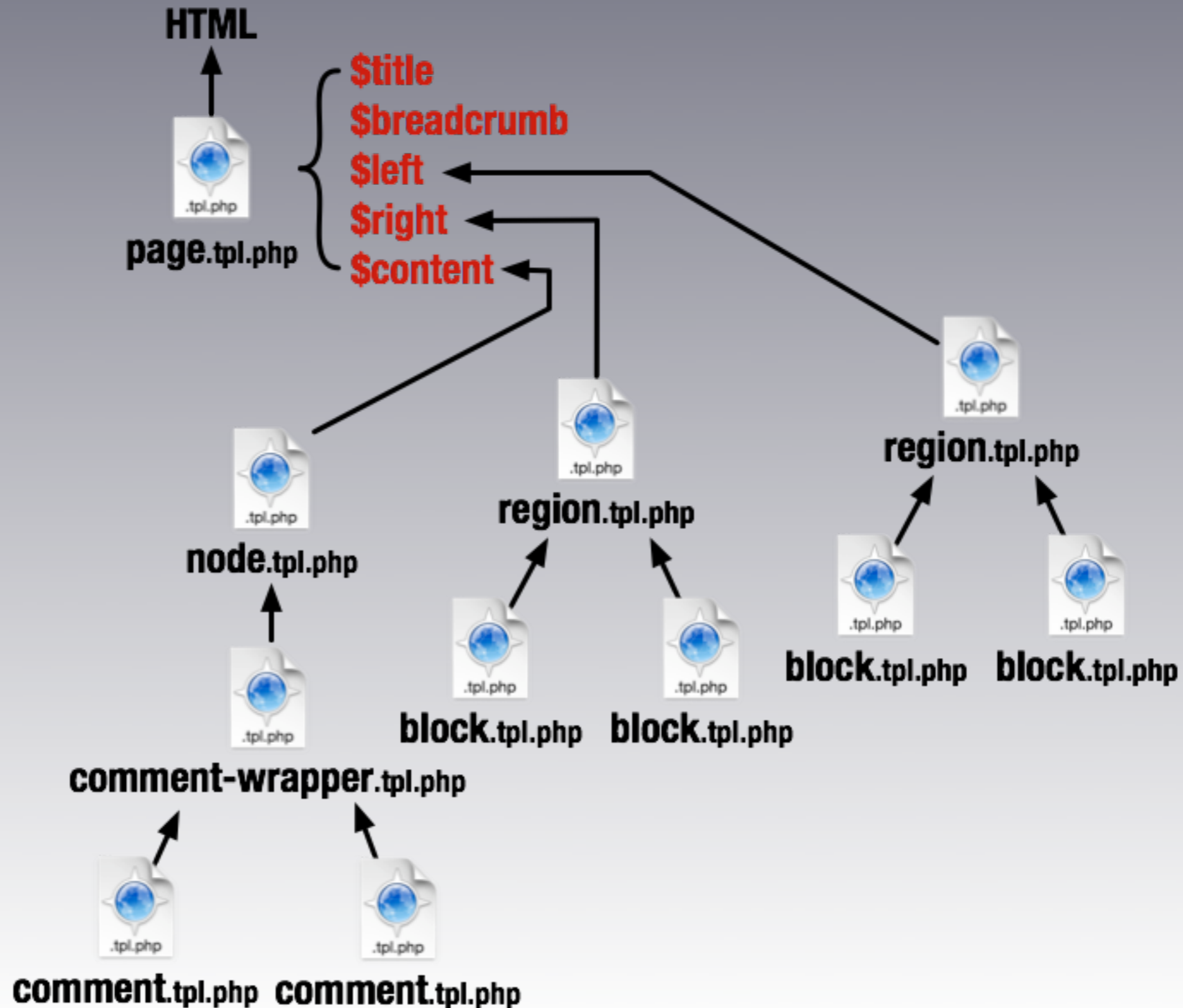
← Search box

← Title

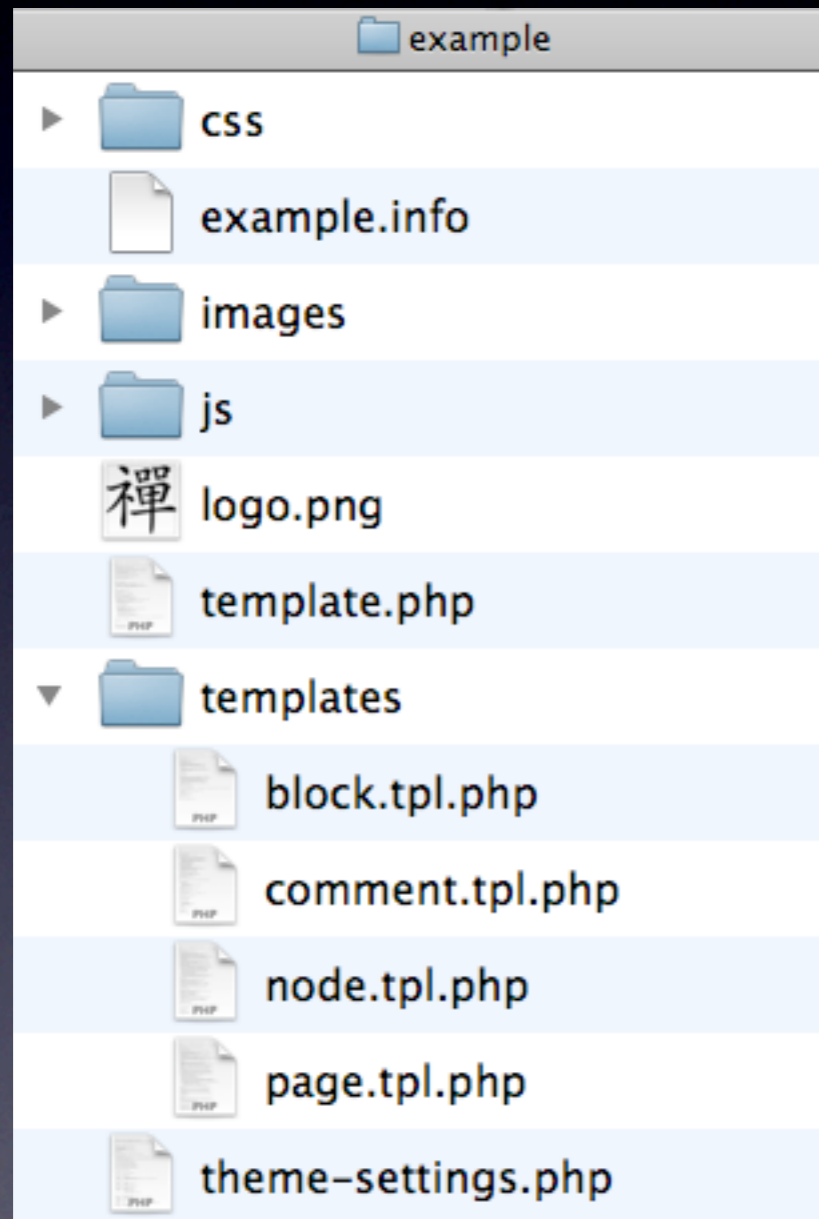
← Conditional

← content

Where do page.tpl.php variables come from?

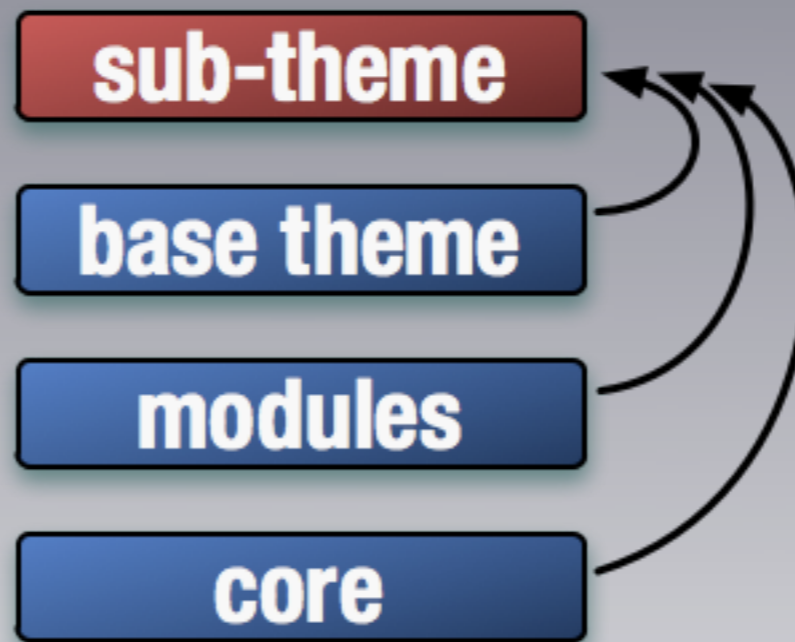


What do you need to know?



- Your theme doesn't need all the templates
- You don't need to learn all the variables
- Let Drupal's architecture build parts of your theme

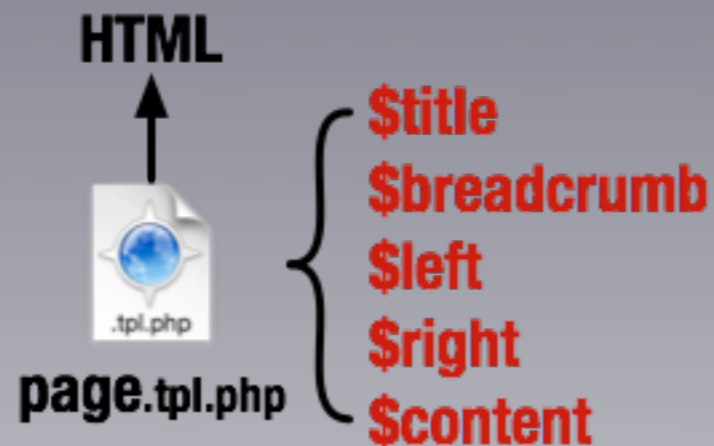
Copy, Override, Modify



Templates and CSS are pulled from lower layers.

Unless they are overridden in your theme.

Preprocess Functions



modify variables using a function:
`[theme name]_preprocess_[hook]`

e.g. `example_preprocess_page`

Preprocess Functions

```
/**
 * Override or insert PHPTemplate variables into the page templates.
 *
 * @param $vars
 *   A sequential array of variables to pass to the theme template.
 * @param $hook
 *   The name of the theme function being called ("page" in this case.)
 */
function STARTERKIT_preprocess_page(&$vars, $hook) {
  $vars['title'] .= ', eh?'; // Canadian translation.
}

/**
 * Override or insert PHPTemplate variables into the node templates.
 *
 * @param $vars
 *   A sequential array of variables to pass to the theme template.
 * @param $hook
 *   The name of the theme function being called ("node" in this case.)
 */
function STARTERKIT_preprocess_node(&$vars, $hook) {
  $vars['new_variable'] = t('Lorem ipsum.');
```

← Page Variable modifications

← Node Variable Additions

Put preprocess functions in your theme's template.php

What was the part in
the middle?

<http://drupal.org/theme-guide>

Base Themes

Powerful Frameworks for
Beginners and Power Users



Benefits of Base Themes

- **You don't have to build everything yourself.** Copy, override, and modify only what you need to.
- **Bug fixes.**
Others can fix any bugs in the base theme.
- **New features.**
For contrib Themes, there will occasionally be new features.
- **Support.**
If you have modified an existing theme, sometimes the only answer you will get to your support question is “Well, it works fine in the original theme.”
- **Rapid Theme Development.**
Many things are built for you.

禪 zen

extend and design



<http://drupal.org/project/zen>

Why use Zen?

- Designed for beginners and Theming ninjas.
- Extensive on-line documentation.
- Step-by-step instructions on building your own sub-theme.
- Extensive in-line comments in its PHP and CSS files.
- It's also got a laundry list of features. (which are exciting to use, but boring to list.)
- A fantastically flexible CSS Layout method (that even works with IE5.5.)
- You just met the developer.

Why use Zen?

- Designe
- Extensi
- Step-by
- Extensi

```
.block h2.title /* Block title */
{
}

.block .content /* Block's content wrapper */
{
}

#block-aggregator-category-1 /* Block for the latest news items in the
first category */
{
}

#block-aggregator-feed-1 /* Block for the latest news items in the first
feed */
{
}

#block-block-1 /* First administrator-defined block */
{
}

#block-blog-0 /* "Recent blog posts" block */
{
}

#block-book-0 /* "Book navigation" block for the current book's table of
contents */
{
}

#block-comments-0 /* "Recent comments" block */
{
}
```

me.

```
}
#BLOCK-COMMENTS-0 /* "RECENT COMMENTS" BLOCK */
```


Brief overview of Zen's Layout method

- Source-ordered HTML: The importance of the pieces of content determines the order in HTML, and not the graphic design.
- Flexible layout options:
 - Fluid (100% width) or fixed-width layout
 - Optional horizontal navbar
 - 1-3 columns built-in. More columns are possible without mind-bending contortions.
- Zen's default Layout Method is completely pluggable. If you don't like it, just replace the layout.css file with your own layout method: YUI, YAML, Jello Mold, Holy Grail, etc.

Brief overview of Zen's Layout method

- Source code determines the layout
- Flexible layout
 - Fluid layout
 - Optional sidebar
 - 1-3 columns
 - Minimum 320px wide
- Zen's layout is simple and easy to use. If you don't like it, you can use your own method.

```
#page (container)
  #header
  #main (container)
    #content
    #navbar
    #sidebar-first
    #sidebar-second
  #footer
```

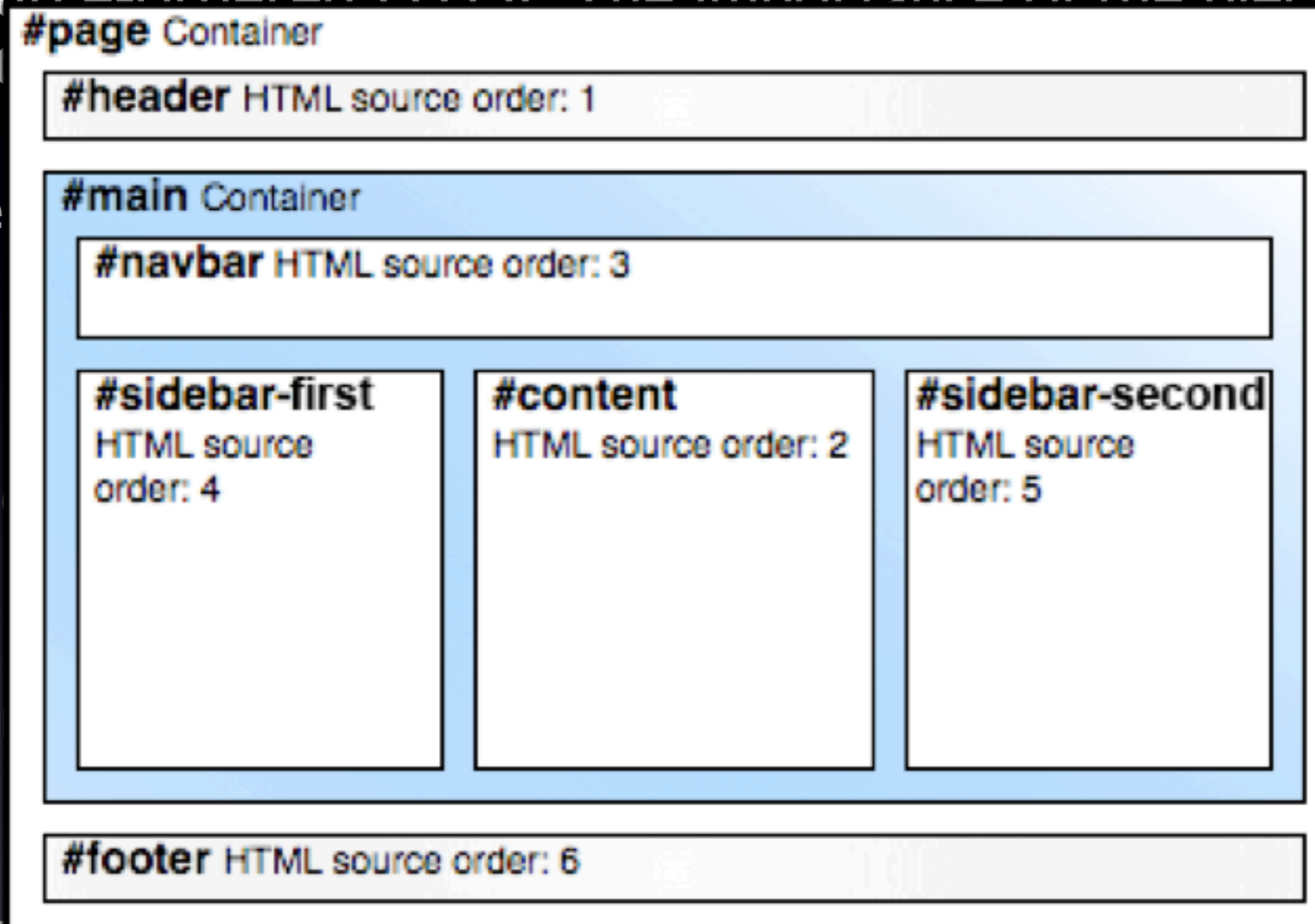
pieces of content
graphic design.

able without

able. If you don't
own layout

Brief overview of Zen's Layout method

- Source-ordered HTML • The importance of the pieces of content design.



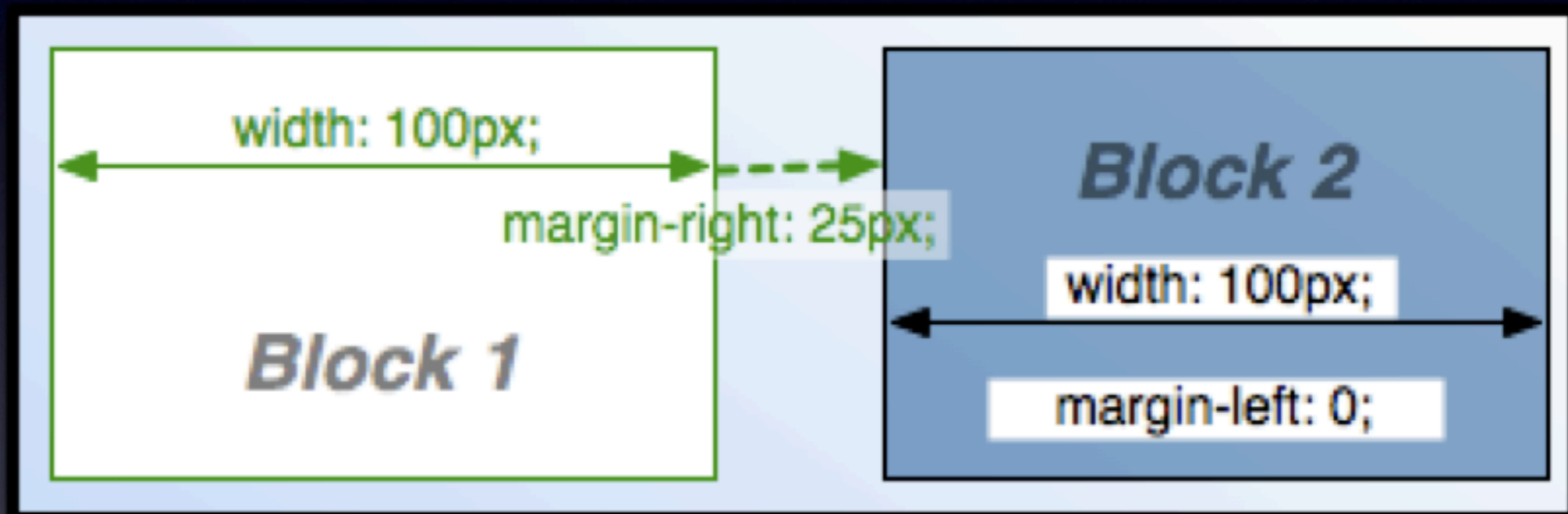
- Flex

without

- Zen. If you don't like it, just replace the layoutless file with your own layout method: YUI, YAML, Jello Mold, Holy Grail, etc.

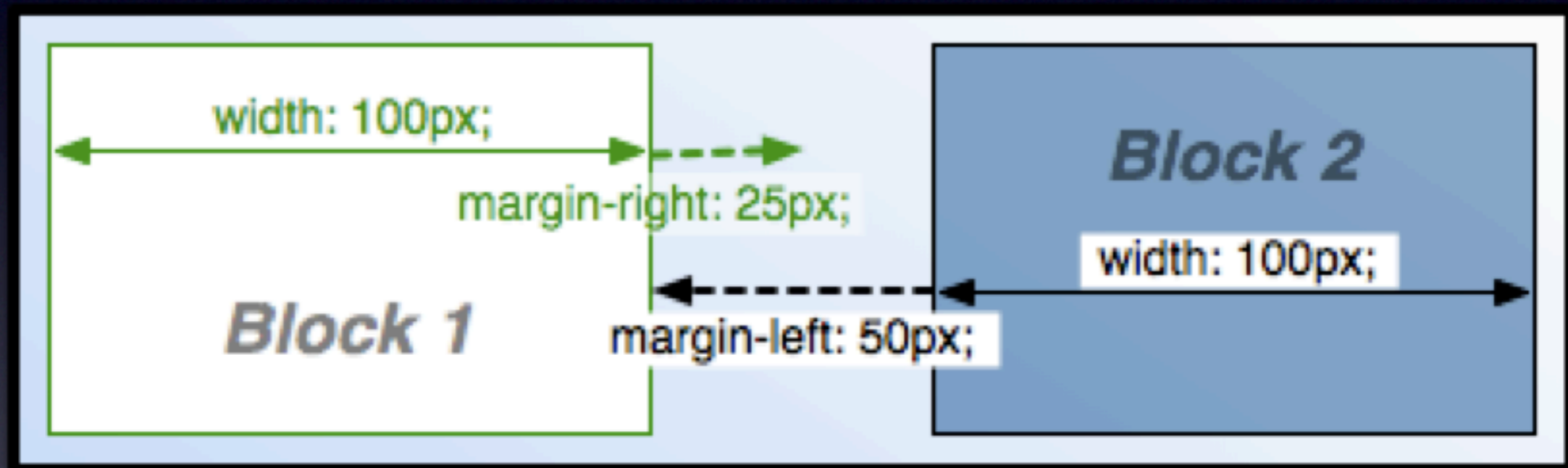
Negative Margins

(and positive results)



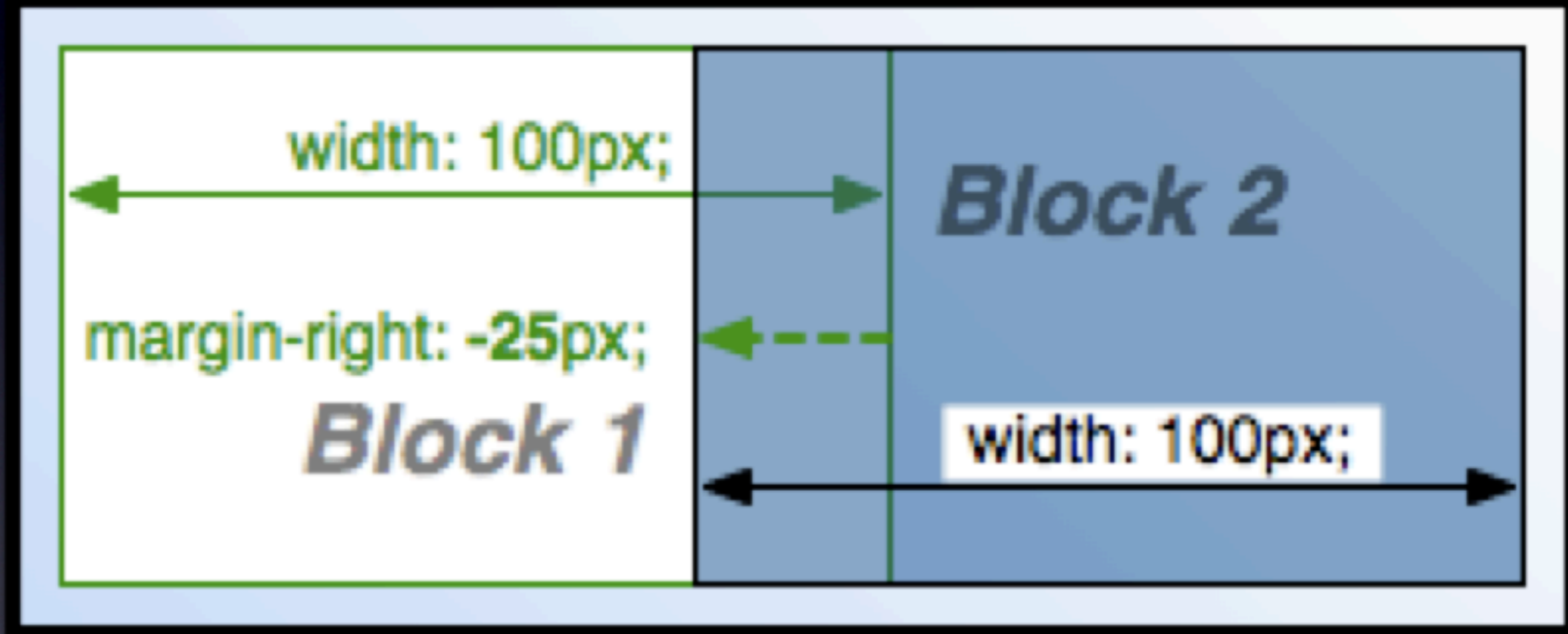
(These blocks have *float: left;*)

Negative Margins (and positive results)



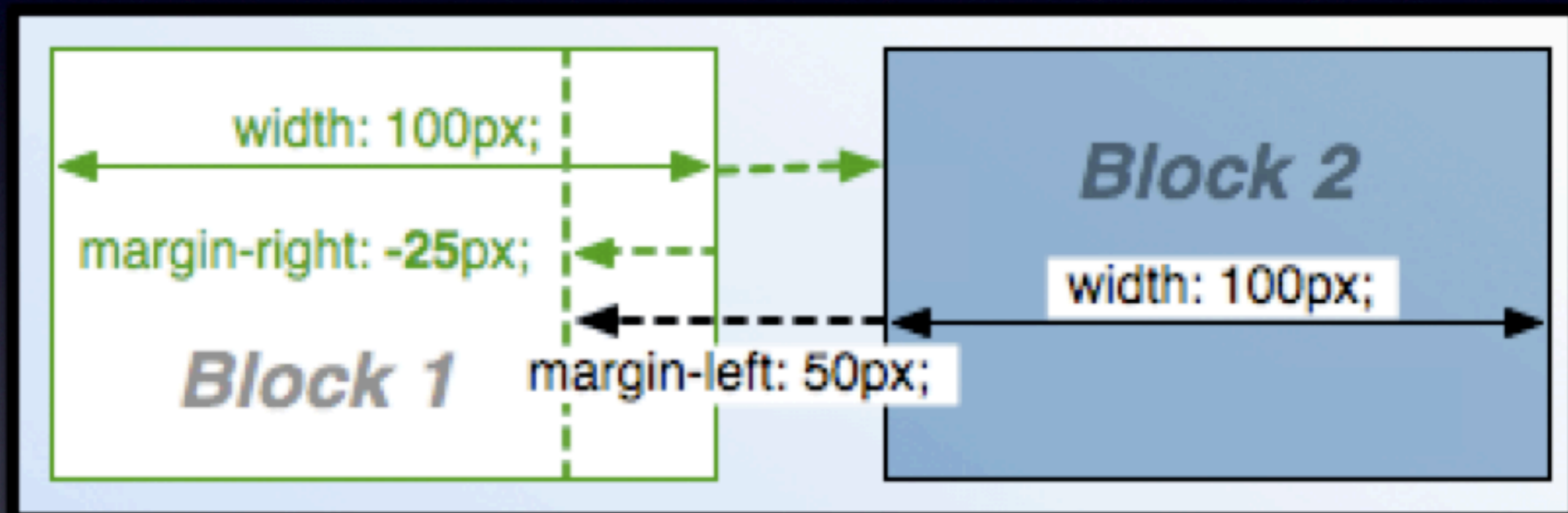
(These blocks have *float: left;*)

Negative Margins (and positive results)



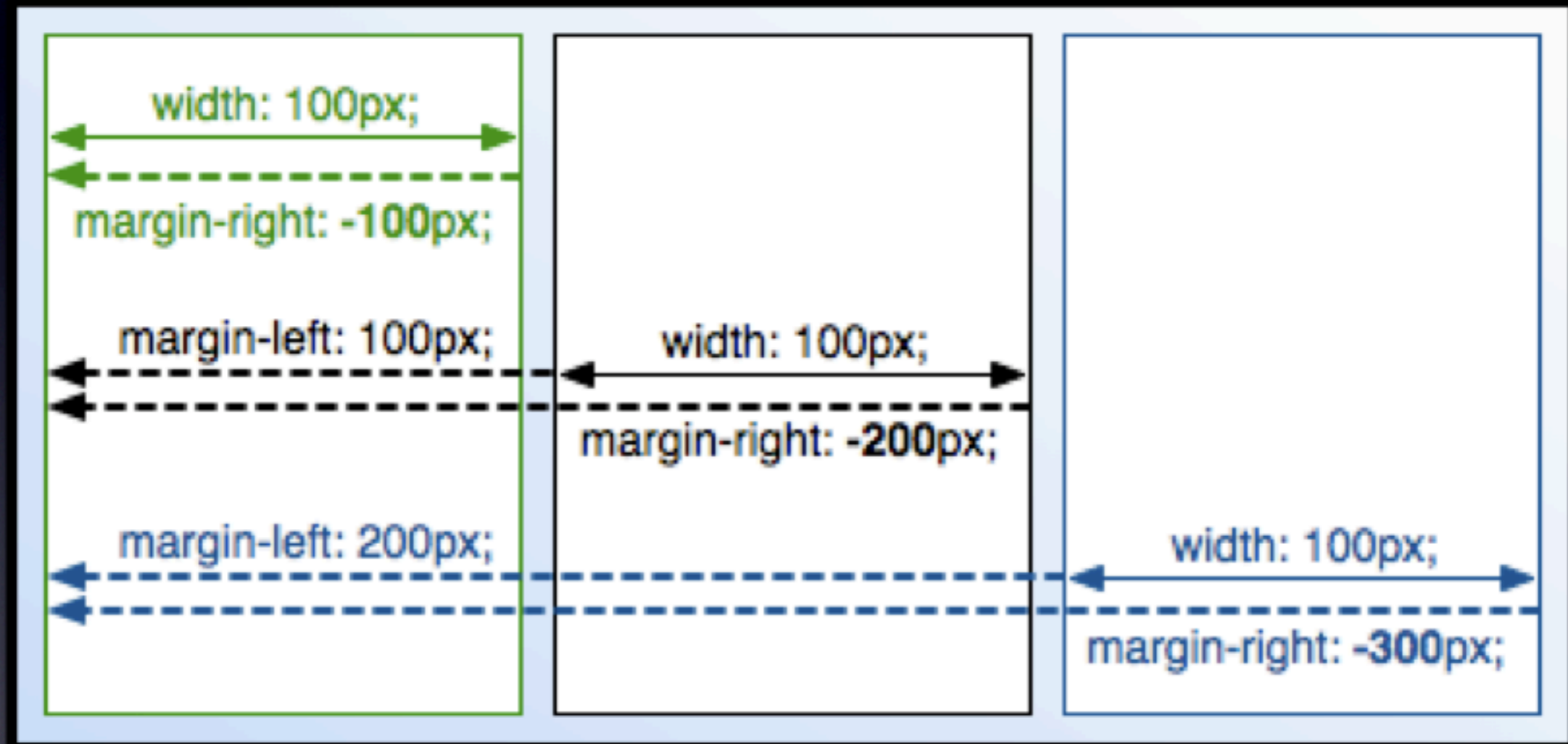
(These blocks have *float: left;*)

Negative Margins (and positive results)

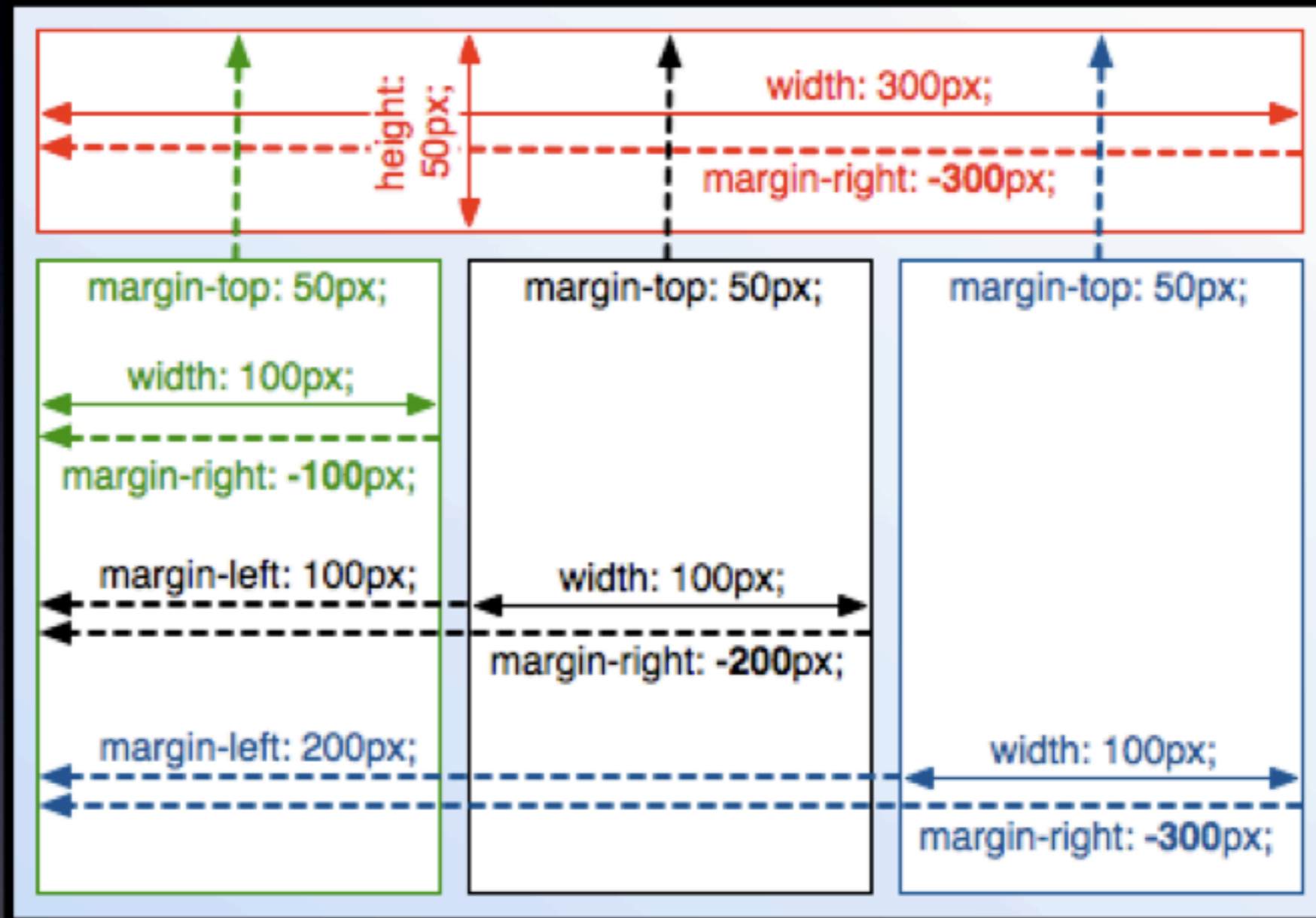


(These blocks have *float: left;*)

Negative Margins (and positive results)



Negative Margins (and positive results)



Getting Help

- 🔗 <http://drupal.org/theme-guide>
- 🔗 <http://drupal.org/project/zen>
- 🔗 <http://drupal.org/irc>
 - 🔗 #drupal-design
 - 🔗 #drupal-themes
 - 🔗 #drupal-support
 - 🔗 #drupal
- 🔗 Ask Questions!

