

Custom Post Types and Taxonomies

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Workshop @ TEI Thessaly
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Nice to meet you

My name is Takis Bouyouris
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My goal today

Help you understand what
custom post types and
taxonomies are and
motivate you to use them

What is WordPress?



WordPress

A blog engine, a CMS,
or an application platform?

Well, it's all of the above!

But how did this come to be?

Some history...

Oh, noooo, not history!



WordPress v.1 - 2004

WordPress

[Post](#) [Edit](#) [Categories](#) [Links](#) [Users](#) [Options](#) [Templates](#) [My Profile](#) [View site](#) [Logout \(admin\)](#)

Create New Post

Title <input type="text"/>	Categories <input checked="" type="checkbox"/> General
Post <div style="border: 1px solid #ccc; padding: 5px;"><p style="text-align: right;">Quicktags: str em del ins link img ul ol li b-quote pre more n-page Dict. Close Tags</p><div style="border: 1px solid #ccc; height: 150px; width: 100%;"></div></div>	
<input checked="" type="checkbox"/> PingBack the URLs in this post ?	
Save as Draft Save as Private Publish Advanced Editing »	
TrackBack an URL : (Separate multiple URLs with spaces.) <input type="text"/>	

WordPress bookmarklet

You can drag the following link to your links bar or add it to your bookmarks and when you "Press it" it will open up a popup window with information and a link to the site you're currently browsing so you can make a quick post about it. Try it out:

[Press It - my weblog](#)

[WordPress 1.0 - Support Forums](#)

0.00 seconds

WordPress v.2 - 2005/6

The screenshot shows the WordPress v.2 'Write Post' interface. At the top, the site name 'Veroia' is displayed with a '(View site >)' link. The user 'Howdy, takis.' is logged in, with links for '[Sign Out, My Account]'. The main navigation bar includes 'Dashboard', 'Write', 'Manage', 'Links', 'Presentation', 'Plugins', 'Users', 'Options', and 'Import'. The 'Write' menu is expanded, showing 'Write Post' and 'Write Page'. The 'Write Post' page features a 'Title' text input field, a 'Post' text area with a rich text editor toolbar, and a 'Path' text input field. On the right side, there are several expandable sections: 'Discussion', 'Password-Protect Post', 'Post slug', 'Categories', 'Post Status', 'Post Timestamp', and 'Post author:'. Below the 'Path' field are three buttons: 'Save and Continue Editing', 'Save', and 'Publish'. An 'Upload' section is located below the main text area, containing a 'File:' field with a 'Browse...' button and the text 'No file selected.', a 'Title:' text input field, a 'Description:' text input field, and an 'Upload' button. At the bottom, there are three more expandable sections: 'Optional Excerpt', 'Trackbacks', and 'Custom Fields'.

WordPress v.3.0 - 2010

The screenshot displays the WordPress 3.0 administration interface for a user named 'admin' on a site named 'Veroia'. The main content area is titled 'Add New Post' and features a large text editor with a rich text toolbar. The toolbar includes options for bold, italic, text color, background color, bulleted and numbered lists, links, unlink, undo, redo, and media insertion. The editor is currently in 'Visual' mode. Below the editor, there are fields for 'Path' (set to 'p') and 'Word count' (0). The interface is divided into several sidebars: a left sidebar with navigation links like 'Dashboard', 'Posts', 'Media', and 'Settings'; a right sidebar with 'Publish' options (Save Draft, Preview, Publish), 'Categories' (Uncategorized), 'Post Tags' (Add New Tag), and 'Featured Image' (Set featured image). A yellow notification banner at the top indicates that 'WordPress 4.2.2 is available! Please update now.'

WordPress 4.2.2 is available! [Please update now.](#)

Posts ▾ Howdy, admin | Log Out

Screen Options ▾ Help ▾

Dashboard

Posts ▾
Posts
Add New
Categories
Post Tags

Media
Links
Pages
Comments

Appearance
Plugins 1
Users
Tools
Settings

Add New Post

Upload/Insert Visual HTML

B *I* ABC

Path: p
Word count: 0

Publish

Save Draft Preview

Status: **Draft** [Edit](#)

Visibility: **Public** [Edit](#)

Publish **immediately** [Edit](#)

[Move to Trash](#) **Publish**

Categories

All Categories Most Used

Uncategorized

[+ Add New Category](#)

Post Tags

Add New Tag **Add**

Separate tags with commas

[Choose from the most used tags](#)

Featured Image

[Set featured image](#)

Send Trackbacks

Send trackbacks to:

(Separate multiple URLs with spaces)

Trackbacks are a way to notify legacy blog systems that you've linked to them. If you link other WordPress sites they'll be notified automatically using [pingbacks](#), no other action necessary.

Custom Fields

Add New Custom Field:

WordPress v.4.0 - 2014

The screenshot displays the WordPress 4.0 dashboard for a user named 'Verola'. The top navigation bar includes a home icon, the name 'Verola', a refresh icon, a notification icon with '5', a '+ New' button, and the user name 'Howdy, admin' with a profile icon. On the right side of the dashboard, there are 'Screen Options' and 'Help' buttons.

The left sidebar contains a menu with the following items: Dashboard, Posts (highlighted), All Posts, Add New, Categories, Tags, Media, Pages, Comments, Appearance, Plugins (with a red notification badge), Users, Tools, Settings, and Collapse menu.

The main content area is titled 'Add New Post'. At the top, a notification banner states 'WordPress 4.2.2 is available! [Please update now.](#)'. Below this is a text input field for the title with the placeholder 'Enter title here'. An 'Add Media' button is located to the left of the main content area. The main content area features a rich text editor with a toolbar containing icons for Bold (B), Italic (I), Underline (ABC), Bulleted List, Numbered List, Quote, Undo, Redo, Link, Unlink, Table, and Media. The editor is currently empty. Below the editor, a 'Word count: 0' indicator is visible.

At the bottom of the main content area, there is an 'Excerpt' section with a text input field. Below the field, a note reads: 'Excerpts are optional hand-crafted summaries of your content that can be used in your theme. [Learn more about manual excerpts.](#)'

The right sidebar contains three panels: 'Publish', 'Format', and 'Categories'. The 'Publish' panel includes 'Save Draft' and 'Preview' buttons, and shows the status as 'Draft' with an 'Edit' link. It also shows 'Visibility: Public' and 'Publish Immediately' options. The 'Format' panel shows the 'Standard' format selected. The 'Categories' panel shows 'All Categories' and 'Most Used' tabs, with 'Uncategorized' selected and a '+ Add New Category' link below.

WordPress evolution
not just design-wise

WordPress has evolved
into a full featured CMS
and an application platform

Since v.3 WordPress supports

Custom post types

Custom taxonomies

Custom post types are like
posts and pages

Custom taxonomies are like
categories and tags

So, we've got posts, pages,
categories and tags and

...

more posts,
more pages,
more categories
and more tags?

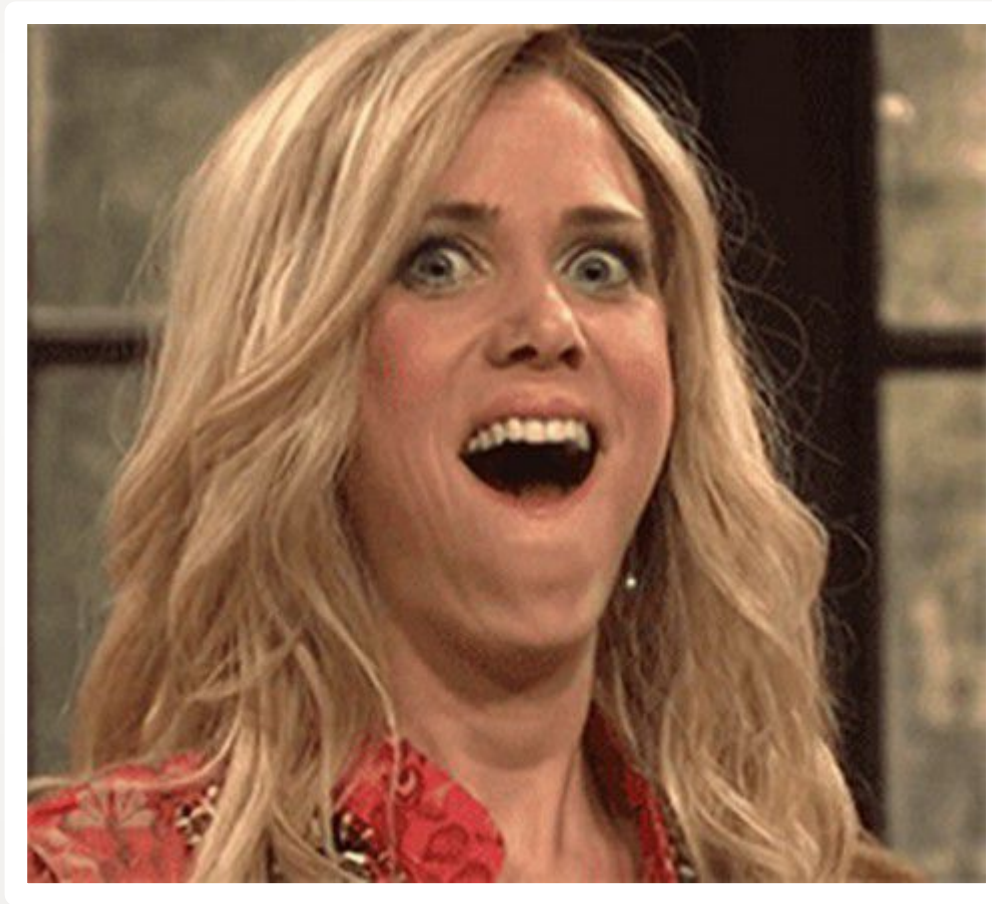
That all?



No!

What you have is an extensible
data structure functionality.

Extensible data structures!



Extensible data structures
that are simple and accessible!

Custom post types

Create a new area of special pages
and name it what you like/need

Custom taxonomies

Create a new ways to categorise
the post types you manage

Example 1

a video club

Custom post type => movie

Custom taxonomies =>
category, studio, country

Example 2

a house broker

Custom post type => house

Custom taxonomies =>
house type, area, usage

Example 3

corporate website common patterns

Pages => corporate info

Posts => news/blog

Example 3 (cont'd)

Custom post type => projects

Custom taxonomies =>
project category, project area

Example 3 (cont'd)

Pages =>

Home page

Profile

Products

Contact

etc

Example 3 (cont'd)

Posts (news) =>

Our new website online

Summer sales this week

Latest products

Fiscal report 2015

etc

Example 3 (cont'd)

Custom Post Type Projects =>

Sportswear eshop

Insurance company website

Corporate website

etc

Example 3 (cont'd)

Custom Taxonomies

Project category =>
website, eshop, design, etc

Project area =>
Athens, Larissa, Veroia, etc

Let's make a
custom post type
from scratch

OMG, he's gonna show code now!



```
<?php
```

```
$args = array( |
    'label'           => __( 'portfolio', 'nevma' ),
    'description'     => __( 'Company portfolio entries', 'nevma' ),
    'labels'          => $labels,
    'supports'        => array( 'title', 'editor', 'thumbnail', 'custom
    'taxonomies'      => array( 'clients' ),
    'hierarchical'   => false,
    'public'          => true,
    'show_ui'         => true,
    'show_in_menu'    => true,
    'menu_position'   => 5,
    'show_in_admin_bar' => true,
    'show_in_nav_menus' => true,
    'can_export'      => true,
    'has_archive'     => true,
    'exclude_from_search' => false,
    'publicly_queryable' => true,
    'capability_type' => 'page',
);

register_post_type( 'portfolio', $args );
```

```
?>
```

OK, that was code!



```
<?php
```

```
$args = array( |
    'label'           => __( 'portfolio', 'nevma' ),
    'description'     => __( 'Company portfolio entries', 'nevma' ),
    'labels'          => $labels,
    'supports'        => array( 'title', 'editor', 'thumbnail', 'custom
    'taxonomies'      => array( 'clients' ),
    'hierarchical'   => false,
    'public'          => true,
    'show_ui'         => true,
    'show_in_menu'    => true,
    'menu_position'   => 5,
    'show_in_admin_bar' => true,
    'show_in_nav_menus' => true,
    'can_export'      => true,
    'has_archive'     => true,
    'exclude_from_search' => false,
    'publicly_queryable' => true,
    'capability_type' => 'page',
);

register_post_type( 'portfolio', $args );
```

```
?>
```

The important bits

name

taxonomies

hierarchical

capability

Let's make a
custom taxonomy
from scratch

OMG somebody stop him!




```
<?php
```

```
$args = array(  
    'labels'           => $labels,  
    'hierarchical'    => false,  
    'public'          => true,  
    'show_ui'         => true,  
    'show_admin_column' => true,  
    'show_in_nav_menus' => true,  
    'show_tagcloud'   => false,  
);
```

```
register_taxonomy(  
    'clients',  
    array( 'portfolio' ),  
    $args  
);
```

```
?>
```

Yeap, that was code again!



```
<?php
```

```
$args = array(  
    'labels'           => $labels,  
    'hierarchical'    => false,  
    'public'          => true,  
    'show_ui'         => true,  
    'show_admin_column' => true,  
    'show_in_nav_menus' => true,  
    'show_tagcloud'   => false,  
);
```

```
register_taxonomy(  
    'clients',  
    array( 'portfolio' ),  
    $args  
);
```

```
?>
```

The important bits

name

post_types

hierarchical

Relax!

There are tools to generate
this code

"Generate WP"

<http://generatewp.com>

- Generators
- General
- 📍 Core
- 📍 Admin
- ✍ Content
- ✍ Design
- 🔄 Query

- 📘 General
- Post Type
- Labels
- Options**
- Visibility
- Query
- Permalinks
- Capabilities

Supports

- Title
- Content (editor)
- Excerpt
- Author
- Featured image
- Comments
- Trackbacks
- Revisions
- Custom Fields
- Page Attributes
- Post Formats

Exclude From Search

No ▾

Posts of this type should be excluded from search results.

Enable Export

Yes ▾

Enables post type export.

Enable Archives

Yes ▾

Enables post type archives.

Update Code

Save Snippet

```
// Register Custom Post Type
function custom_post_type() {

    $labels = array(
        'name'          => _x( 'Post Types', 'Post Type General Name', 'text_domain' ),
        'singular_name' => _x( 'Post Type', 'Post Type Singular Name', 'text_domain' ),
        'menu_name'     => __( 'Post Type', 'text_domain' ),
        'name_admin_bar' => __( 'Post Type', 'text_domain' ),
        'parent_item_colon' => __( 'Parent Item:', 'text_domain' ),
        'all_items'     => __( 'All Items', 'text_domain' ),
        'add_new_item'  => __( 'Add New Item', 'text_domain' ),
        'add_new'       => __( 'Add New', 'text_domain' ),
        'new_item'      => __( 'New Item', 'text_domain' ),
        'edit_item'     => __( 'Edit Item', 'text_domain' ),
        'update_item'  => __( 'Update Item', 'text_domain' ),
        'view_item'    => __( 'View Item', 'text_domain' ),
```

There are plugins with a UI

“GD Custom Post Types and
Taxonomies Tools”

<https://wordpress.org/plugins/gd-taxonomies-tools/>

- Dashboard
- Posts
- Media
- Pages
- Comments
- Appearance
- Plugins
- Users
- Tools
- Settings
- GD CPT Tools**
- Front Page
- Post Types
- Taxonomies
- Settings
- Upgrade to Pro
- Collapse menu

GD Custom Posts And Taxonomies Tools: Add new Custom Posts

Name

This must be unique name, not used by any other default or custom post type.
Also, use only lower case letters and no special characters except for the underscore.

Status

This custom post type is set to active and will be registered for use.

If you deactivate this custom post type, all the posts associated with it will remain intact.

Description

No HTML is allowed.

Admin Menu

Menu Position:

Menu Icon:

Menu icon must be set to full URL to the image you want to use as icon.

Labels

Plural Name:

Singular Name:

[Auto fill rest](#)

Add New:

Add New Item:

Edit Item:

New Item:

View Item:

Search Items:

Not Found:

Not Found In Trash:

Parent Item Colon:

Menu Name:

All Items:

Settings

Features:

- Title
- Editor
- Excerpts
- Trackbacks

Taxonomies:

- Categories [category]
- Tags [post_tag]

So, not so bad after all...



Custom post types and taxonomies
are great, but we also need
the templates to show them

Meet the “template hierarchy”

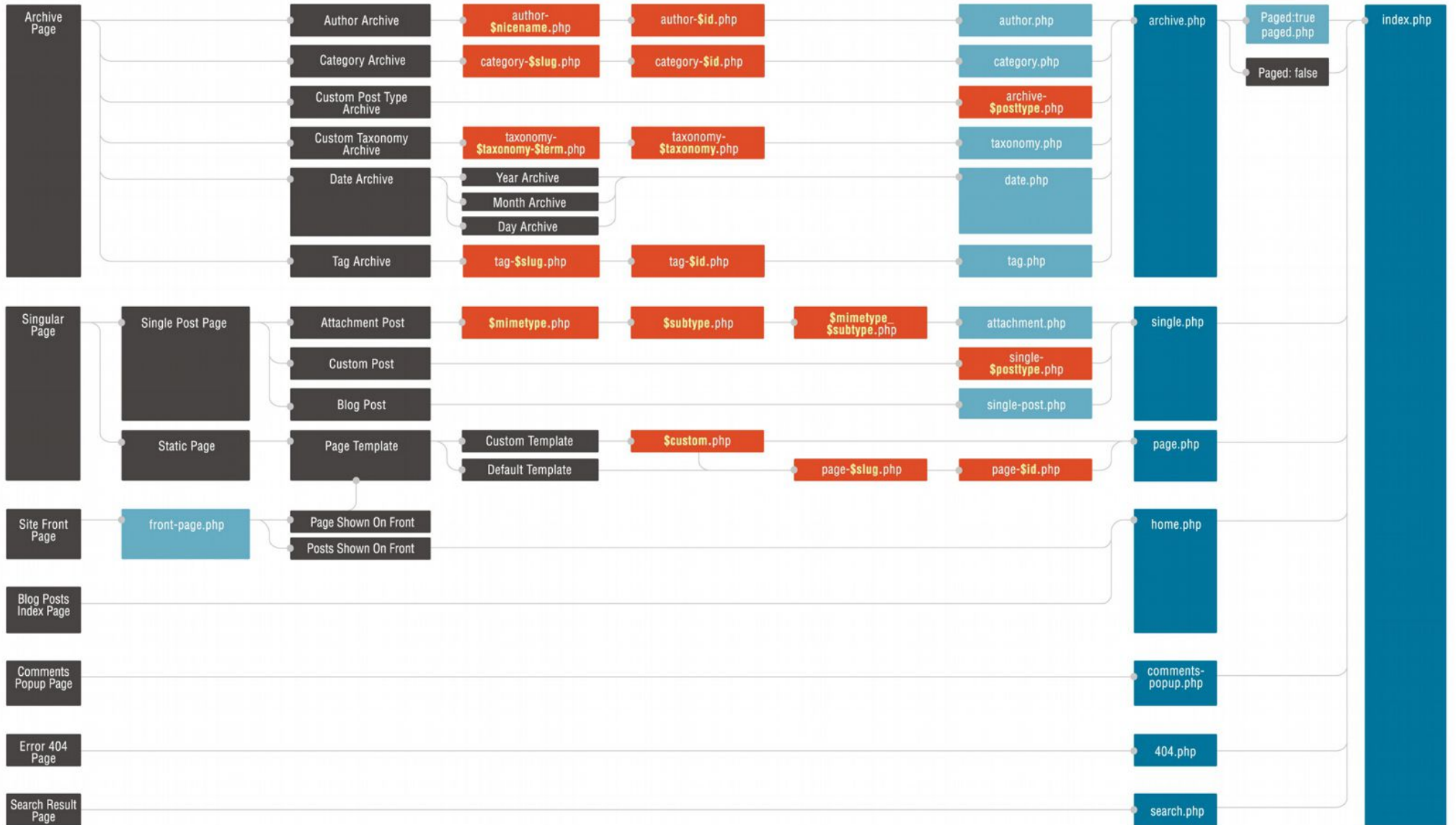
<https://developer.wordpress.org/themes/basics/template-hierarchy/>

“Template hierarchy”

The WordPress way to define which PHP template will be chosen to handle each user request.

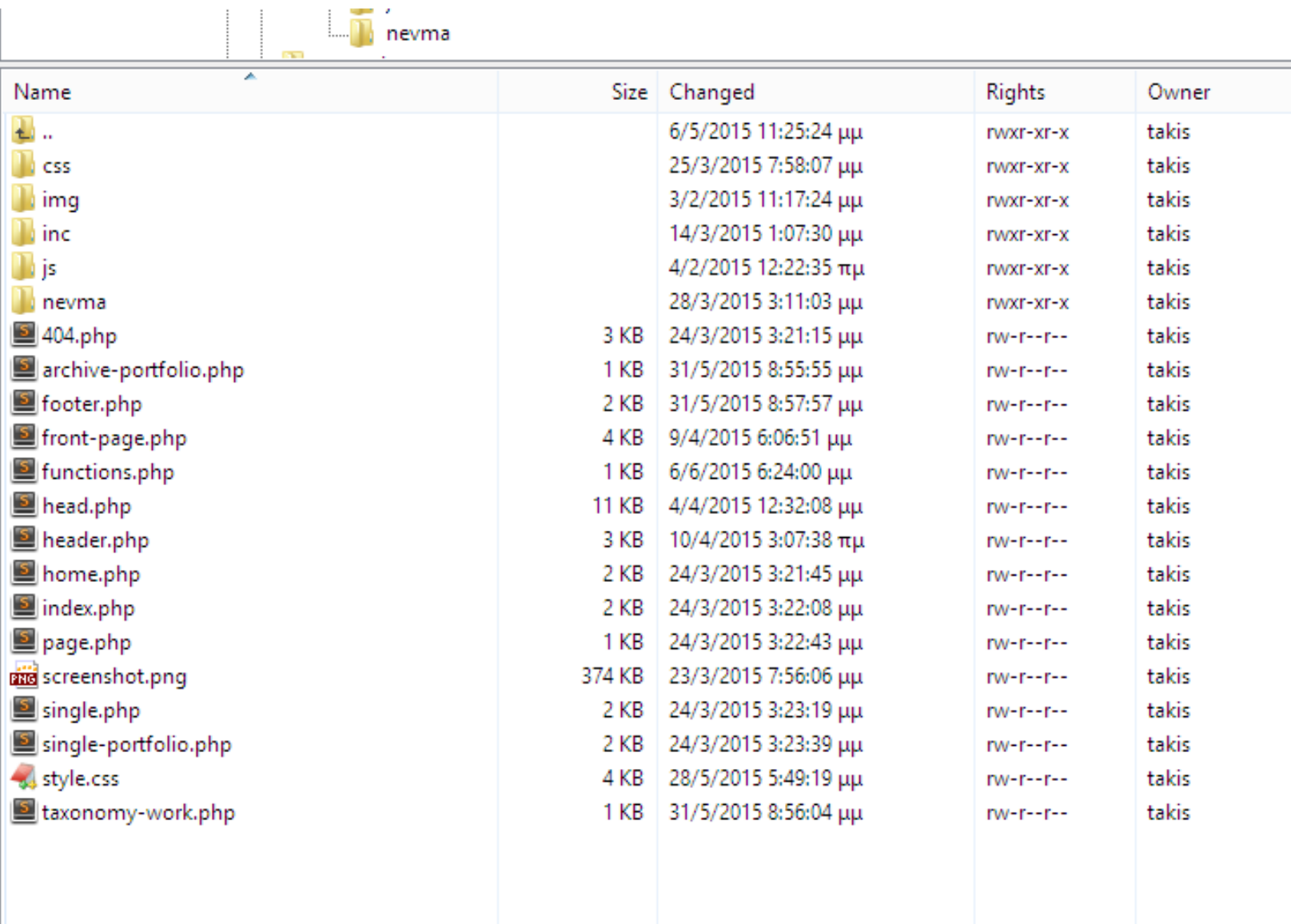
Necessary for theming.

Template hierarchy



■ Primary Template
 ■ Secondary Template
 ■ Variable Template
 Page Type

Theme PHP files



Name	Size	Changed	Rights	Owner
..		6/5/2015 11:25:24 μμ	rwxr-xr-x	takis
css		25/3/2015 7:58:07 μμ	rwxr-xr-x	takis
img		3/2/2015 11:17:24 μμ	rwxr-xr-x	takis
inc		14/3/2015 1:07:30 μμ	rwxr-xr-x	takis
js		4/2/2015 12:22:35 πμ	rwxr-xr-x	takis
nevma		28/3/2015 3:11:03 μμ	rwxr-xr-x	takis
404.php	3 KB	24/3/2015 3:21:15 μμ	rw-r--r--	takis
archive-portfolio.php	1 KB	31/5/2015 8:55:55 μμ	rw-r--r--	takis
footer.php	2 KB	31/5/2015 8:57:57 μμ	rw-r--r--	takis
front-page.php	4 KB	9/4/2015 6:06:51 μμ	rw-r--r--	takis
functions.php	1 KB	6/6/2015 6:24:00 μμ	rw-r--r--	takis
head.php	11 KB	4/4/2015 12:32:08 μμ	rw-r--r--	takis
header.php	3 KB	10/4/2015 3:07:38 πμ	rw-r--r--	takis
home.php	2 KB	24/3/2015 3:21:45 μμ	rw-r--r--	takis
index.php	2 KB	24/3/2015 3:22:08 μμ	rw-r--r--	takis
page.php	1 KB	24/3/2015 3:22:43 μμ	rw-r--r--	takis
screenshot.png	374 KB	23/3/2015 7:56:06 μμ	rw-r--r--	takis
single.php	2 KB	24/3/2015 3:23:19 μμ	rw-r--r--	takis
single-portfolio.php	2 KB	24/3/2015 3:23:39 μμ	rw-r--r--	takis
style.css	4 KB	28/5/2015 5:49:19 μμ	rw-r--r--	takis
taxonomy-work.php	1 KB	31/5/2015 8:56:04 μμ	rw-r--r--	takis

Check it out interactively with

<http://wphierarchy.com/>

To sum up

Custom post types are extensible data structures (the WordPress way) and custom taxonomies are new ways to categorise them

A large, faint, dark gray watermark of the WordPress logo is centered in the background of the slide. The logo consists of a stylized 'W' inside a circle.

WORDPRESS

Greek Community

WordPress Greek Community

Facebook

<https://facebook.com/groups/WordPressGreekCommunity/>

Twitter

<https://twitter.com/wordpressgrcomm/>

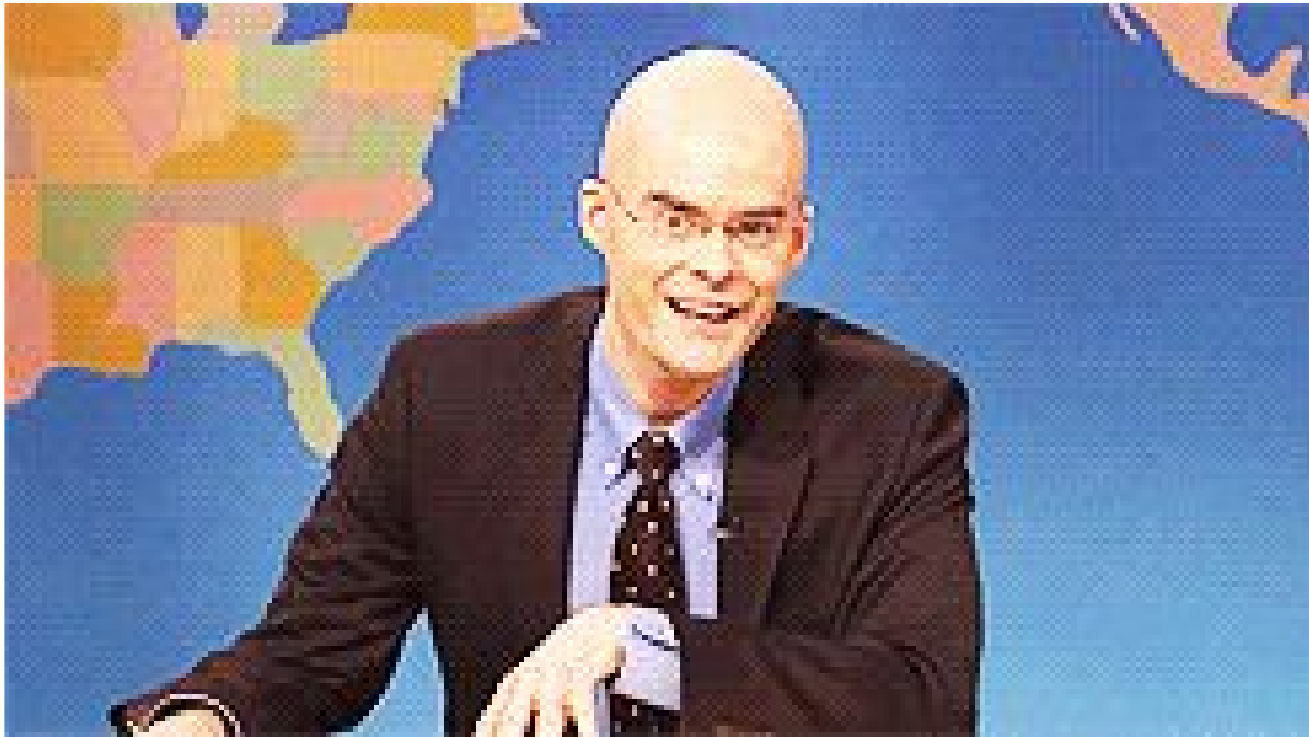
Website

<http://www.wpgc.gr/>

<http://www.wpgreece.org/>

Thank you for listening!

Questions?



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<https://www.facebook.com/takis.bouyouris>

<https://www.linkedin.com/in/takisbouyouris>

Sorry and thank you SNL :-)