Fourth Edition

Thord Daniel Hedengren

SMASHING WordPress®

BEYOND THE BLOG

WILEY

SMASHING WORDPRESS®

BEYOND THE BLOG

4TH EDITION

Thord Daniel Hedengren

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Who do you dedicate a book on WordPress development to? Your parents? Your pets? Your lovers? Your slightly mentally deficient alter ego who wears tights and that weird interpretation of the WordPress *W*?

None of the above. What do they know about this stuff anyway? Except that weird *W* guy, of course. He's a genius, in his own sense.

I'd like to dedicate this book to the WordPress community, the core team, and all developers out there who are contributing to the ecosystem with themes, plugins, and blog and forum posts. You're all doing something to keep this platform of ours — yes, ours — propelling forward, and this is important. What we're part of here isn't just some web publishing platform thingy to help the major corporations save money. It isn't about creating new blogs, sites, or startups on a budget. It's not even about the accessibility of modern web technology.

This is about being able to express yourself and giving your fellow man the same opportunity. WordPress and open source are as much about free speech and power to the people as anything else. This is what keeps me going, keeps me invested, and keeps me interested in this platform.

So there. This book is dedicated to the possibilities a platform such as WordPress offers for everybody. Use it; speak your mind; make a difference. And have fun while you're at it!

Thord Daniel Hedengren

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ABOUT THE AUTHOR

Thord Daniel Hedengren is addicted to words, which led him to launch his first online newsletter in 1996. It all went downhill from there, with dozens of sites and a career as an editor and freelancer in Sweden and abroad.

Going international started with a blog post, which led to a book deal with Wiley, which in turn resulted in the *Smashing WordPress: Beyond the Blog* book and its follow-up *Smashing WordPress Themes: Making WordPress Beautiful,* and an even stronger voice in the WordPress community. You're holding the fourth edition of the critically acclaimed *Smashing WordPress: Beyond the Blog* in your hands right now. This is really just the beginning because that word obsession keeps Thord spewing out new stuff.

When not obsessed with words, Thord and friends are building cool websites using WordPress at his web agency Odd Alice. He also appears in both print and web publications, in both Swedish and English, telling you about the next big thing online, or something entirely different. You can follow everything Thord on `http://tdh.me`, where you'll also find his self-published works along with some goodies.

Thord lives in the land of kings, Sweden.

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Well, all right, a big THANK YOU to Malin for putting up with my nonsense, a not insignificant feat in itself. I'd also like to thank Chris, Dana, Ellie, Sara, and their fellow cohorts at Wiley for being such good sports. And finally, my team at Odd Alice, just because.

And thanks for buying this book, possibly for the fourth time, fellow reader!

CONTENTS

PART I: GETTING STARTED WITH WORDPRESS 3

Chapter 1: The Anatomy of a WordPress Install 5
The Basic Install 6
The Guided Installation Method 6
The Manual Installation Method 8
Using an External Database Server 10
Other Database Settings 10
Useful wp-config.php Features 11
A Few Words on Installers 12
Moving the WordPress Install to a Different Directory 13
Hacking the Database 14
Learning Where Everything Is 15
Fixing Issues by Hacking the Database 15
Backing Up 16
Switching Hosts 17
Using the Export and Import tools 18
When Export/Import Won't Work 19
How to Make Your WordPress Install More Secure 21
Users and Passwords 21
Server-Side Security Steps 22
Looking Ahead 23

Chapter 2: The WordPress Syntax 25
WordPress and PHP 26
The WordPress Codex 26
The WordPress Core 27
Themes and Template Files 28
Using the Template Tags 31
The Include Tags 31
Passing Multiple Parameters to a Template Tag 33
Function and Query-String Style Arguments 34
Understanding Data Types 36
Conditional Tags 37
Why Is this Great? 38
Next Up: The Loop 39

Chapter 3: The Loop **41**
Understanding the WordPress Loop 42
The Basic Loop 42
Separating the Loop Using the Template Parts 43
A Few Words About wp_query 45
Using the Loop 46
Using Sticky Posts 49
Working with Post Formats 51
The get_template_part() and Post Formats 53
Modifying the Query with pre_get_posts 53
Alternatives to the Loop 54
Multiple Loops 55
Featured Posts with Multiple Loops 56
Three's a Charm, but Four Loops Are Way Cooler 58
Getting More Comfortable with the Loop 62

PART II: DESIGNING AND DEVELOPING WORDPRESS THEMES **65**

Chapter 4: WordPress Theme Essentials **67**
Theme Basics 68
Elements of the Basic Theme 68
This Is What You're Doing 70
A Few Words on HTML5 70
Creating the Template Files 71
The Theme Declaration in style.css 71
Up Top, the header.php File 72
The Footer, with footer.php 76
The Right Column: sidebar.php 78
The Content Flow, Using index.php 79
Breaking Out the Loop 85
Single Posts and Pages 87
Archive Templates 91
404, Search, and Screenshots 92
Features with functions.php 93
Understanding Template Files 96
Which Template File Is Used When? 96
The Template Hierarchy 97
Page Templates 98
Using functions.php 101
Setting the Default Width 101
Inserting Promotions with functions.php 102
Understanding Widgets and When to Use Them 104
Declaring Widget Areas 104
Using Multiple Widget Areas 105
Customizing Widgets 106

Making Comments Look Good 107
Threaded Comments 108
Author Highlighting 109
Adding Custom Fields 110
Common Usage 110
The Usability Factor 111
Developing a Starter Theme 111
Releasing a Theme 112
Theme Checklists 113
Commercial Themes and the GPL License 115
Submitting to WordPress.org 115
Moving Onward with Themes 118

Chapter 5: The Child Theme Concept 119
The Brilliance of Child Themes 120
How Child Themes Work 120
The Beauty of Template File Overriding 123
The Wonderful Template Parts 124
Event Child Themes 125
Child Themes and Internationalization 126
The Flip Side of Inheritance 126
Common Issues to Keep in Mind 127
Managing Several Sites Using Child Themes 127
Managing Design for Multiple Sites 128
Don't Forget About functions.php 129
There Is Such a Thing As too Much 129
What About Theme Frameworks? 130
Let's Talk About Parent Themes Instead 130
Taking Themes to the Next Level 130

Chapter 6: Advanced Theme Usage 131
Outlining the Theme 132
Rule #1: Style by Category, Sort by Tag, and Tune with Post Formats 133
Rule #2: Carefully Consider Custom Fields 133
Rule #3: Build with Pages and Extend with Custom Post Types 134
Is That All? 134
Individual Styling Techniques 134
Styling the Posts 135
Body Class Styling 137
Sticky Posts 139
Using Custom Fields 140
Custom Field Basics 141
Creating Meta Boxes 142
Fancy Custom Features 144
Properly Adding Functions in functions.php 144
Featured Images 145

Custom Menus 146
Custom Headers 147
Custom Background Images 149
The Theme Customizer and Theme Options 149
Adding Your Own Theme Settings 150
Theme Option Pages 154
Theme Customizer or Theme Options? 155
Mastering Action Hooks 156
Hooking On 157
Creating Your Own Action Hooks 157
Removing Actions from Hooks 158
Using Taxonomies 158
Purposes for Custom Taxonomies 159
Get Your Mind Working 160
Taxonomies and Portability 160
The Power of Custom Post Types 161
Using Custom Post Types 161
Theming Custom Post Types 161
Multiple Language Support 162
Working with Language Files 163
The Naming Issue 164
Working with RSS Feeds 164
The WordPress Feeds 165
Build a Custom Feed Url 166
Basic SEO Implementations 167
Trimming WordPress on the Theme Side 168
Themes Versus Plugins 170

PART III: USING PLUGINS WITH WORDPRESS 171

Chapter 7: Making the Most of WordPress Plugins 173
Plugins Are Great 174
About the Feature-As-Plugin Concept 174
Different Types of Plugins 174
Regular Plugins 174
Drop-in Plugins 175
Must-Use Plugins 175
Getting the Most out of the Plugin Ecosystem 176
A Checklist for Choosing a Plugin 176
Tweaking Plugins 177
Developing Plugins for Networks 178
Sitewide WordPress Plugins 179
Plugin Basics 179
Methods for Incorporating Your Plugins 181
Using Hooks 182
Creating Your Own Template Tags 183
The Pluggable Functions 184

Custom Taxonomies and Custom Post Types 184
Why Use a Plugin? 185
Creating a Custom Taxonomy 185
Creating a Custom Post Type 187
Must-Have Functionality for Plugins 189
Plugin Settings 189
Database Content and Uninstalling 195
After Uninstalling 195
Building the AddAff Plugin 196
The AddAff Settings Page 196
Creating the AddAff Meta Box 199
Filtering the_content 201
Wrapping It Up 204
Adding Widget Support to Plugins 204
Creating a Widget 205
Dashboard Widgets 207
Plugins and the Database 209
Backward Compatibility for Plugins 209
Check If a Function Exists 210
Hosting Your Plugins on WordPress.org 210
A Final Word of Warning and Encouragement 211

Chapter 8: Plugins or functions.php? 213
When to Use a Plugin 214
Extending Functionality with Plugins 214
Caution: Plugins Can Slow Down Your Site 214
When to Use functions.php 215
The Shortcode Dilemma 216
Solve It with Child Themes 216
The Best of Both Worlds: A Functionality Plugin 217
Create Your Own Functionality Plugin 217
The Importance of Portability 219
Planning for Extended Functionality in Your WordPress Site 219

PART IV: ADDITIONAL FEATURES AND FUNCTIONALITY 221

Chapter 9: Using WordPress As a CMS 223
Is WordPress the Right Choice for Your CMS? 224
WordPress CMS Checklist 225
Trimming WordPress to the Essentials 226
Tweaking the Admin Interface 227
Don't Forget the Theme Customizer 228
Unblogging WordPress 229
The Perfect Setup for a Simple Static Website 230
Doing More Than the Basics 232

Uses for Custom Post Types and Taxonomies in a WordPress CMS 232
Putting Widgets to Good Use in a CMS 233
Managing Menus 235
Integrating Non-WordPress Content 236
Don't Forget to Include a Manual 236
A Final Word on Using WordPress As a CMS 237

Chapter 10: Integrating the Social Web 239
Integrating Facebook into Your Site 240
The Like Button 240
Profile Widgets 242
Facebook Comments 242
Integrating Twitter 242
Adding Twitter Buttons and Widgets 243
Twitter and Short Urls 245
Adding Google+ to Your Site 246
Share and Follow on Tumblr 247
The Follow Button 247
The Share to Tumblr Button 248
Pin to Pinterest 249
Share to Linkedin 251
Cross-Publishing 252
Some Cross-Posting Solutions 253
Using a Hosted Comment Solution 253
Using Unified Logins 255
Plugins and Overhead 256
The Importance of the Social Web 256

Chapter 11: Design Trickery 259
Adding More Control over Your Posts 260
Tag-Based Design 260
Using Custom Fields 261
Hooking on to body_class(), post_class(), and comment_class() 263
Adding Your Own Taxonomy 264
Improving the Menu 264
Thinking About Hover-Based Menus 265
Placing Ads Within the Loop 266
Creating 404s That Help the Visitor 267
Using JavaScript Libraries with WordPress 268
Registering Scripts 269
Making WordPress Your Own 269
A Custom Login Form 270
Admin Themes 271
Making Your Theme Responsive 273
Media Queries 273
Responsive Design Considerations 274
Polishing Your WordPress Site 275

Chapter 12: Fun with Media 277
Working with Image Galleries 278
Styling the Gallery 280
Better Browsing with Lightbox 282
Using Outside Scripts and Systems 283
The Media Post Formats 284
Embedding Media Content 284
Getting the Settings Right 285
The Magic of Oembed 285
Randomizing Image Elements 287
Displaying Random Images from Your Galleries 288
More Random Image Options 289
Making the Most of Image-Sharing Services 290
Posting from Flickr 291
Beware of the Clutter 293

Chapter 13: Extra Functionality 295
Tabbed Boxes 296
Smart Usage 296
To Tab or Not to Tab 298
Displaying RSS Feeds 299
The Built-in Parser 299
Caching with the Transients API 300
When to Use the Widget Solution 301
Multiple Feeds with SimplePie 302
Custom Shortcodes 303
Adding Shortcodes 303
Shortcode Tidbits 304
What About the Visual Editor? 305
Sending E-mail with WordPress 306
Personalizing the Login Form 307
Adding Your Own Login Form 308
Print That Blog 310
And Even More . . . 312

Chapter 14: Uncommon WordPress Usage 313
Working with User-Submitted Content 314
Receiving Guest Posts 315
Handling User News and Reviews 316
Rolling a Bootstrapped Job Board 316
Using wp_editor() 317
A Final Word About User-Submitted Content 318
Using WordPress As a FAQ-Like Knowledge Base 318
Adding the Functionality 319
Including Further Enhancements 321
WordPress and eCommerce 322
Running a Web Shop on WordPress 322
Selling Digital Products 323
Building for eCommerce 323

Building a Product Directory 324
Creating the Book Post Type 324
Creating the Book Page 326
Showing Off the Products 328
Tasty Blogging: Using WordPress for Recipes 330
Starters: The Theme 330
Main Course: The Recipe Post Type 331
Dessert: Custom Taxonomies 333
Digestif: What You Have So Far 335
Building a Links Site 336
The Alternative: The Link Post Format 338
Some Thoughts About Usage 338
Mixing Link Posts with Traditional Content 339
Short and Sweet: Other Uses for WordPress 340
An Event Page and a Calendar 340
Intranets and Collaboration 341
Communities and Forums 341
Databases 342
Static Sites 342
Journals and Notes 342
You Can Build Anything You Want 343

INDEX **345**

INTRODUCTION

WRITING A BOOK about WordPress isn't the easiest endeavor that you could tackle. When my editor and I first started discussing this project, the idea was to create something that not only acts as an introduction to web developers and professionals who want to utilize the power of the WordPress platform, but also sparks the minds to create things beyond the obvious.

Or go *beyond the blog,* as it were, which is also the subtitle of this book. That subtitle stands strong, as this book reaches its fourth edition.

The whole point is really to prove that WordPress is so much more than a blog-publishing platform. You can build just about anything with it, and you should as well if you like fast deployments and great flexibility. It is not always the perfect choice, but it should definitely be considered at all times. The ease with which you can both build and use this platform is a selling point, just as is the living community that can back you up when you run into problems — and the fact that this is open source at its finest.

Although I think that anyone with some knowledge of HTML, CSS, and PHP can learn WordPress from this book, it is important to remember that this is not a beginner's book. I start at a pretty high pace to make sure that even professionals get the fundamentals right. It is so easy to stick to familiar territory and do things the way they've always been done, instead of learning to do them right. And although having the basics in here will help anyone get started with WordPress, you really should know some HTML and CSS and have at least a grasp of what PHP is and does. If those are alien concepts to you, I urge you to read up on them first.

That being said, *Smashing WordPress: Beyond the Blog* is indeed written with the idea that anyone with the suitable background can learn WordPress using this book, as well as take the platform beyond the obvious. When you're done with this book, you'll be ready to build just about anything using WordPress.

To convey this message, *Smashing WordPress: Beyond the Blog* is divided into four parts.

PART I: GETTING STARTED WITH WORDPRESS

The first part tackles the WordPress essentials, from install to what actually makes the system tick. It gives you everything you need to get started with WordPress, albeit at a slightly quicker pace than traditional beginner books. However, coverage doesn't stop there because there are a lot of things you should be aware of when getting started with WordPress, such as security measures, moving the install, and so on. The idea is to not only help beginners get started, but also enlighten current users to the problems and options available.

PART II: DESIGNING AND DEVELOPING WORDPRESS THEMES

WordPress themes are what the user sees; they are the skin of your site and control how the content is presented. When you work with a site running on WordPress, you'll spend a lot of time altering the theme files to get WordPress to do what you want. This second part introduces the technical features of themes and gives you the required knowledge to start building your own.

PART III: USING PLUGINS WITH WORDPRESS

The third part is all about getting started with WordPress plugin development, as well as getting the most out of the plugin ecosystem that's already there. The fact that you can extend WordPress with plugins means that there really is no limit to what you can do with the platform. If you can make it work in PHP, you can run it in WordPress — more or less. This also means that this part of the book is highly conceptual, dealing with the basic communication between your plugin (which in fact is your PHP code) and WordPress itself.

PART IV: ADDITIONAL FEATURES AND FUNCTIONALITY

The fourth part is all about using WordPress for purposes other than blogging. Here you look at how WordPress can be used as a CMS to power more traditional websites, and you build a couple of sites from the ground up to prove that the platform can indeed do other things than just run bloggish websites.

This part is all about making you think differently about WordPress. The goal is to do away with all your thoughts about WordPress as only a blogging platform. This is a publishing platform — nothing else.

In this part, you'll also find a selection of nifty tricks and techniques that you can use to further enhance your site. A lot of the things you might need in your WordPress projects have been done already, and this part gives you a little peek into that.

START THINKING AND GET PUBLISHING!

Smashing WordPress: Beyond the Blog was written with the web developer in mind, but anyone who has fiddled a little bit with HTML, CSS, PHP, and WordPress can benefit from this book. It is truly a breeze to get started with WordPress, and WordPress is all you'll need to begin rolling out your projects. After that, you'll have to get your hands dirty, modifying or building themes and creating the necessary plugins to build the site you've envisioned.

In other words, start thinking and get publishing with WordPress, whether you're building the next *The Verge* or *Wired,* or something entirely different.

PART

I

GETTING STARTED WITH WORDPRESS

Chapter 1: The Anatomy of a WordPress Install

Chapter 2: The WordPress Syntax

Chapter 3: The Loop

CHAPTER

1 THE ANATOMY OF A WORDPRESS INSTALL

INSTALLING WORDPRESS IS neither difficult nor time-consuming, and the instructions available on WordPress.org are more than adequate to guide you through the basic install. With the extra knowledge that you'll get in this chapter, however, you can supercharge your WordPress setup with themes and plugins. WordPress is the bricks and mortar of the site, but themes and plugins are what make it really tick.

Remember that "WordPress" in this book refers to the standalone version of WordPress available for free from `http://wordpress.org`*. Don't get this mixed up with Automattic's hosted version on* `http://wordpress.com`*. This book is all about the main version available from WordPress.org, with more specifically version 3.8 in mind.*

THE BASIC INSTALL

Installing WordPress is a breeze; the PR talk about a "five-minute install" is right on target. In fact, the only reason that the install should take even that long is the fact that uploading the files sometimes takes time due to slow Internet connections or sluggish web hosts. Most likely, you'll already have a fair amount of experience with basic WordPress installs, so I'll be brief on this matter.

First, make sure that your system meets the minimum requirements. The most recent set of requirements can be found at `http://wordpress.org/about/requirements`. If your host supports PHP 5.2.4 or higher and runs MySQL 5.0 or higher, you'll be fine. However, you should make sure that your host has `mod_rewrite` installed because that will be needed for prettier links.

There are two ways to install WordPress: the guided way and the manual way.

A third installation method is the one-click install offered by some web hosts. One-click installs are briefly described later in this chapter. There's also a fourth option for installing WordPress using Subversion or Git, but I'll skip that in this book.

THE GUIDED INSTALLATION METHOD

WordPress is one of the easiest open source publishing systems out there to get up and running. Just download the most recent version of WordPress (from `http://wordpress.org/download`), extract the archive file (usually you're grabbing a zip file), and then upload the files within the wordpress folder to the place where you want to install WordPress, using FTP. For example, if you want to install WordPress on `mysite.com`, you just upload the files to the root folder for `mysite.com`.

Point your web browser to the install directory (which would be `http://mysite.com` in this example) and provide the requested information, as shown in Figure 1-1. You'll need your database name, username, and password, and possibly also the address to the database server if you or your host has an external address. Your host will supply this, along with everything you need to actually set up your database. This might involve a web interface such as cPanel or phpMyAdmin or the use of SSH or your software of choice. Consult your host for more information on how you work with MySQL and set up databases.

Click Submit to get to the site setup, shown in Figure 1-2. On this screen, fill out the name of the site, the admin account credentials you would like, and so on. Make sure that you use a working e-mail address and keep track of your password. After you have entered all the requested information, click the Install WordPress button. You're just about done. Log in — and there you have it: WordPress is up and running!

Figure 1-1: The install interface.

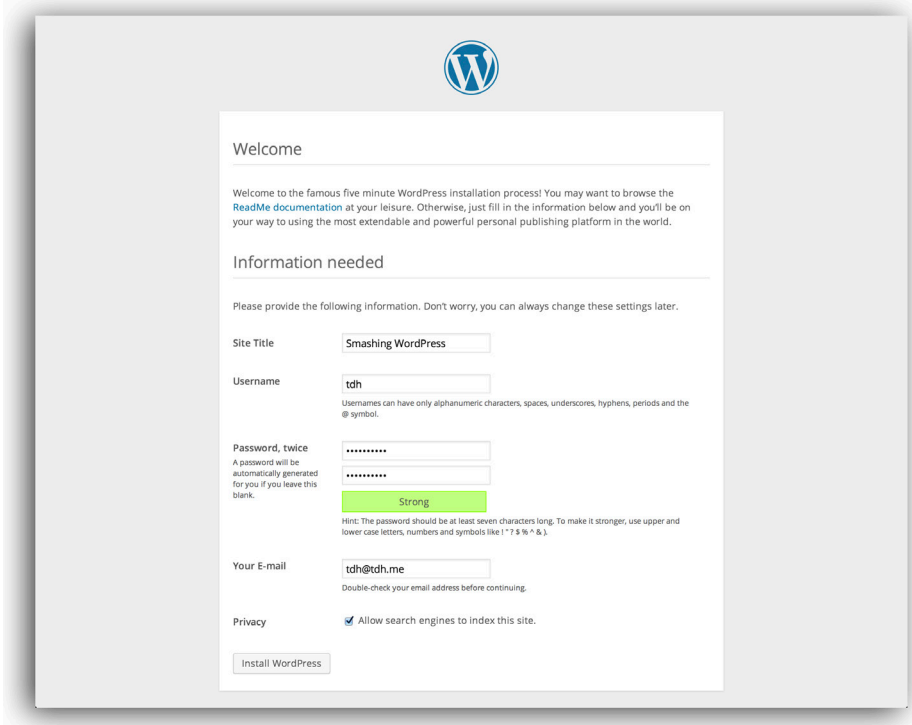

Figure 1-2: Fill out the details.

The guided install doesn't provide options to make WordPress run in any language other than the default, English. If you want your installation to run in a language other than English, consult the manual install procedure detailed in the following subsection.

THE MANUAL INSTALLATION METHOD

For a manual install, you'll need the following:

- The most recent version of WordPress (available from `http://wordpress.org/download`).
- A MySQL database as a user who has write privileges. (Ask your host if you don't know how to set this up.)
- Your favorite FTP program.

To install, unzip your WordPress download and upload the contents of the wordpress folder to your destination of choice on your server. Then open the wp-config-sample.php file and find the database parts where you fill out the database name and the username and password with write privileges. This is what wp-config-sample.php looks like:

```
// ** MySQL settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define('DB_NAME', 'database_name_here');

/** MySQL database username */
define('DB_USER', 'username_here');

/** MySQL database password */
define('DB_PASSWORD', 'password_here');

/** MySQL hostname */
define('DB_HOST', 'localhost');

/** Database Charset to use in creating database tables. */
define('DB_CHARSET', 'utf8');

/** The Database Collate type. Don't change this if in doubt. */
define('DB_COLLATE', '');
```

Next, still in wp-config-sample.php, find the section that deals with secret keys. This part starts with commented information text titled "Authentication Unique Keys" and is followed by four lines (as of this writing) where you'll enter the secret keys. This is a security function to make your install more secure and less prone to hacking. You'll need to add these keys only once, and although they can be entered manually and can be whatever you like, there is an online generator courtesy of WordPress.org that gives you random strings with each load. Just copy the link (`https://api.wordpress.org/secret-key/1.1/salt`) to the generator from your wp-config-sample.php file and open it in your favorite web browser. You'll get a page containing code looking something like Figure 1-3.

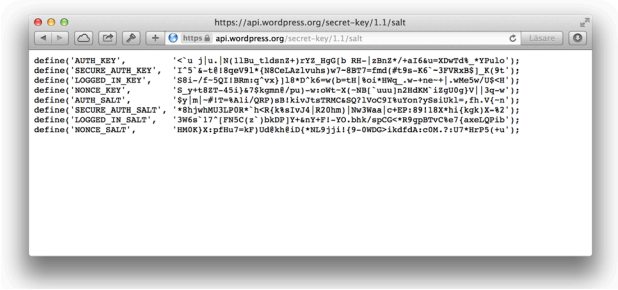

Figure 1-3: Your random key, ready to be copied and pasted.

Copy the contents from the generator page and replace the following code in wp-config-sample.php with them:

```
define('AUTH_KEY',          'put your unique phrase here');
define('SECURE_AUTH_KEY',   'put your unique phrase here');
define('LOGGED_IN_KEY',     'put your unique phrase here');
define('NONCE_KEY',         'put your unique phrase here');
define('AUTH_SALT',         'put your unique phrase here');
define('SECURE_AUTH_SALT', 'put your unique phrase here');
define('LOGGED_IN_SALT',    'put your unique phrase here');
define('NONCE_SALT',        'put your unique phrase here');
```

By replacing the code with the lines from the generated page, you've made your install a little bit more secure from those nasty hackers.

The last thing you may want to change in wp-config-sample.php is the language. WordPress is in English (U.S. English, to be exact) by default. To change the language, you'll need to upload a language file to your wp-content/languages/ folder. The language files are in the .mo format; you can find most of them at `http://codex.wordpress.org/WordPress_in_Your_Language`. You also need to alter the following little snippet in wp-config-sample.php to let WordPress know what language you want:

```
define('WPLANG', '');
```

You need to add the language code: This is the same as the language file, without the file extension. So if you want your install in Swedish (the language of kings), you'd download the sv_SE.mo file, upload it to wp-content/languages/, and then pass the language to `WPLANG`, like this:

```
define('WPLANG', 'sv_SE');
```

This won't necessarily display any themes or plugins you use in your language of choice, but WordPress and its core functionality will be, as will any code that supports it. (You'll learn about localization of themes and plugins in Chapter 6, "Advanced Theme Usage.")

That's it! Rename wp-config-sample.php to wp-config.php and point your web browser to your install location. You will see a link that initiates the install procedure, in which you'll fill in the