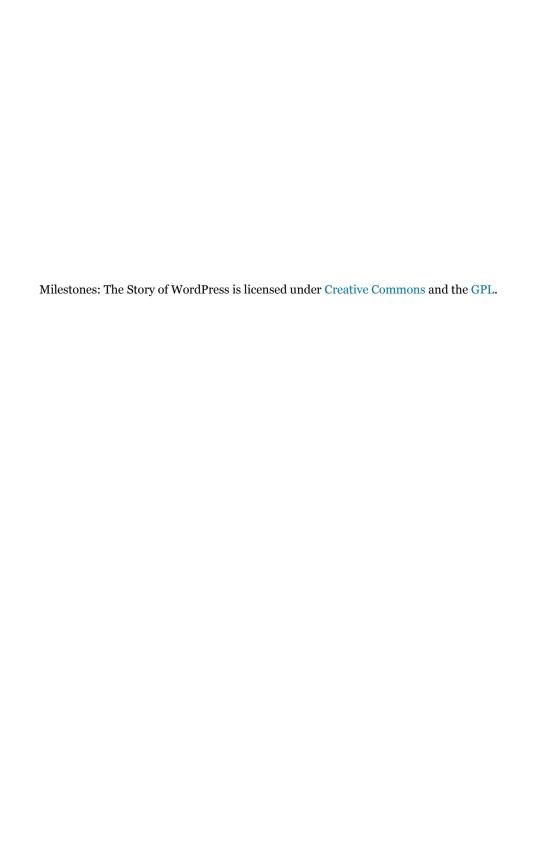


Milestones: The Story of WordPress



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Introduction

We live in a highly networked world where billions of people engage and interact with one another online. Global communication is instantaneous. We can converse across the world, learn about other cultures, and meet new people without leaving our own home. The ways in which people get online are as varied as the people who populate the internet. People connect on social media, communicate using applications, and build websites using everything from hand-coded CSS and HTML, to content management systems.

The web is built on free and open source software: server-side software like Apache and Nginx, application frameworks like Ruby on Rails, databases like MySQL, and security cryptographic protocols like OpenSSL. This software is often built by hackers and hobbyists, who distribute it freely, hack on it, patch it, and share it with one another. But free software isn't just the domain of hardcore coders — those who build the underlying fabric of the web. Millions of people, for example, use tools like the open source browser Firefox to browse the web.

And then there's WordPress, the user-focused publishing platform built to make it easy for anyone to publish online. At the time of this writing (2015), it powered 25% of all websites, and is used by millions of people worldwide. Users vary from casual bloggers to international news sites, small businesses to big businesses, non-profits, networks, and personal portfolios. What started out as a blogging platform is now the most widely used content management system on the internet. Some developers even use it as an application framework.

With so much of the internet powered by WordPress, it's no surprise that the people who use it are as diverse as those who use the internet itself. Each website represents a different story - a different individual or organization

1

who has a stake in being online and providing a window into their world. This book tells the story of WordPress, a tool created by a couple of hackers and developed by volunteers from all over the world. But before that story begins, it's worth looking at the stories of just a few of those who have been empowered by the software.

Fighting Human Rights Abuse Thailand, near the Burmese Border

Burma is the stage for one of the longest-running civil wars in history. Since 1948, different ethnic minorities have struggled for independence. In ethnic areas, the military junta has committed innumerable atrocities against the people of Burma, including torture, executions, rape, kidnapping, and chemical attacks. It has left millions of people living like refugees in their own country, displaced from their homes and under attack from their government.

Since 1997, the Free Burma Rangers (FBR) have delivered humanitarian relief to internally displaced persons (IDPs). Operating from regions around Burma's borders, relief teams of up to six people enter Burma's jungles to provide emergency medical relief, humanitarian assistance, and counselling to IDPs. The teams are made up of Burmese nationals, many of whom have themselves been displaced and been victims of the government's military rule.



Medics from the Free Burma Rangers in the field.

In addition to humanitarian relief, every team has a member who documents atrocities using photography, video, and interviews. This evidence is trekked out of the jungle and over the border, and forms an archive of the human rights abuses committed by the junta.

For many years, these documents were simply stored on paper. Offices full of paper held evidence of years of abuse. The information was tabulated into spreadsheets and documents. Photographs and videos were stored on stacks of hard drives. To find information, a person had to spend hours looking for it; there was no way to look at the data in aggregate, to find patterns and trends.

Volunteers converted hundreds of thousands of records into a digital database that allows rangers to quickly upload and disseminate information. The system needed to be usable by the rangers, many of whom had little computing experience and speak different languages and dialects. The site was user tested in a jungle hut via a solar-powered laptop using a satellite internet connection.



User testing in a hut in the jungle.

Reports are stored on two sites: an internal site for storing and tracking reports, and a public-facing site that disseminates information to the public. Both websites use WordPress. While on a relief mission, a team documents human rights violations by taking photos and recording interviews. They do the same for any patients they see, recording everything in a paper journal. When the relief mission is complete, the journal and SD card are trekked out of the jungle, and the information is added to the website.

The digitization of these reports has meant that volunteers can spend less time digging for information and more time improving relief, training, and providing aid. It's made analysis more efficient and effective, allowing training teams to look for patterns that will improve aid.

But it's also helped the FBR to easily disseminate information about atrocities to the world. In December 2012, one of the IDPs working with the Free Burma Rangers hiked through the jungle to deliver video and photographs of the Burmese military using attack helicopters and jet fighters in air strikes against ethnic rebels in the northern Kachin state. The images were pub-

lished on the blog. The next day, the BBC picked up the images, broadcasting them around the world. These images increased international pressure on the Burmese military and played a significant role in the 2013 ceasefire.

Charting a Dream Journey On the road, USA

For nearly five years, Maria Scarpello has been traveling the highways and byways of America, sampling beer, in search of that perfect pint. She travels in an RV she calls Stanley, a 1999 Class C Ford Jayco. Stanley isn't just an RV; it's her home. "Home is where my wheels are," Maria says. She parks the RV wherever she can: campgrounds, street corners, parking lots, and friends' driveways. Stanley has been adapted to her life on the road. The bed has been removed from the back of the RV, replaced with a couch to give additional space to work, relax, and hang out with her two dogs, Ernie and Buddha.

Her first blog, TrippingWithStanley.com, charted the first year-and-a-half of her journey across America, which included zip lines in Las Vegas, golfing in Phoenix, barren deserts in Arizona, and the rocky cliffs of the Oregon coast. When Maria left home, she had planned to travel for only six months, but the five years she has lived in her RV are a testament to how deeply she has fallen in love with life on the road.



Maria Scarpello at Golden Canyon in Death Valley National Park.

Her current website, The Roaming Pint is a travelog of all of the breweries she's visited in the United States. Beer lovers can vicariously visit America's breweries through her site and search the website to get information about the hundreds of breweries she's visited.

To support her trip, Maria had to find work that would accommodate her fluid lifestyle. First, she planned to make money through her blog; plenty of people fund their travels by blogging, so why not? But making money from a blog is no easy task, and, after a year on the road, Maria decided that monetizing her blog would not be profitable enough to support her nomadic lifestyle. For the past three years, Maria has worked as an Internal Community Man-

ager at WooThemes, a WordPress company that's now part of the Automattic family. Armed with a mobile hotspot and her laptop, she has everything she needs to make money on the road. Her office is in her RV and has been completely renovated to make it feel like home: the walls are painted bright green and are decorated with stickers, coasters, pictures, and other travel souvenirs. The view from her office is always changing. "Next month, my office will be overlooking the beautiful white-capped Rockies in one of my favorite states, Colorado," Maria says. "The following month we will be venturing even further west, eventually making our way back to the coast. There is no better office view for me than overlooking vast bodies of water, preferably with palm trees or mountain-side cliffs and sandy beaches begging me to put my MacBook Air away and let the dogs play!"



Maria Scarpello hanging out with her dogs and Stanley. Photo by sethkhughes.com.

Running a Small Business *Fjærland, Norway*

Eivind Ødegård arrives at his office and heads straight for his coffee machine.

Coffee in hand, he sits at his computer to read email. He is surrounded by books: they fill the shelves lining the walls of his room. They're stacked all over the floor. Much of his day is spent in front of the computer, handling money and bills, dealing with correspondence, and processing orders. It sounds like a job that could be done in any office, but his view is quite different from the normal 9-to-5. From his window he can see the ferries bringing tourists in and out of the tiny town of Fjærland. They come to Fjærland for the glacier, the majestic scenery, and Norway's booktown, where Eivind is the manager.

Fjærland is a rural community with less than 300 inhabitants. It is ringed by mountains and glaciers. Waterfalls run down the mountainsides along the fjords where dolphins and seal hunt for fish. In the summer, it's hot and sunny and busy with tourists; in the winter, the weather turns cold and the local inhabitants — cut off from the rest of the world — plan for the coming summer.



The booktown at Fjærland. Photo by Trond J. Hansen.

A booktown — "a small rural town or village in which second-hand and antiquarian bookshops are concentrated. Most booktowns have developed in villages of historic interest or of scenic beauty." The first was in Hay-on-Wye in Wales, but there are now booktowns all over the world. In Fjærland, the booktown that Eivind manages was established in 1995 to solve a specific problem: buildings in the town were derelict and falling into disrepair, and rather than watch them fall into ruin, the townspeople filled the buildings with books. Second-hand books fill stables, boathouses, a bank and a post office, a grocery shop, and a ferry waiting room. Each shop has its speciality; one even doubles as the tourist information office. Some bookshops are staffed, others operate by an honor system; customers leave money in an honesty book whenever they take a title.



A customer browses the books. Photo by Trond J. Hansen.

Some of Eivind's daily routine is spent managing and updating the booktown's website, which also acts as a window into this secluded community. The site provides information about the booktown, while the blog has news from Fjærland. There is also an online store that distributes publications from Sjørettsfondet, the Norwegian Maritime Law Foundation. The website, maintained in both Norwegian and English, is built on WordPress.

Building the Web New York, New York

Some blogs have been around long before blog software even existed — long before WordPress or Movable Type or LiveJournal. People shared their thoughts and links from around the web on hand-coded websites which chart not just the evolution of a person, but the evolution of the web.

Jeffrey Zeldman's blog is one such example. It's a record of many of the important trends and changes in technology and design that have happened since the mid-1990s, complemented by asides and personal reflections that illustrate the world as it has changed with the web.

Before the advent of blogging as its own form, Jeffrey used his website to entertain and create. His archives are a treasure trove of '90s design artifacts: banners from zeldman.com, desktop backgrounds, and 8-bit pixel art icons.

Reading through the blog archives is like touring the history of the modern web through Jeffrey's perspective. It chronicles the early days of web standards — when many designers built beautiful sites with Flash while others crafted web pages with CSS — through the popularization of the semantic web, the growth of social networks and the skepticism around them, to responsive web design.

But there's more to Jeffrey's blog than musings about the web. While he was still hand-coding his website, Jeffrey started a section called "My Glamorous Life," where he wrote about himself. The tag "glamorous" is still what he uses to tag posts that are about him, rather than about someone else. As with all diarists, there's a lot we can learn about Jeffrey: he's a web designer who cares passionately about web standards. He's a publisher and event organizer. He hosts a regular podcast called "The Big Web Show." But there's more than just what he *does*. He has a daughter named Ava. He's long been

divorced, but still looks after his ex's two small dogs when she is ill (much to the annoyance of his neighbors). He has family secrets that, now and again, come out of the closet. He's a fan of Edward Hopper and John Coltrane. He surrounds himself with smart people he respects. He loves what he does and he wants you to like it too.

This blend of personal and professional is the mark of many blogs. After all, for the writer, these things are just different aspects of who they are. "I don't really see a big difference between sharing what's personal and sharing opinions about web design and sharing information about web design," Jeffrey says. "It's all the same." He continues in the same fashion today, blogging on WordPress about the web, sharing news about his different projects, and telling stories from his glamourous life.

Giving People a Voice

Worldwide

Citizen journalists all over the world tell their stories on the web. The past 15 years have seen publishing tools go from the hands of a few media outlets into the hands of many. Those who traditionally formed the audience are now able to report the news. Individuals share their stories and unique perspectives from across the globe.

Global Voices Online is one of the largest international networks of bloggers and citizen journalists. Using WordPress, the team of writers reports from 167 countries, and their stories are translated into more than 30 languages. Founded in 2004 by Ethan Zuckerman and Rebecca MacKinnon to highlight bloggers who build bridges between languages and cultures, its mission has evolved to "find the most compelling and important stories coming from marginalized and misrepresented communities," as well as speak out against online censorship and help people find new ways to gain internet access.

"People no longer only get their news from governments and the media, but have a wider variety of sources to enjoy," says Solana Larsen, the site's former managing editor. "Especially when it comes to societies that have limited freedom of expression that's hugely important. Ordinary citizens can help change the way current events are perceived and remembered in history."

Since its launch, bloggers on Global Voices Online have written about some of the most significant events happening in the world. In March 2011, bloggers in Japan wrote with horror about the 8.9 magnitude earthquake that killed 10,000 people and damaged the Fukushima power plant. The same year, bloggers at Global Voices Online were among those in Tunisia who provided eyewitness accounts of the revolution that toppled the government. In Egypt, bloggers wrote about the revolution that led to the downfall of Hosni Mubarak. In 2014, bloggers from West Africa wrote about the Ebola crises that swept Liberia, Guinea, and Sierra Leone. Bloggers write to remind the world that they are more than just a virus, to highlight the work of scientists and medics, and to share successes in the fight against the disease.



A resident walks past a mural about the dangers of the Ebola Virus painted on a wall off Tubman Boulevard in Monrovia. Photo by Morgana Wingard/ UNDP (cc-by-nc-nd).

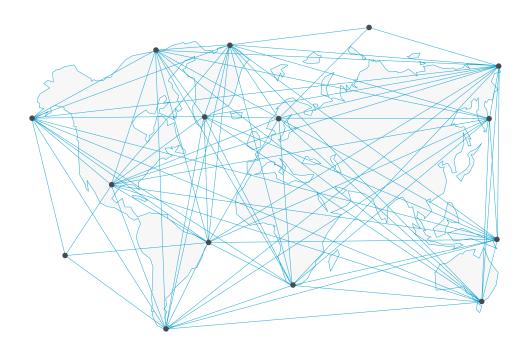
But it's not just the world-shaking events that get written about. Bloggers

write about what it's like to live in their countries, sometimes from repressive regimes where voices are so easily silenced. In Russia, a blogger writes about how the internet has become a battleground for LGBT rights. In Skopje, Macedonia, shoppers protest against government plans to makeover buildings in a neoclassical or baroque style. Syria prepares for its first TEDx conference. In Ecuador, the guayacan trees come into bloom, flooding the world with the color yellow. Each of these stories is a window into another part of the world, giving the reader a glimpse of what it is like to live somewhere else, in a different set of circumstances.

These are just a few of the stories of those that use WordPress — people who have been able to tell their stories and share their own unique perspectives on the web. But the software itself has a story, one that stretches back even before WordPress launched. Like so many pieces of free software, it didn't start out with financial backing, nor was it built by a company with clear aims and objectives. It was originally a small discarded blogging script picked up by two hackers who wanted to use it to power their blogs. So how did it come to dominate the web? Why is it so popular? And who are the people who made the software what it is today? This book charts the story of WordPress, from its humble beginnings in an apartment above a bar in Corsica to the dominant web platform that it is today.

Part One

They found each other
To build a community
And called it WordPress



CHAPTER 1

Hello World

It was February, 2002 and Matt Mullenweg (matt) was in Houston, Texas, home from school. Sitting at his homemade PC, surrounded by posters of his favorite jazz musicians, he downloaded a copy of Movable Type, installed it on a web server, and published his first blog post.

I suppose it was just a matter of time before my egotist tendencies combined with my inherit (sic) geekiness to create some sort of blog. I've had an unhealthy amount of fun setting this up. This will be a nexus where I talk about and comment on things that interest me, like music, technology, politics, etc. etc.

A few months later, and nearly five thousand miles away in Stockport, England, Mike Little (mikelittle) sat in the converted cellar that served as his home office. Surrounded by hundreds of books and CDs, he sat at a desk swamped by a 17" CRT monitor and spent his Sunday installing a free and open source blogging platform called b2. His first post is similar to Matt's. Mike tells the world about his blogging platform and his plans for his blog: "There will either be nothing here," he wrote, "or a collection of random thoughts and links. Nothing too exciting. But then again I'm not an exciting person."

These two unremarkable blog posts, *testing new system* and *welcome*, are like hundreds of first blog posts before them — a tentative first step, a software test, a pronouncement "I am here" with a promise of writing to come. What sets these two posts apart, is that they don't just mark the beginning of two blogs, but a blogging platform that supports a community and an econ-

omy, that enables millions worldwide to write their "hello world" posts, too, and publish online.

Matt and Mike published their first posts at a time when more and more people were getting online and using the internet to express themselves. Blogging, while not quite in its infancy, was still maturing. A few years earlier, in 1998, there had only been a handful of weblogs. These early blogs were often curated collections of links accompanied by snarky or sarcastic commentary. These collections were web filters; the author surfed the web for readers who could then browse through links on weblogs they trusted. One of the earliest bloggers, Justin Hall, collected links to some of the darkest corners of the internet, but in addition to sharing the weird things he found, Hall poured his personal life online, and was a key figure in the transition from link log to personal diary.

As Rebecca Blood noted in 2000, blogs evolved from "a list of links with commentary and personal asides to a website...updated frequently, with new material posted at the top of the page." It was this type of blog that brought Mike and Matt online, a format with established conventions that we're familiar with today. Blogging software publishes content with the most recent post at the top of the page — the first thing a visitor sees after landing on a site. This self-publishing premise has been a blogging feature from the earliest online diaries, to weblogs, to tumblogs, and even microblogging sites such as Twitter.

Many of the first bloggers were those already involved with the web: software developers like Dave Winer, designers like Jeffrey Zeldman, and technologists like Anil Dash. As a result, much of the earliest blog content was about the web and technology, interspersed with more diffuse thoughts and commentary about a blogger's life. With this tendency toward meta-commentary, bloggers wrote about the tools used to publish their blogs and the improvements they made to their sites. While blogging grew steadily, the community was still considered geeky and insular. Journalists disparaged bloggers, and rarely took their reporting seriously.

In 2001, blogging started to permeate the public consciousness. American political blogs became popular in the wake of the September 11th attacks on the World Trade Center and the Pentagon. Blogs such as *Instapundit* and *The Daily Dish* saw a massive surge in popularity. Andrew Sullivan, the blogger behind *The Daily Dish*, said that people didn't come to his blog just for news; "They were hungry for communication, for checking their gut against someone they had come to know, for emotional support and psychological bonding."

This was one of the first indications of the power of blogging — it gave people a voice online, providing a platform where people could come together to grieve. In his book *Say Everything: How Blogging Began, What It's Becoming, and Why it Matters*, Scott Rosenburg talks of how, despite the dotcom bubble burst, blogging increased in the last quarter of 2001. "Something strange and novel had landed on the doorstep," Rosenburg writes in his introduction, "the latest monster baby from the Net. Newspapers and radio and cable news began to take note and tell people about it. That in turn sent more visitors to the bloggers' sites, and inspired a whole new wave of bloggers to begin posting." Since that time, blogging — and later social media — has played a pivotal role in politics, public life, and even revolutions.

As blogging evolved, so did blogging tools. Services like Geocities and Tripod allowed anyone to create a website, but these sites had little in common with the dynamic stream of content on a blog. The earliest blogs were manual, using HTML and FTP. On his blog, Justin Hall had a page titled Publish Yo' Self, which taught people how to write HTML and publish online, claiming that "HTML is easy as hell!" But writing and publishing HTML got in the way of the actual writing process; the dream was to create a tool for writing content and publishing it to the web with one click. Dave Winer, whose popular *Scripting News* was one of the earliest blogs, set up UserLand Software, which developed Frontier NewsPage, a tool that enabled people to create news-oriented websites like *Scripting News*.

In 1998, Open Diary, a community where people wrote diaries online and

communicated with other diarists, launched. Then came LiveJournal, Xanga, and Pitas.com in 1999. In the same year, Pyra Labs launched Blogger, the tool often credited with popularizing blogging. Blogger automated publishing a blog to a web server: the user wrote their content, and Blogger uploaded the page to the server after each post.

Movable Type, the platform which, at one time, was one of WordPress' biggest competitors, launched in 2001. As with so many popular platforms, Moveable Type came about as a result of developers scratching their own itch. While Blogger was easy to use, it was limited in its functionality — it lacked post titles, rich text editing, and categories. For reasons like these, Ben and Mena Trott created something different for Mena's blog. When they launched Movable Type in October 2001, it quickly became the most popular blogging platform, used by many of the major blogs at the time, including *Instapundit*, Wonkette, and Boing Boing. In many ways, Movable Type raised the bar for blogging platforms. It was not simply a publishing platform, but a publishing platform that people wanted to use. "I thought it was beautiful. I think in a lot of ways it foreshadowed the web 2.0, not the gradients and things, but the beauty and the white space," recalls Anil Dash. Now, "all of a sudden my blog posts had titles and I could have comments and I could archive things by month and I could do all manner of really interesting things. And all mostly with just HTML. Pretty much as easily as Blogger, but with just so much more power."

The tools got better. Soon publishing content wasn't enough. Communities grew around different types of blogs. An author's blog became a way for them to connect with people around the world. A blogger's first, lone "hello world" quickly evolved into a series of posts that interlinked with other bloggers across the internet. Sidebars were embellished with "blogrolls," lists of blogs that gave "link love" to favorite sites. Movable Type created Trackbacks to allow bloggers to track discussion on their articles across the internet.

It was into this arena that the nascent WordPress platform first said "hello world." It did so quietly, not in Texas, nor in Stockport, but in the French

island of Corsica. It appeared, first of all, not even as WordPress at all. In June 2001, months before Mike or Matt had even published their first blog posts, a developer in Corsica created his own blogging platform. He touted it as a "PHP+MySQL alternative to Blogger and Greymatter." He called his PHP blogging platform b2.

The Only Blogger in Corsica

It was late 2000, and Michel Valdrighi (michely) was writing a blog post in his small apartment above a bar in Corsica. The "only blogger in Corsica" used a creaking dial-up AOL connection that disconnected every thirty minutes. He shared his apartment with two cats, No Name and Gribouille, who perched on a windowsill overlooking a high drop.

Like many bloggers, Michel experimented with different web publishing platforms, and started out with HTML before moving to Blogger. But he discovered that Blogger wasn't as fully-featured as he'd wanted. For example, it didn't have a built-in comment system. This was at a time when bloggers could sign up for external commenting services that were often unreliable and unstable. Michel signed up for two different commenting services — both of which disappeared, along with all of the comments and discussions. Blogger was also plagued by stability issues, and users sometimes joked that the platform was "sometimes up."

Michel was learning the server-side scripting language PHP. Unlike a language like Perl, PHP is relatively easy to learn, making it a useful tool for people who want to start hacking on software. One of Michel's first PHP projects was a Corsican-language dictionary: this experience taught him that he could use PHP to manipulate data, inspiring him to create his own blogging script.

In June 2001, Michel started developing b2, ¹ a "PHP+MySQL alternative to Blogger and Greymatter." He wrote:

Not much new ideas in it, but it will feature stuff like a built-in comment system, good users management (with complete profile etc), user-avatars (got piccies?), multiple ways of archiving your blog (even post by post if you like to do a kind of journal) (sic).

The installation will be easy, just edit a config file, upload everything and launch the install script. And there you go, but you'd like an admin control panel? It will be there, packed with options.

The PHP and MySQL combination was a good alternative to other contemporary blogging platforms. PHP is suited to the dynamic nature of a blog, in which an author regularly posts content and readers regularly return to read it. Movable Type used Perl, which rebuilt the page every time someone left a comment or edited the page, often making for slow page-load times. As a result, b2 was touted as an easy-to-use, speedy blogging tool. "You type something and hit 'blog this' and in the next second it's on your page(s)," boasts the sidebar of cafelog.com. "Pages are generated dynamically from the MySQL database, so no clumsy 'rebuilding' is involved. It also means faster search/display capabilities, and the ability to serve your news in different 'templates' without any hassle."

These features attracted Matt, Mike, and many other bloggers. But Michel admits to being a novice developer, learning PHP and MySQL while building the precursor to one of the most widely-used blogging and CMS platforms in

^{1.} The name b2 is a combination of the word "blog" and "Song 2" by the British band Blur, which Michel had been listening to regularly at that time. He combined them to make "blog2," then "blogger2," until he arrived at b2. b2 was also known as Cafelog, which was the name Michel had planned to give to the 1.0 series as no b2 domains were available, and the name was too short for a project on SourceForge.

use today. He recalls that as a fledgling PHP developer, he didn't always do things correctly:

When you look at WordPress' code and think 'Wow, that's weird, why did they do that this way?', well often that's because they kept doing things the way they were done in b2, and I sucked at PHP.

Like other early blog software developers, Michel was "scratching his own itch" — a familiar phrase in free software development. This means creating the tools you need, whether that's a blogging platform, a text editor, or an operating system. In his book, *The Cathedral and the Bazaar*, Eric Raymond writes, "every good work of software starts by scratching a developer's personal itch." If a developer has a problem, she can write software to solve that problem, and then distribute it so that others can use it too. Many blogging platforms, including Blogger, b2, Moveable Type, and WordPress, started life in this way.

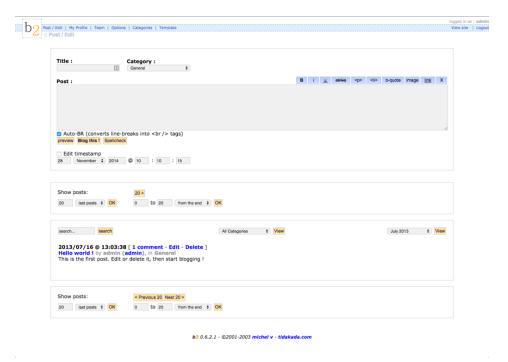
By being both the software developer and its user, the developer knows whether the tools she creates meet her real needs. When developers write code, they use it just as any user would. They know what works and what doesn't. Scratching an itch gives the developer a closer relationship with the software's users — it's grass-roots development that's bottom-up as opposed to top-down.

Michel wanted a blogging tool, not a CMS, so early b2 features were focused on creating a frictionless way to blog. Early enhancements made writing easier. For example, AutoBR was included to add a
br/> tag to create a new line every time a writer hit enter. As Michel's, and later the community's needs changed, improvements included a basic templating system, an options page, archives, an option to allow users to set their own timezone, and comments.

Michel believed that any layperson should be able to easily publish on their

blog with b2. This "making software easy for everyone" ideal permeated the b2 community and would eventually become a core ideal in WordPress' own philosophy.

By the end of June 2001, Michel was ready to say goodbye to Blogger and move his blog to b2. His blog was the first website to run on the code that would become WordPress, grandfather to millions of websites and blogs. A few days later, Michel set up a website called cafelog.com, and released the first version of b2. The software was quickly picked up. The second site running b2, the personal weblog of a schoolboy named Russell, was published in July 2001.



The b2 user interface.

Development didn't always go smoothly, although solving problems inevitably led to platform refinements. Brigitte Eaton, who ran a site called Eatonweb, was the first prominent b2 user. Eatonweb was a handmaintained list of blogs, a go-to place for discovering new blogs until the number of blogs exploded and hand-maintained lists became untenable. It

was superseded by the ubiquitous blogroll and services like Technorati, which started ranking blogs according to incoming links. Brigitte Eaton published regularly, and when she imported her blog into b2 she found that the more posts she added, the slower the blog loaded. This was because Michel didn't know how to write code for retrieving months of content from the archives. His code parsed every post on the blog to query whether the post had changed and then displayed it. For blogs with many posts, this meant a huge server workload, which quickly slowed the website. Solving this problem meant improvements for all b2 users.

Although b2 did not have an established developer infrastructure, it was open for contributions. The first major code contribution to the project was pingback functionality, from developer Axis Thoreau, who went by the handle Mort. ² Movable Type had a similar linkback feature called trackback; Michel added a version of it to b2. Trackback is a ping sent from the original author's site to a site they reference with a link. Unlike pingbacks, trackbacks are manual so the original author has to choose to send the trackback, and can edit the excerpt sent. Trackbacks are much more susceptible to spam than pingbacks; ³ whereas pingbacks ping back to the original site to verify that it is not spam, trackbacks do not carry out the same checks.

With users and developers frequenting b2's forums, a community quickly formed. The forums were a haven for people who needed help with the software. The most popular were the installation, templating, and how-to discussion forums, but there were also forums just for general chatter about the software and about blogging. Developers helped each other out with hacks for b2, and it was on the forums that the early WordPress developers first met.

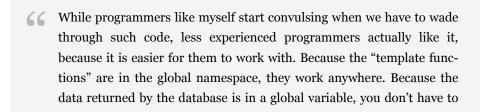
^{2.} Pingback is a linkback method which authors use to request notifications when someone links to their website. An author writes a post on their blog that links to a post elsewhere. The original site sends an XML-RPC request and when the mentioned site receives the notification signal, it goes back to the original site to check for the link. If it exists, then the pingback is recorded. A blogging system can then automatically publish a list of links in the comment section of the post, or wherever the developer chooses to place it.

^{3.} Spam pings are pings sent from spam blogs to get links on other websites.

Outside the b2 community, the software was criticized. Michel's lack of coding experience showed, especially to experienced developers. Blogger Jim Reverend wrote a post titled, "Cafelog: A Look at Bad Code." In it, Jim bemoans poor code quality in publicly released software — particularly b2 — and criticizes the software for its lack of features ⁴ and poor coding practices.

Michel's lack of PHP experience meant that he wrote inefficient code and used techniques counter-intuitive to a more experienced coder. Rather than taking a modular approach to solve a logic problem, the code grew organically, written as Michel thought about it — a sort of stream-of-consciousness approach to coding. Code wasn't so much a tool to solve a problem, but a tool to get the newest feature on the screen. This created multiple code interdependencies, which caused problems for developers new to the project. A line of code would change and break something that appeared unrelated. For Reverend, this type of "dirty code" was unforgivable. "What I do have a problem with," he wrote, "is my inability to use his code (without extensive reading and rewriting) to implement my own features." Writing extensible code is a fundamental principle of free software. If code is written in a stream-of-consciousness fashion outside best practices, it becomes difficult for other developers to extend.

It wasn't all bad. In a follow-up article, Reverend concedes that there are benefits to poorly written code:



^{4.} Particular problems that the article calls out include the fact that b2 didn't cache calls to the database. So when there was a new visit from a user, the page had to be loaded from the database and server, slowing the website. The article also criticized the lack of flexibility in the templating system and the absence of cruft-free URLs (known in WordPress lingo now as "pretty permalinks").

use any tricks to get at it. It makes extending, enhancing, and modifying the code easier for newbies.

Michel's inexperience gave the code a level of simplicity that made it easy for other novice developers to understand. "In a way it was beautiful because it was so simple," says developer Alex King, (alexkingorg). "It wasn't elegant but it was straightforward and accessible. For someone who didn't have a lot of development experience coming in — like me — it was very comfortable understanding what was going on."

The article also highlights something important: people liked using b2. With b2 they could publish without hassle. "If you are a user of this product," writes Reverend, "please don't tell me about how cool it is, or about how well it works. If you read a site powered by this engine, please don't tell me about how easy you find it to use."

But people did find it easy to use. To users, it didn't matter what was going on under the hood. It may have had its problems, but it was a friction-free way to get content online. Where users went, developers followed; even better if those users were novice developers themselves, fumbling at the edges of PHP, learning what they could do with code, which new features they could add to their website and share with other users. Even in these very early days, a schism started to open between developer-focused development and user-focused development. On the one hand, there was a focus on logical, beautifully written code, and on the other, a focus on features users wanted.

Despite having distributed b2, Michel hesistated over his choice of license. The free software movement was relatively young, and many large projects had their own licensing terms (such as Apache, PHP, and X.Org). Until he chose a license, Michel distributed b2 with his copyright.

On the b2 blog, you can follow the events leading to b2's distribution with a GPL license. In August 2001, Michel made a brief statement on cafelog.com,

telling people that they could use his code provided he was given credit for it, stating explicitly that "b2 isn't released under the GPL yet." People were taking notice of b2 and some passed it off as their own. In October 2001, a Norwegian agency claimed to own the copyright to b2 and Michel was forced to contact the Norwegian copyright agency. In the discussion around this incident, Michel made a statement that came as close to a license as he'd had so far:

66

You can use b2 for free, even if your site is of commercial nature. You're welcomed to buy me items from my Amazon.com wishlist if you're going to make much money from your b2-powered site or if you just like b2.

You can edit b2's source code.

You can re-distribute a modified or original version of b2. In no way your modifications make you author or co-author of the modified version, I'll remain b2's sole author and copyright holder. (sic)

Any help is welcomed. Feel free to submit fixes and enhancements, they might get in b2's code and your name or email address will be there as credit in the source code.

I guess this makes a b2 license for now.

Michel released b2 under this slapdash license until he realized that b2 needed an official license and started looking in earnest. It was important to Michel that b2 remain free, even if he stopped working on the project. He also wanted his code to remain free if other developers took it and used it in their own project. He recalls now that "at the end of that elimination process, GPL remained. It helped that there were already some projects using it, as I didn't want the code to end up abandoned and forgotten because of the choice of an exotic license."

Michel's choice of license was prescient. Under a GPL license, software can

be forked, modified, and redistributed. If development stops (as it did with b2), the ability to fork, modify, and redistribute can prevent software from becoming vaporware.

All was going well until May, 2002 when Michel lost his job. In the months following, he continued to develop b2, but he wrestled with depression and health issues. His electricity was cut off, he moved, and struggled to find a job. With so much going on in his life, Michel eventually disappeared. He posted about spam in December, 2002 but didn't post on his personal blog in 2003.

The users of b2 had no lead developer. There was no one to steer the project, fix bugs, apply patches, or add new features. People were concerned about Michel — they liked him and were worried about what had happened to him. In March 2003, a thread on cafelog.com discussed Michel's whereabouts. Michel's sister, Senia, posted that he was well and that he was looking for a job, and promised to ask him to connect to IRC and MSN. The responses to Senia were mixed.

One commenter said:

Please pass on to Michel that not only has he created a really nice piece of software, but he has also inadvertently built a community [...] of people, a sort of commonwealth on the blogosphere. I don't know him the slightest bit, but I wish him well and hope that any soul searching or vision quest (or vision exodus?!) he has embarked on helps him find what he needs. Yet also allows him to tie up any loose ends that he leaves behind.

Others had concerns about their own projects:

Anyone heard from Michel yet? His last post was 6 weeks ago. I want to install and promote b2 in two projects (one affiliated with a UN women's

project).. but I am nervous about doing so if there will be no developer support available. I am sure he knows that b2 is including (sic) in the Fantastico auto-installer bundled with the cPanel virtual hosting tool. I want to write an blogging article for hosting clients. Michel? You going to be around?

Michel never went back to b2 with the same gusto with which he had started. Eventually, the stagnation made the software unusable. Software needs to be maintained — bugs need to be fixed, security issues patched, new features need to be added. Blogging software needs to evolve with a fast-moving internet. It wasn't just the software that was on the verge of becoming vaporware - the community was adrift too. In the free software world, the community is as important as the software. The community is the garden in which the software grows and matures. Community members submit patches, fix issues, support users, and write documentation to help a free software project flourish. But every project needs a person, or group of people, to commit patches, create new features, and steer the project. When the lead developer disappears without a trace, community members can play around the edges, help out with support and hacks, but, without someone to step up and take the lead's place, the community dissolves. People move on to other projects, or start their own. After all, if the person who owns the project shows no commitment, how can commitment be expected from anyone else?

But the GPL license meant that neither the code nor the community had to disappear. Developers — familiar names from the b2 community forums — forked the software. While b2 itself did not continue, it was the platform that connected Mike and Matt, and the software that would provide the foundation for WordPress. With its simple PHP and focus on usability and ease of use, b2 contained the rudimentary ideals that would form the heart of WordPress. But first, the software had to be forked, and, as bloggers are wont to do, they took to their blogs to do it.

The Blogging Software Dilemma

The internet brings people from different backgrounds, countries, and cultures together around shared interests. On a small corner of the internet, b2 was forming one such community. People supported one another because they were interested in two things: blogging and blogging software.

The founders of WordPress were among those drawn into the b2 community. They were from very different backgrounds, but free software formed their common ground. In Houston, Matt Mullenweg wrote about politics, economics, technology, and his passions for jazz music and photography. Mike Little, from Stockport, wrote about blogging technology, the books he read, and his family.

Matt and Mike had very different entries into computing: Matt's father was a computer programmer, and Matt started tinkering with computers at an early age. Mike, who was 22 years older than Matt, had his first computer experiences at school cut short when a teacher caught him and his friends smoking in the paper room.

A shared passion for music drew them both deeper into programming. Mike was involved in the Manchester music scene in the 1980s, working at a record shop and handing out 'zines for nightclub manager and record label owner Tony Wilson. He lived with a local glam rock band, and it was through the band that computing came back into his life. The lead singer thought it would be cool to have stacks of televisions with graphics on either side of the stage. Mike borrowed a ZX Spectrum and used a couple of programs from com-

puting magazines: one of them bounced objects around the screen, the second created 3D text. He hacked on them until the words he wanted bounced around a screen, but the plan fell flat when they couldn't figure out how to output the program to multiple screens at the same time. Despite not being a total success, this incident further cemented his reputation for being the goto guy for all things computing and music.

By the time he arrived at b2, Mike had nearly twenty years of programming experience. That first faltering step with the ZX Spectrum had started a love affair with coding, which took him on a route through Basic, 6502 Assembler, Pascal, and C. He learned PHP during the transition between PHP versions one and two.

In Houston, Matt set up his first business while studying at the High School for the Performing and Visual Arts (HSPVA). While Mike's music passion was post-punk, for Matt it was jazz. He built computers and websites for his music teachers, including his saxophone teacher, David Caceres. He also used the internet to connect other music fans in the Houston area, setting up a forum on David Caceres' website. Matt used the forum software phpBB — his first taste of using PHP — to create a dynamic website.

With experience in PHP, b2 was the perfect platform for Matt and Mike to publish their content and to let their hacker tendencies loose. Matt experimented with other platforms, including Movable Type, but at the time, it didn't have pingbacks and comments were in pop-ups, as opposed to being inline. Movable Type was written in Perl with a DBD database, which meant that customizing Movable Type was more difficult than a PHP platform.

PHP and MySQL allowed Mike and Matt to scratch their blogging and hacking itches. They hacked on their websites and customized as they saw fit, and shared those hacks and improvements with the community. Their first discussion was around the gallery software Matt used on his blog. Other developers had their own itches to scratch: developers were talking about building their own platforms; others, in the absence of Michel, were considering a fork.

As free software licensed under the GPL, it meant anyone could fork b2 and use it, provided their fork retained the GPL license. By early 2003, it was clear that Michel would not be back. No one was maintaining b2 or fixing security issues. The blogging software at the core of the growing community was no longer evolving. The web, and blogging, was moving forward, but b2 had lost its driving force. In France, François Planque forked b2 to create b2evolution. The lack of b2 development frustrated François and he wanted to continue to develop b2 for his own needs.

In Cork, on the west coast of Ireland, Donncha Ó Caoimh, (donncha), forked b2 to create b2++, a multi-user blog platform. Donncha discovered b2 while searching for a platform to create a blog network for his Linux user group. He found b2 small, basic, and easy to modify. However, he made major modifications to create blogs.linux.ie. The templating system for b2++ used Smarty, which separated code and presentation, making it easier for users on the network to change their site's design. Donncha didn't consider b2++ a fork of b2. "A fork gives the impression that it was competing — it wasn't competing because most of what it did was add multi-user aspects to the project." While b2 was a platform aimed at individual bloggers, everything that Donncha did in b2++ created a better multi-user environment.

On his blog, Matt wrote a post called "The Blogging Software Dilemma," in which he proposes forking b2. He wrote:

b2/cafelog is GPL, which means that I could use the existing codebase to create a fork, integrating all the cool stuff that Michel would be working on right now if only he was around. The work would never be lost, as if I fell of the face of the planet a year from now, whatever code I made would be free to the world, and if someone else wanted to pick it up they could. I've decided that this (sic) the course of action I'd like to go in, now all I need is a name. What should it do? Well, it would be nice to have the flexibility of Movable Type, the parsing of Textpattern, the hackability of b2, and the ease of setup of Blogger. Someday, right?

The next day, from Stockport, Mike Little responded:

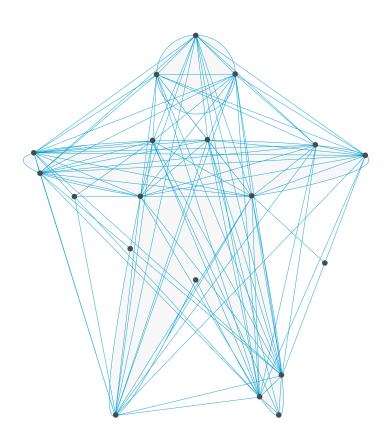


Today, the post that started WordPress gets a lot of traffic when people link to it on the software's anniversary. But for more than a year, that post sat there with just one comment, a marker of the very early days of the project, when for a few months, just Matt and Mike, in their homes at opposite sides of the Atlantic, started creating WordPress. At the beginning, it was just two developers working on a small script to make their blogs better. By forking b2, they could continue to use the software, develop it for their own needs, and scratch their own itches. At that moment, in a small pocket of the internet, the right people connected. They may have been from completely different backgrounds, but a shared love of creating tools, playing with code, and publishing online brought them together.

On April 1, 2003, Matt created a new branch of b2 on SourceForge, and, with the name coined by his friend Christine Tremoulet, called it WordPress.

Part Two

Principles designed
On true usability
For every person



Guiding Principles

It's no surprise that WordPress' founding developers had so much in common. Matt and Mike liked b2 because it was simple, hackable, and usable, and WordPress needed to be those three things too. When they forked b2, Matt and Mike didn't just inherit code, they also inherited b2's ideals — ideals enriched by fundamental beliefs about software that each founder embraced. These founding philosophies informed much of WordPress' early development, became underpinning philosophies for the project, and still inform decision making about software development and community building today.

In WordPress' nascent state as b2, the focus was on making things as easy as possible for all users, and particularly for those new to the platform. On cafelog.com, Michel kept a development log where he recorded his thoughts about developing b2. It was often just a list of things that he'd done that day, but some of the things he mentions provided insight into who he saw as b2's user base. For example, when he talked about creating a templating system, he said that he wanted to "make templates customizable by Joe Newbie," in other words, a templating system that any user could customize, regardless of background.

One key feature of b2 was the install script, written by a b2 contributor, which made installing the software easy. This contrasted with the most popular blog platform at the time — Movable Type — which was considered difficult to install. A simple install script meant that people without much technical knowledge could install WordPress. By the time b2 ceased development, it hadn't reached the point of a seamless install, but the code and the intent provided the groundwork for WordPress' "famous 5-minute install."

Allied to this focus on usability was a commitment to simplicity. Creating

simple software means providing users with only exactly what they need to get the job done. Software is a tool, and like any tool, the simpler it is, the easier it is to use. By keeping things simple, a user can figure out the software from the interface itself, with as little external instruction as possible. The way to use software should be self-evident from the interface.

When Michel started b2 development, he made the decision to focus on blogging functionality. He didn't want to create a CMS, he wanted to create a blogging platform. This meant that all of his early enhancements focused on simple tools for getting content on the screen. This focus on blogging ensured that, particularly in the early days of development, the platform remained simple.

Matt's early focus was on web standards. He wanted to ensure his own website's forward compatibility — that it would work in future browsers and devices. Jeffrey Zeldman's *Forward Compatibility: Designing and Building with Standards* was a major influence on Matt. Zeldman's book advocates creating standards-compliant websites that work across browsers and devices. Even prior to forking b2, Matt had converted most of his site to XHTML 1.1.

This meant that many of Matt's first WordPress commits focused on HTML semantics and web standards. After setting up the CVS repository (the version control system the project used at that time) and uploading the files, Matt made basic semantic changes to the index.php file, fixed whitespace issues, and converted <div> tags into heading tags. Using correct tags to generate proper headings reinforces the content's semantic meaning on the page.

In a post just after WordPress o.7 launched, Matt outlined his thoughts on the future of WordPress on WordPress.org. He wrote, "one thing that will never change is our commitment to web standards and an unmatched user experience."

Simplicity, usability, and web standards — these are principles that guide

WordPress development to the present day. Over time and as new people join the project, new axioms become a part of the community, augmenting and strengthening these guiding principles. Taken together, these are guiding principles for a user-first focus. Perhaps this came about because Mike and Matt were users of b2 who blogged before they started developing blogging software. They started developing blogging software only because they were interested in making improvements to their own blogs, and as they made improvements, they were drawn further into the development community. But they remained, particularly in the beginning, software users, which meant that while they were developing software, they retained an empathy for others. This was also true for other developers who became involved with the project. Developers didn't get involved with the project just because they felt like working on blogging software. They got involved with the project because they used blogging software. They had installed the software for their own blog, found that they wanted to change or improve something, and contributed those changes to WordPress.

What ensures that the user-first approach continues is a decision made prior to even the fork of WordPress, a legacy that the community is either sustained by or stuck with, depending on your perspective. That legacy is the GPL, the software license that Michel distributed b2 with, and it remains WordPress' license to this day.

CHAPTER 5

The GPL

WordPress is distributed with the General Public License (GPL). It contains the terms under which the software is distributed, and there are few things more divisive in the project. Matt and Mike, the founding developers of WordPress, supported the license. Before getting involved with b2, Mike had contributed to free software projects. He'd submitted patches to the version control system CVS and the DJGPP compiler, and bug reports to database software MySQL. When it came to choosing his blogging software, the license played a big part in his decision. Movable Type, for example, was not an option because it wasn't GPL. As a coder, Mike was accustomed to software-sharing and to working on someone else's code to make it your own. It was while he was working on DJGPP that he first learned about GNU and the ideas behind the GPL. "I learned about Richard Stallman and read his story," he says. "he instilled those four principles that just sort of inspired me."

The principles that inspired Mike have inspired thousands of software developers. They are ideas that resonate with hackers, that speak to freedom, and a society based on sharing and collaboration. Communities like WordPress have grown up around an ethos that has influenced models of software development all over the world.

The principles are the clauses written into the General Public License (GPL), the terms under which the software is distributed. The license was written by Richard Stallman for software he released as part of the GNU software project. ¹ Exasperated by proprietary licensing — which he believed responsible

^{1.} In his book, *Hackers: Heroes of the Computer Revolution*, Stephen Levy explores the Lab at MIT where Richard Stallman worked, and how the Lab's decline led Stallman to create GNU and write the GPL.

for the decline of the MIT hacker lab — he wanted to distribute his software with a license that protected software users' freedoms. The GPL protects four user freedoms that are at the heart of "free software." "Free" in this context does not apply to price; it refers to freedom, which is the underlying ethos that drives the Free Software Foundation.²

Free software protects four essential freedoms:

- The freedom to run the program, for any purpose.
- The freedom to study how the program works, and change it so it does your computing as you wish.
- The freedom to redistribute copies so you can help your neighbor.
- The freedom to distribute copies of your modified versions to others.

These can be summarized as "users have the freedom to run, copy, distribute, study, change, and improve the software." The freedoms are protected for all users. What this means in practice is that anyone can use a piece of free software — they can install it in as many places as they want and give it to whoever they wish. They can hack on it and modify it for their own needs. They can distribute any changes they make. When it comes to a piece of free software, the user has absolute freedom.

However, it's not enough just to write freedoms into a license. Those user freedoms need to be protected. Otherwise, free software can be absorbed into proprietary software and developers get the benefits of free software, but don't pass on those benefits to others. To ensure that these freedoms are protected, the GPL operates using what Stallman calls "copyleft." Copyleft subverts the normal use of copyright laws to protect the terms under which the work can be distributed and redistributed. It's a method of making a work free and requiring that all extended and modified versions of the work are free as well. In this way, the copyright holder can ensure that their work does not end up being part of a proprietary model.

^{2.} The choice of the word "free" in this context has dogged the Free Software Foundation throughout its life. The uninitiated think that "free" refers to cost. The Free Software Foundation often has to qualify "free" with the statement "free as in freedom, not as in beer."

Copyleft works in the following way:

- The copyright holder asserts that they hold the copyright to the work.
- The terms of distribution that anyone can use, modify, and redistribute the work, provided they pass the same freedom on to everyone else — are added.

If a programmer wants to use a copyleft work in their own software, then that new work must provide the same freedoms as the original work. Copyright is turned on its head. It is used against itself, or, as Stallman puts it "we use copyright to guarantee their freedom." A copyleft license doesn't abandon copyright (i.e., by simply putting a work in the public domain) it asserts it and uses it.

The GPL is often described as a viral license. This is because any code integrated with GPL code automatically adopts the license. The GPL spreads. For free software proponents, this is important. It means that the body of work that constitutes the commons is self-sustainable and self-perpetuating, thus preserving freedom.

To see copyleft in action, simply open up the license that comes bundled with WordPress. The head contains the following:

b2 is (c) 2001, 2002 Michel Valdrighi – m@tidakada.com – http://tidakada.com

Wherever third party code has been used, credit has been given in the code's comments.

b2 is released under the GPL and WordPress - Web publishing software

Copyright 2003-2010 by the contributors

WordPress is released under the GPL

It's the perfect example of how a copyleft license works. Michel asserted his original copyright for b2 and then distributed it under the GPL, which said that anyone was free to distribute and modify it, provided they pass those freedoms on. This meant that when it was originally forked, the developers had no choice but to license WordPress under the GPL. Michel's intention to preserve b2's freedom worked. It also means that anything that includes WordPress source code must also be GPL, so all WordPress users, no matter which form they use WordPress in, have the same freedoms. And when b2 was in danger of becoming vaporware, the license enabled Mike and Matt to fork it, and use the code as a base to continue development. The commons, of which the code is a constituent part, continues.

Mike's passion for free software is an important foundation for WordPress' development. b2 was the first free software project that Matt had been involved in. While he later developed a strong belief in the role of free software, it was in b2, and then in the early days of WordPress, that Matt first learned about the free software ethos, as a result of Mike's influence. "That's the thing I really learned from Mike," says Matt in a 2010 interview. "b2 was the first open source project I was really involved with. I didn't even really understand what that meant."

The GPL complements a user-first development focus because the license emphasizes the user freedoms. This is perhaps one of the biggest misunderstandings around the license. When the GPL talks about freedom, it is talking about user freedom, not developer freedom, and often the freedom of users comes at the expense of developers. Developers who want to use GPL code in their own software are restricted to using copyleft licenses for their products. There are also restrictions on the code they can integrate with their GPL code. To use a library in WordPress, for example, that library must be GPL-compatible. This emphasis on freedoms has been a fault line along which many debates in the project have happened.

The freedom of users is protected even further by the sheer number of project contributors. Even if there was consensus among the project's leaders on changing the license, the freedoms of WordPress users would continue. Thousands of people all over the world contribute to WordPress' codebase. Each person who writes code for WordPress retains their copyright, but agrees to license the code under the GPL. This makes it virtually impossible for the creators of WordPress to change the license. To do so, they would need to contact every single contributor and ask them to agree to the change. This would include everyone from the most prolific contributors, to those who contributed a single patch, from today's lead developers, to Matt and Mike, and as far back as Michel. This means that WordPress will always remain free.

The choice that Michael made about using the GPL has been one of the most significant decisions in the project's history. It's meant that the software's distribution terms protect user-first development, ensuring that users are free to do what they want. But what is the cost of user freedom? This is a question that has come up again and again throughout the project's history as different groups have discovered their own rights and freedoms restricted, whether they be designers, developers, or business owners.

WordPress' First Developers

Once the WordPress branch was set up on CVS, Mike and Matt started making changes. They were small and iterative, but they were the first steps that moved WordPress away from its predecessor and marked the real beginning of the project. Mike's first commits involved repopulating files that were missing from the branch, while Matt added wptexturize, a tool he created to properly format plain text (straight quotes to curly quotes, for example, and dashes to em dashes). Mike's first feature was the excerpt functionality which allows users to display handcrafted post summaries in RSS feeds and in other places.

Over the coming months, Mike and Matt made over 100 commits to the WordPress repository. Notable commits included WordPress' branding, Mike's b2links hack, which remained in WordPress until it was no longer turned on by default in WordPress 3.5 (released in 2012), major changes to the administration panel, and installation process improvements. Creating a simple installation process was something that both the developers felt strongly about. It was important that WordPress have a low barrier to entry. Anyone should be able to get on the web and publish their content. Matt replaced the b2install.php file with a new wp-install.php file. The aim was to keep configuration to a minimum. In the first version, the user had to create a MySQL database, add the configuration details to b2con-fig.php, transfer the files to their server using FTP, and then run the script. The "famous 5-minute install" was refined over time as the developers worked to simplify the process.

While developing WordPress, Mike and Matt were still active on the b2 forums, talking about the new software. But there were a few months after the

WordPress project started when it was unclear which fork would be b2's official successor. On May 23rd 2003, Michel announced that once WordPress was launched, it would become the official branch of b2.

On May 27th 2003, the first version of WordPress, WordPress 0.7, was released. Users who switched from b2 to WordPress got some new features, most notably the new, simplified administration panel and the WordPress Links Manager, which allowed users to create a blogroll.

Once WordPress o.7 shipped, there was an effort to get other developers involved in the project, starting with Donncha Ó Caoimh and François Planque, both of whom had created their own b2 forks.

On May 29, 2003 Matt emailed Donncha to ask if he would consider merging b2++ with WordPress. Donncha agreed, raising the number of official Word-Press developers to three. Matt also contacted François Planque to join the project and rewrite his b2evolution improvements for WordPress. François considered it, but felt that "it was too much work for too little benefit."

Over the year, Dougal Campbell, (dougal) and Alex King joined the team. Although not a b2 user, Dougal had investigated using b2 for his blog, and had blogged about writing his own blogging software. Alex had been more actively involved in the b2 community — while he didn't have a background in PHP, he learned it through the platform and the community. He particularly recalls Mike Little helping him refine and improve his code.

It took Dougal and Alex some months to get properly involved. Dougal was busy with work, and Alex's first impressions of WordPress weren't positive. He wrote about upgrading from b2 o.6 to either WordPress o.7 or b2++. Installing WordPress didn't offer any significant speed improvements, while b2++ gave him a site that he couldn't log into. He decided to wait until the next version of WordPress to upgrade. Matt responded, noting that there would be significant improvements to database speed later on. WordPress o.71's release announced a 300% performance boost: "We're not kidding," the announcement post reads, "this release will perform about three times

(or more) faster than previous releases of WordPress and b2." It wasn't, however, fast enough to convince Alex to upgrade. He and Matt kept in touch and in July 2003, Alex announced that he would help Matt launch a hacks section on WordPress.org.

In the early days, WordPress developed organically. A new developer's first change tended to be a small, iterative step, before they worked on a pet feature. Most developers focused on web development areas they had an interest or a background in. Matt, for example, focused on semantics and usability.

Mike improved his b2 links plugin. He also introduced wp-config-sample.php. At the time, all b2 and WordPress configuration information was stored in b2config.php. This meant that upon upgrade a user had to store the file and information safely. If they overwrote it, their configuration information would be lost, and they'd end up on the support forums looking for help. Including wp-config-sample.php meant that there was no wp-config.php file bundled with WordPress — the user renamed the file wp-config.php, protecting it from being overwritten. This configuration file protection was something Mike had done for previous clients, and while he recalls now that it seems like an obvious thing to do, it solved a problem that users had encountered repeatedly.

Dougal's major focus was the XML-RPC API which, at that time supported Blogger's API. XML-RPC is a remote transfer protocol, which allows for remote calls via HTTP. This means that the user can post to their blog or website using a client. The Blogger API didn't cover all of the features that WordPress had. The Movable Type API and MetaWeblog API had additional features that built upon the Blogger API. Dougal added the new features so that the XML-RPC layer covered WordPress' entire feature set. At the time, people would check their RSS feed over and over again and it would regenerate just like a pageview. This could increase the load on the server, slowing the site down. Dougal worked on improving these capabilities, speeding it up by including a cached version.

Alex's first project was checking in a cursor-aware quicktag code. This

enabled users to highlight a word in the text editor and use a hotkey to surround the text with HTML tags. In the end, the hacks section on Word-Press.org that he had posted about on his blog was never built. Hacks were superseded by the plugin system.

In parallel to WordPress developments, Donncha worked on WPMU (Word-Press MU). The original plan was to merge the b2++ codebase with the Word-Press codebase, but they ended up remaining separate and b2++ became WPMU. WPMU had its own version control system and, eventually, its own trac instance. Donncha recalls that WordPress and WPMU targeted different audiences. "Most people just have one blog," says Donncha, "they don't have half-a-dozen blogs running on one server so multiple sites wouldn't have been a requirement for most people." Over time, this situation changed as it became easier and cheaper for people to host their blogs and websites, but in 2003, it didn't make sense to have multi-user functionality available to every WordPress user. Instead, Donncha worked on WPMU alongside WordPress, and merged the changes from WordPress into WPMU. When a new version of WordPress was released, Donncha had to merge each file individually into WPMU. He used Vimdiff to load the two files side by side so he could review changes and push them from one file to another. It wasn't always easy. "I had to keep track of the changes that were made in case they broke anything. So at the back of my mind I'd be thinking 'did that change I made five files back, will that affect this change?" As WordPress got bigger and bigger, the merges became more difficult to manage.

In late 2004, a now long-standing WordPress developer took his first steps into the community. Ryan Boren, (ryan), was a developer at Cisco Systems. Like Mike, Ryan is a big advocate of free software; he'd contributed to free software projects before, particularly Gnome and Linux. When he found WordPress, he'd been looking for a free and open source blogging platform. Ryan had been blogging for a number of years. His earliest blog posts were on Blogger, and then Greymatter, until he decided that he "wanted something new and a little nicer." He liked WordPress' markup and CSS, so he made the

switch, scratching his own itch by writing a Greymatter importer to move his content to WordPress.

Almost straight away, Ryan had influence in the community, writing huge amounts of code and also providing advice on how WordPress development should be carried out. He had more free software project experience than anyone else at the time, and he was on forum threads sharing his thoughts on how things should be run. While he had little experience with PHP at that time, his coding background allowed him to quickly learn. It wasn't long before he was given commit access to the WordPress repository.

Inside the Bazaar

In these first days of WordPress, new developers often received commit access to the code repository. This meant a developer could work on code and add it to the core software. There was no requirement for code review (though sometimes code would be sent around among developers before being committed). WordPress was still a small blogging script used mainly by the people who'd written the software. Many of the early commits are from names absent from the commit logs today: mikelittle, alex_t_king, emc3 (dougal), and even michelvaldrighi, who came back and contributed to WordPress.

There was no real process in those early days. It was the extreme of what Eric Raymond talks about in his work, *The Cathedral and the Bazaar*. Raymond contrasts the open source bazaar-style development model with the "cathedral building" of traditional software development. The metaphor of the bazaar is apt, with its noise and bustle; people talking on top of each other, each with their own aim and agenda. A free software project operates in this jumble. Common sense tells you it's all wrong but, just like the bazaar, this throng somehow works.

The first two years of the WordPress project were marked by this laissez-faire approach to development. A developer saw a problem and fixed it. If a developer was interested in a feature, they built it. They used their own experience as bloggers, as well as their b2 forum activity, to guide them. "As bloggers, we had similar desires to those other people had," says Mike. "I seem to remember still sticking around the b2 forums and looking at what people were asking about and what people wanted while it was still in b2 and getting inspiration and ideas from that."

It wasn't until later that more hierarchy was introduced into the project, but in those first few years it hardly mattered. So few people were actually using the software. Many of the developers felt that they were working on blogging software for themselves and if other people wanted to use it, great. The legacy of that time, though, is that today's developers must maintain and work with all of that code.

A frequently asked question, particularly around the time of the fork, was whether the new WordPress developers planned to rewrite the codebase. The b2 emphasis on getting easy-to-use features on the screen quickly was often at the expense of good coding practices. Michel was learning about PHP when he wrote b2; he tried to get new features on the screen as soon as he imagined them.

This simplistic, often chaotic, codebase put some developers off. Before joining the project, Dougal posted to the support forum asking how far the developers intended to go with the rewrite: were they planning to rewrite the whole codebase from scratch, or would something recognizably b2 still remain? The response was that they planned to structure the code more logically as they went along, with object-oriented code as a long-term goal.

There wouldn't be a total WordPress rewrite. The WordPress project was launched in the wake of Mozilla's browser, which was the result of a three-and-a-half year Netscape rewrite. Using Mozilla as a negative example, many developers in the free software community argued that rewriting software is a big mistake. While rewriting might produce an all-new codebase, it lacks the years of testing and bug fixes that come from using a mature codebase. It also leaves space for competitors to emerge while developers are focused internally on rewriting.

Instead of a wholesale rewrite, WordPress' developers worked to iteratively improve and refactor code. For example, in late 2003, major changes to the file structure of WordPress involved replacing "b2" files with "wp-", dubbed The Great Renaming. Tidying up b2's files had been on Michel's agenda in 2001 and he had made some improvements already, but they lacked consis-

tency. Now the WordPress project had decided to tackle the problem. When the files were renamed with the new wp- prefix, instead of the old b2 one, hack writers found that their hacks no longer worked, but it was believed that the upheaval was necessary to organize the file structure for long-term stability. WordPress' file structure morphed from b2 to the familiar WordPress file structure used today, with many files consolidated into the wp-includes and wp-admin folders.

These sorts of iterative steps have been more of a feature of WordPress' development than any major restructuring or rearchitecting. And, over time, such changes have become harder to do as the number of people using the software means that many more sites are likely to break.

To facilitate development, the developers needed a way to communicate. The hackers mailing list wasn't set up for 17 months after project launch and the project's main developers communicated on a private mailing list. IRC was one of the first tools the community used for communication. Freenode had a b2/Cafelog channel, so it made sense for WordPress to have one too. The first of these was #wordpress.

An IRC channel provides a virtual meeting space where people can instantaneously communicate with one another. It's also possible to log an IRC channel so that a record of what happened can be posted online. In WordPress' early days, many community members spent all day hanging out in the IRC chat room. For some, it was the tone of the IRC chat room that got them more actively involved in the WordPress community. Owen Winkler (ringmaster) recalls:

I had stumbled on IRC channels for other programs before, and you know, you ask a question and no one answers or they make fun of you. WordPress was never like that. When I started out, if you came to the channel and you asked a question, people answered the question. After

you learned a bit, if you stuck around, you would answer the questions too.

It was this camaraderie that caused people to stick around. Many of them were learning to write code, making software for the first time, and they were doing it together. Over time, WordPress spawned more IRC chat rooms. The #wordpress IRC chat room morphed into a place for user support, with a small community of regulars that frequented it. The #wordpress-dev channel became the place where WordPress development took place, including weekly meetings and development chats. There were also individual chat rooms for the teams that worked on different areas of the project. ¹

WordPress.org forums were the other communication tool that the project had right from the beginning. WordPress.org launched in April 2003; initially it was home to the development blog, some schematic documentation, and support forums. The original WordPress homepage told the world that "WordPress is a semantic personal publishing platform with a focus on aesthetics, web standards, and usability." The site gave the WordPress community a presence and the forums provided a home.

Originally, the forums ran on miniBB, but as the number of people on the support forums grew, the software couldn't handle the load. In 2004, while stuck in San Francisco over Christmas, Matt took what he'd learned from WordPress and applied it to forum software, writing bbPress. Now, bbPress is a plugin, but when it was originally coded, it was stand-alone piece of software with its own templating system. Matt wrote in the launch post that he wanted to "bring some weblog and WordPress sensibilities to forum software."

Today, the WordPress.org forums are mostly used for providing support to users and developers, but back when they were first set up, they were

^{1.} In late 2014, the WordPress project moved its communication from IRC to Slack.

the community's primary method of communication. The first post on the forums appeared before WordPress was even released, with a request to beta test the software. Word had gotten out about a b2 fork and people were eager to use it.

The support forums became a place to talk about everything related to Word-Press: the Word-Press.org website, bug reports, troubleshooting, and requests for design feedback. People also posted hacks and later, plugins.

Developers communicated on these open channels, but anyone was able to join in. It didn't take long for people who weren't developers to gravitate toward the project. Sometimes, these were people who used WordPress, but lacked the technical skills or confidence to actively contribute to the code. Others were more interested in the support roles essential to a successful project — writing documentation, for example, or providing support. Some of these people would go on to have just as big an influence on the project as any of the developers.

Support and Documentation

Many early WordPress developers got their start answering support forum questions. Support was also an entry point for people who worked on other aspects of the project. A user installs the platform, encounters a problem, and visits the support forum to ask a question. That user sticks around, surfs the forums, or hangs out in the chat rooms. Then, someone asks a question that they know the answer to and that's it, they're hooked. Mark Riley (Podz) was one of the first WordPress.org forum moderators. "You're a hero to somebody every day, aren't you?" he says. "There's nothing like somebody saying thank you. 'Yay, you fixed it! It works!' You're thinking, 'Cool. I'll remember that. That was cool. I like doing this.""

A contributor community grew in parallel to the development community. Developers wrote code, other contributors helped with support and documentation. People tried WordPress, liked it, and wanted to help out. Craig Hartel (nuclearmoose) was an early contributor. He signed up at Word-Press.org in November 2003. Like many contributors, he was interested in blogging and had programming experience. "I didn't have any specific skills," he says, "but there was no better way than jumping right in. I decided I was going to find some way to get involved." He asked questions, dropped hints that he wanted to help, and after hanging out on the IRC channel, "realized that getting involved was a matter of just doing something."

The project's user-centric focus meant there were ways for people from a variety of backgrounds to help. Anyone could answer support forum questions, write documentation, or get involved with IRC discussions. Some contributors found that while developers aren't always good at explaining things to non-technical users, they could translate "developer speak" into "user

speak." These community members acted as advocates for users; Mark Riley, for example, became a go-between for the support forums and the wp-hackers mailing lists. As the developers became more absorbed in developing the software and started using it less, this sort of user advocacy became increasingly important.

Not long after WordPress launched, blogs starting cropping up dedicated to the platform. The first, Weblog Tools Collection (WLTC), was a blog that Mark Ghosh (laughinglizard) initially launched to cover every type of weblog tool. It was the first of many WordPress community blogs, followed by Wordlog by Carthik Sharma (Carthik), and Lorelle on WordPress by Lorelle Van-Fossen (lorelle).

These were places outside official channels where people congregated — where enthusiasts could write about the growing platform, providing information, tutorials, and commentary. Some focused on tutorials, sharing guides on how to do things with WordPress, others created lists of plugins and themes that drew large amounts of traffic. Mark Riley's tamba2 blog, for example, was home to a number of popular tutorials, and Lorelle Van-Fossen, who wrote many popular tutorials, ported her writing over to Word-Press' official documentation. The authors soon discovered that people were interested in what they had to say. "I suddenly got all of this attention for not knowing a lot and not really doing a lot," says Mark Ghosh, "and that really pleased me." The community respect he got for running WLTC spurred him to help out more with the forums, write his own plugins, and get more involved. Posts on WLTC about platforms like Movable Type quickly tailed off and almost all of the posts are on WordPress, or on migrating from other platforms to WordPress.

At its peak, WLTC received 12,000 to 15,000 unique hits per day, but Mark was never fully able to take advantage of the traffic. Running a niche community blog takes a lot of work and doesn't result in a huge monetary payoff. "Most of the people who came to WLTC wanted news about plugins, or they wanted to know how to do X, Y, or Z. They were trying to find this informa-

tion and the quality of audience was kind of low." These site visitors weren't necessarily valuable to advertisers. However, WLTC played a major role in the WordPress community's development, providing a home for discussion and debate away from WordPress.org.

With the project attracting so many writers and bloggers it's no surprise that six months after the project launch there were calls for documentation. Users needed it and there were people willing to write it. The people answering questions on the forums saw this need — users asked the same questions over and over again. With good documentation they could help themselves. In November 2003, WordPress' first mailing list was set up — to discuss Word-Press documentation.

The first schematic documentation was on the WordPress.org website, but this was merely an outline that lacked content. By and large they were holding pages for content that was promised in the future:



The WordPress.org docs page in late 2003.

In December 2003, the WordPress wiki launched. Now, any contributor could help with documentation. Free software projects often use wikis for

their docs. The advantage is that anyone can easily edit the content. Some wikis require a login, while others can be edited by anyone. The downside to using a wiki is that contributors have to learn a new tool with a new syntax for creating content. This is particularly onerous when the free software project is a CMS. A further problem is that, without careful curation, it can become messy, out-of-date, and difficult to navigate.

Originally, the wiki was designed to complement the official documentation. The landing page informed visitors that it was "designed for us to be able to work together on projects." While developers worked toward shipping Word-Press 1.0 in January 2004, other community members worked furiously on the wiki.

This was in contrast to the aborted work on the official documentation. An FAQ and template documentation were created. But the majority of documentation was written on the wiki.

While the official docs felt formal and rigid — a place for only official documentation writers — the wiki was informal and free-form, an experimental place where anyone could help out. By July 2004, the wiki was the main documentation for WordPress. It needed a name. In WordPress' IRC chat room, (monkinetic) suggested "Codex." The community loved the suggestion. Matt said it was "short, sweet, and we can totally own that word on Google."

Writing documentation for WordPress wasn't always easy, particularly in those first few years. In a post on WordPress.org, Cena Mayo (cena), who had taken on the role of reporting on the WordPress.org blog, outlined some of the issues:

Part of the problem is the rapidly changing face of WordPress itself. The CVS is currently at version 1.2-alpha, with almost daily updates. 1.2, which will be the next official release, is much different from the widely used 1.0.1/1.02 series, and even more different from the still-used .72.

With changing file structures, new features appearing, new template tags, and new database tables, writing formal documentation must have felt, with this rate of change, like a pointless task. By April 2004, the software changed so fast that much of the documentation on hacks (the standard way of extending WordPress) was out of date. With WordPress 1.2 shipping in May, a huge amount of documentation needed to be written. But just before release, something happened that distracted contributors from writing documentation and writing code, and that brought together everyone in the community.

CHAPTER 9

Freedom Zero

In early 2004, Movable Type was the most popular self-hosted blogging platform. The blogcensus.net service pegged Movable Type at 70% of the market share for self-hosted blog platforms in February 2004. It was used all over the world, by everyone from individual bloggers to big media outlets.

On May 13th 2004, Six Apart, the company behind Movable Type, announced changes to Movable Type's license. Movable Type 3.0, the newest version, came with licensing restrictions, which meant that users not only had to pay for software that was previously free, but pay for each additional software installation. Movable Type users were upset and angry about the license changes, and they took to their blogs to tell the world. Anil Dash (anildash), who was Vice President and Chief Evangelist at Six Apart, says:

Nobody had ever had an audience where by definition every single one of your customers had a blog before. And so nobody had ever had a social media shit storm before. And now you can see a fast food company makes a stupid tweet, and they have like a checklist. They're like, oh, okay, we fired the intern, we're sorry, it won't happen again, here's the hashtag for how we're going to apologize, we made a donation... like you just run through the list. It doesn't even get attention unless it's something really egregious. But it hadn't happened before. And mostly because nobody else had a lot of customers that were bloggers before. So you might have one. But every single person we'd ever had as a customer was a blogger.

Respected programmer and writer, Mark Pilgrim, wrote one of the most

influential posts on the license changes. In his post, Freedom Zero, Pilgrim reminds his readers that while Movable Type had been "free" (as in free from cost), it wasn't free according to the definition of the Free Software Foundation (free as in freedom, not as in beer), and while the source code might be available, it wasn't open source as defined by the Open Source Initiative. He described Movable Type as having been "free enough"; developers could hack on the code and add features, and while they couldn't redistribute their modifications, they could share patches, so everyone had been happy enough.

Pilgrim, like Movable Type's other customers, had watched as Movable Type 2.6 fell behind, while Six Apart focused on their growing hosted platform: Typepad. He, and others, waited for Movable Type 3.0 to appear, only to discover that the new features were lacking and, worse, there was a new licensing plan, so that "free enough" no longer meant free in any sense.

To continue to run his sites, Pilgrim would have to pay \$535. Instead of paying that money to Six Apart, he donated it to WordPress. He wrote:

Freedom o is the freedom to run the program, for any purpose. Word-Press gives me that freedom; Movable Type does not. It never really did, but it was free enough so we all looked the other way, myself included. But Movable Type 3.0 changes the rules, and prices me right out of the market. I do not have the freedom to run the program for any purpose; I only have the limited set of freedoms that Six Apart chooses to bestow upon me, and every new version seems to bestow fewer and fewer freedoms. With Movable Type 2.6, I was allowed to run 11 sites. In 3.0, that right will cost me \$535.

WordPress is free software. Its rules will never change. In the event that the WordPress community disbands and development stops, a new community can form around the orphaned code. It's happened once already. In the extremely unlikely event that every single contributor (including every contributor to the original b2) agrees to relicense the code under a more restrictive license, I can still fork the current GPL-licensed code

66

and start a new community around it. There is always a path forward. There are no dead ends.

Movable Type is a dead end. In the long run, the utility of all non-Free software approaches zero. All non-Free software is a dead end.

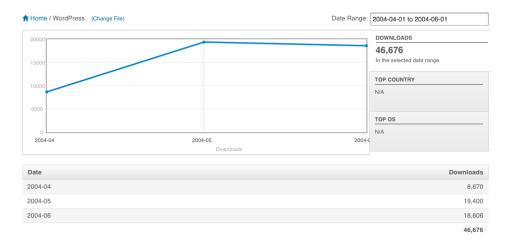
This site now runs WordPress.

Pilgrim's post was one factor that led to an exodus from Movable Type to WordPress. Even if users were willing to pay for their websites, what if Six Apart changed their licensing terms again? How much would Movable 4.0 cost? How many sites would users be able to run? It was too easy for Six Apart to change the rules, but WordPress' rules could never change under its GPL license.

Six Apart's move galvanized the WordPress community. It helped grow the WordPress platform. Dissatisfied Movable Type users needed a blogging platform that was flexible and without restrictions. Mark Pilgrim pointed them to WordPress, and the community was only too happy to help people migrate. Andrea Rennick (andrea_r), who was a Movable Type user at that time, recalls:



That's when I first heard people starting to say, 'Hey, there's this alternative' and then the buzz went around. There's an alternative. It's easier to use. You can set up multiple installs. You can't set up multiple blogs inside the platform but it was super easy to set up a whole new one on your hosting site. It was a lot easier to install on a shared host too.



The SourceForge graph showing the increase in the number of WordPress downloads between April and May 2004.

WordPress downloads on SourceForge more than doubled, increasing from 8,670 in April, 2004, to 19,400 in May. The IRC chat rooms were buzzing. Craig Hartel recalls: "We saw an opportunity to bring people who were passionate about something to our passion for WordPress. Maybe they would find WordPress to be as good, if not better than Movable Type. We spent a lot of time on the forums and directly with people to show that we were a stronger community, that we weren't the kind of community that was just going to slap some information out there and then you were on your own."

The decision not to rewrite the platform was prescient: if the community had buried itself in a rewrite, it wouldn't have been ready to welcome and support all of the new WordPress users. Instead, they were ready. For weeks, everyone was focused on helping "switchers." Developers wrote scripts to help people easily migrate from Movable Type to WordPress. Writers wrote guides to migrating from Movable Type to WordPress. On the WordPress.org blog, a post about Movable Type's licensing scheme reminds users that the GPL "ensures that the full source is available free of charge, legally." And WordPress had its first mention on Slashdot, as a free and open source alternative to Movable Type.

The WordPress community actively sought out people who were dissatisfied

with Movable Type and suggested that they move to WordPress. As Anil remembers, "I was responding in the comments on every single blog post that had complained and saw on every single blog post Matt going in and saying you should try WordPress. And I was livid."

Pilgrim was one of many prominent people who moved from Movable Type to WordPress. Another significant adopter was Molly E. Holzschlag. Along with Porter Glendinning, Molly had written a book about Movable Type, *Teach Yourself Movable Type in 24 Hours*, which was released the same week that Movable Type launched. There were people who switched for reasons other than licensing. They were frustrated by Movable Type's functionality. For Om Malik, Movable Type 3.0 had simply too many bugs.

When Six Apart changed Movable Type's license, it threw into relief the power relationship between developer and user. It became obvious that Six Apart held the power. At any time, they could increase prices, change the license, and change the rules. The license protected the developers. Word-Press, on the other hand, had a license that protected its users, and it was to this user-focused, user-driven community, that Movable Type users flocked. Many of those who moved to WordPress would go on to become long-standing community members. It was the first of many times that WordPress' license, the GPL, would ignite the community, and its positive effects saw WordPress go from a small fork of b2, to a competitor as a stand-alone blogging platform.

WordPress 1.2 "Mingus"

Those who switched from Movable Type to WordPress did so at a time when the software itself was in flux. May 2004 was the month WordPress 1.2 launched — a release that improved WordPress' flexibility.

Before WordPress 1.2, developers extended WordPress using "hacks," a concept inherited from b2. A "hack" was a set of files bundled with instructions on where to insert the code into the b2 core files. In b2, administration happened in a separate PHP file. The b2 user opened a text file — b2menutop.txt— to add the name of the PHP file that they wanted in the menu. When the code ran, the new menu item would appear after the default menu items. To add a hack to the administration screens, the user needed to place the PHP file into the admin directory and add a reference to it in the text file. If the hack output was supposed to appear on the website, the user needed to edit b2's index.php file to put it in the right place. It was a convoluted process that intimidated users uncomfortable with editing code. Also, it meant that when a user updated b2, they had to save the text file and the index file to ensure that their changes weren't overwritten, and integrate their changes back into the new files.

The plugin system brought dramatic changes. It uses hooks to enable developers to extend WordPress without having to edit core files. Hooks are triggers placed throughout the codebase that developers use to run their own code and modify the software. There are two types of hooks: filters and actions. Filters were already available in b2 for developers to create hacks, which changed content. For example, by using the_content filter, a developer can modify content under conditions they specify. Actions, which were first added to WordPress 1.2, allowed developers to run code when events

happened. For example, by using the post_publish action, a developer can run code whenever a post is published.

The plugin system is an example of Ryan Boren's influence early in the project. As many other developers' involvement trailed off, he dove straight in to development. Mike Little recalls how he hadn't noticed Ryan at first, that he'd been active, but quiet about his contributions. It was the plugin system that made Mike really take notice: "It shone brighter than most of the other things that people were doing. And that's not to say that people weren't doing good stuff, they were, but that was a step change. The hook system was a step change in WordPress development, and it was probably the first step on quite honestly making it the superior product that it is."

The plugin system transformed WordPress for core developers and the wider community. It meant that the core product didn't need to include every developer's pet feature, just the features that made sense for a majority of users. Ryan says that the plugin system enabled core developers to implement the 80/20 rule: "Is this useful to 80% of our users? If not, try it in a plugin." Unlike hacks, which involved editing core files, plugins could be dropped into a directory in a user's WordPress install. Non-technical users were able to extend their blogs without having to mess around with PHP. The barrier to entry around extending WordPress inched lower.

The first plugin — which is still bundled with WordPress — the Hello Dolly plugin, randomly displays a lyric from the Louis Armstrong song *Hello*, *Dolly!* in the top right of the admin dashboard. It was intended as a guide to making plugins. The second plugin was the blogtimes plugin, which generated a bar graph image showing when posts were created over a certain period of time.

Internationalization was another major advancement in WordPress 1.2. From its very beginning, the WordPress community was international in nature. The original developers were from the United States, the United Kingdom, Ireland, and France, and a forum thread from January 2004 shows how international the growing community was. Community members came

from Hong Kong, Wales, New Zealand, Japan, and Brazil. With people from all over the world using WordPress, translations soon followed. The Japanese WordPress site was set up in December 2003, only six months after Word-Press launched. As WordPress wasn't yet set up for localization at that time, (Otsukare), a community member from Japan, created a multilingual fork of WordPress. This was an internationalized version of WordPress that people could use to make their own localizations. It was popular among WordPress users from non-English speaking countries who wanted WordPress in their own language. Its popularity emphasized the necessity of internationalizing WordPress. A lack of proper internationalization tools in WordPress could have led many community members to use the fork instead. Maintaining two codebases in this way would have been inefficient and bug-prone.

Ryan used gettext to internationalize WordPress, which he used in the GNOME project. It involves marking up translatable strings with the gettext() function, so that a .pot file is generated containing all the translation strings. Translators translate the strings and generate .po and .mo files for localized versions of WordPress.

To internationalize WordPress, Ryan wrapped the translatable strings with the gettext() function and put them in a format that provided a full string to the translator, which retained context. He went through the code, one line at a time, found everything that could be translated, and marked it up. This meant that when WordPress 1.2 was released, it not only contained the plugin API, but was fully internationalized.

On May 19th 2004 — before WordPress 1.2 was even released with the first official .pot file — Pankaj Narula (panjak), released the first full localization in Hindi using the new gettext method. Following the release of WordPress 1.2, there was an explosion of WordPress translations, including French and Norwegian.

Version 1.2 made WordPress much more accessible and available to a wider group of people. The plugin system turned WordPress from a straightforward blogging tool into a publishing platform that anyone could extend — all you

needed was a bit of PHP knowledge. And if you couldn't write PHP, you still had access to the ever-widening commons of plugins, as developers created new plugins and distributed their code. Internationalized code meant that it was now possible for people all over the world to have WordPress in their own language, and a community of translators quickly grew around the software. Naoko Takano (Nao), who was an early member of the Japanese community, recalls that there were other free software projects that didn't take translations seriously and that WordPress' internationalization efforts encouraged her to join the project.

The Birth of wp-hackers

WordPress 1.2 development discussions happened in the support forums, the IRC chat rooms, and via private chat and email. But the community was growing. The switchers from Movable Type had increased WordPress' user base, proper internationalization made WordPress more usable worldwide, and the plugin system allowed developers to extend the platform. The growing community needed more diverse communication channels with which to manage development, communicate, and support users.

Many community members were happy with just the forums and IRC, but some developers wanted a mailing list. This was the case particularly for developers with free software project experience. A mailing list is one of the most important communication tools in a free software project, and at the time, WordPress had no development mailing lists. It took more than a year after the project's inception for WordPress' developer infrastructure to take shape. The FAQ on WordPress.org reflects the approach to development at the time:

- I am a programmer/designer/hacker can I help with the development of WP?
- Sure you can! Post your suggestions and requests for features in the forums. Design or alter some hacks to add functionality to the WP suite of tools. Got some cool ideas on an innovative design? By all means, build it and show it off! If you want to be directly involved in the daily

development of WP, the best way is to show your competence by building clean hacks or patches that conform to the developer guidelines. Once you have some code out there, contact Matt and he'll talk to you about getting you involved more directly with development.

That was the process: post on the forums, blog about it, and email the lead developers. There wasn't a clear, single entry point for developers to go. The forum didn't provide the proper infrastructure that developers were used to on free software projects. Ryan Boren had Linux development experience. He posted to a discussion thread on the forum in 2003:

Communities are built around development mailing lists. That's where the bazaar really takes place. A BB [bulletin board] isn't nearly as good for sending and reviewing patches, performing UI reviews, and so forth. The BB is a nice resource that has its purpose, but a mailing list is better suited to development traffic. I would much rather use my favorite email client with its editing, sorting, and filtering capabilities than any web BB. Plus, the mail comes to me, not me to it.

Right now, I send all of my patches directly to Matt. I hope he gets them. If there was a development mailer, I would send the patches there so all interested parties could give them a look and see what people are working on.

There was, in fact, a mailing list, but it was a private one with just Matt, Mike, and the other early developers. It wasn't publicly archived and it wasn't possible for anyone to get involved with the discussion. There were no plans to create a public mailing list as, at the time, they preferred development discussion to take place on the WordPress forums.

That discussion thread contains a seed of contention in the WordPress community — the division between people who didn't write code and people

who did. A developer mailing list could segregate the community into different groups — on the one hand developers, and on the other, everyone else. "It's exactly the mentality that causes most OS projects to become these developer-heavy, 'in-the-know' kind of places that make them unpleasant (and unapproachable) for the average user," wrote Cena.

But with a growing developer base, a mailing list was inevitable. A mailing list enables developers to ask questions about development, review patches, and discuss new features. A developer can send a patch to the mailing list and anyone can review it. It also helps to prevent the bottlenecks that can occur when a patch is sent privately to a developer and sits in their inbox waiting for review. Often, advanced users participate — those who either have questions about the product or who want to answer others' questions. Mailing lists serve a different purpose than an IRC chat room. To participate in a chat room, a person needs to be online at the time a discussion takes place. They can follow up by reading logs (if the chat room is logged), but that's after-the-fact.

The first mailing list in the project, however, wasn't wp-hackers, but wp-docs, which was set up in November 2003 to discuss WordPress' documentation and wiki. It was active for six months before the hackers mailing list was set up in June 2004. This later moved to wp-hackers. Development discussion shifted from the forums to the mailing list, leaving the forums as a place to provide support.

The wp-hackers mailing list exploded with activity, busy with heated discussions about issues such as whether comment links should be nofollow to discourage spammers, the best way to format the date, and how to start translating WordPress. Developers finally had a place to congregate. They embraced the new communication platform — their new home in the project.

As predicted in the 2003 support forum discussion, the mailing list further cemented the division between those who provided support (whether by answering support tickets or writing documentation) and those who wrote code. Coders are usually more focused on solving code problems than helping

with user support. But those providing support sometimes needed the input of those who wrote the code. It frustrated many support forum volunteers that the project's developers weren't usually available to help out.

Still, wp-hackers became an important place for WordPress development, particularly during the project's early growth. As is the general trend with mailing lists, it became less useful over time, but for the first few years after it launched, there was ongoing discussion about WordPress development. Many important features were discussed and debated. It was the place where many of today's developers had their first taste of WordPress.

The WordPress Plugin Repository was the other development resource that appeared around this time. The WordPress Plugin Repository launched in January 2005. Hosted at dev.wp-plugins.org, and powered by subversion and trac, it's quite different from the user-friendly plugin directory that we're used to today. Literally, the plugin repository was just a code repository.

In order to make it a little more accessible, a wiki was used to create an early version of the Plugin Directory.



of the state							Search
27 7 7 7 2				Login	Settings	Help/Guide	About Trac
	Wiki	Timeline	Browse Source		Vie	w Tickets	Search
L. 77-20 m			Start Page	Title Ind	lex Rece	ent Changes	Page History

Plugin Directory

You can see all plugins hosted here in the source code browser. Those listed below have extra documentation in this wiki.

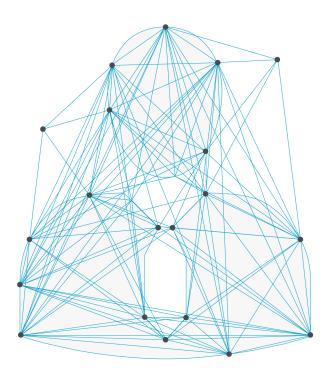
- . AuthImage adds a captcha to your comments form
- · Author Highlight Prints out a class attribute if the name and e-mail address of the comment matches those set
- AutoTrackbackByCategory allows admins to specify trackback URI's to categories
- AutoTranslator adds a flag banner and language translator links to your WP sidebar
- BasicBilingual adds template tags and extra fields in wp-admin for blogs with two languages
- BlogTimes generates a timeline of your recent blogging
- BreadcrumbNavigation makes it easier to navigate to container categories
- BunnysTechnoratiTags add tags painlessly to your posts
- · ComPreVal Comment Preview and Validation (for 1.5), forces XHTML-compliant comments
- CommentKiller deletes all comments in moderation queue
- . CommentPay asks spammers to pay for their advertising
- Cricket Moods a post mood plugin that allows the selection of moods from a list during post authoring.
- Cross-theme Stylesheets adds stylesheets to all themes.
- CSS Compress Automatically removes comments, new lines, tabs, and gzip compresses (GZIP) any CSS file called with "<?php bloginfo('stylesheet_url'); ?>"
- Dokuwiki Markup Use the power and simplicity of the dokuwiki markup in your posts and pages
- DonkieQuote Displays a random quote from a database on your blog.
- DownOnMe Rewrites header tags one level down (h2 -> h3, etc.) in multipost blog pages.
- FancyTooltips Replace standard browser tooltips with customizable, dynamic ones.
- favatars adds favicons next to comments/pingbacks/trackbacks
- FlickrPost displays specially tagged Flickr images inside blog posts
- · Gatorize adds a Newsgator rating to each posting
- GeoPlugin adds geographic information (latitiude, longitude) to each post

The first version of the WordPress Plugin Directory, in late 2005.

While being full of developer tools, it didn't have an easy interface to allow users to find the right plugins. Trac and wikis can often be difficult for non-technical software users to navigate. Users just want to get what they want, easily, and interfaces that look code-heavy can be confusing and off-putting. For developers, however, the repository nurtured the free software community's inclination toward code sharing, and was the first step toward the plugin directory on WordPress.org.

Part Three

Committers and themes!
Balance day job with passion
A company forms



CHAPTER 12

Themes

Templating was the next area ripe for improvement — users could extend their blog and have it in their own language, but there wasn't yet an easy way to change their site's design. Even in the b2 forums, many support questions were about changing a website's design. A blog is a visual representation of the author, their tastes, and their interests — a blog is a home on the internet, and, just as with any home, owners decorate it according to their tastes. To change the look of a b2 or early WordPress blog, the user had to create a CSS stylesheet. This changed the colors and layout on the front end. However, it didn't offer any real flexibility in site design; a robust templating system was needed. Michel had looked into creating a templating system for b2, but it was not until the transition between WordPress 1.2 and 1.5 that WordPress got its theme system.

A lot of research went into finding the best approach to templating. Smarty templates came up again and again. Smarty is a PHP templating system that allows the user to change the front end independently from the back end. The user can change their site's design without having to worry about the rest of the application. There are a number of posts on the WordPress.org development blog discussing Smarty's merits. Donncha even imported it to the repository (his first commit to the project). But, despite sharing PHP with WordPress, Smarty had a difficult syntax to learn. In the end, it was rejected for being too complicated. What WordPress needed was a system as easy to use as the software itself.

While templating system discussions continued, WordPress users got creative with CSS stylesheets. To make switching designs easy, Alex King wrote a CSS Style Switcher hack, which came with three CSS stylesheets. Not every-

one who had a WordPress blog wanted to create their own stylesheet, and many didn't know how. Users needed a pool of stylesheets to choose from. To grow the number of stylesheets available, Alex ran a WordPress CSS Style competition. Prizes, donated by members of the community, were offered for the top three stylesheets; \$70, \$35, and \$10, respectively.

Creating a resource similar to the popular CSS Zen Garden was the secondary aim of the stylesheet competition. Just as the CSS Zen Garden showed off CSS' flexibility, a CSS stylesheet repository would show off WordPress' flexibility.

The competition created buzz in the community. In total, there were 38 submissions. Naoko Takano won the first competition with her entry, Pink Lillies:



Pink Lillies, by Naoko Takano.

The competition successfully widened the pool of available stylesheets, increasing the number from seven to 45. On his website, Alex launched a style browser to allow visitors to view the different stylesheets. The competition ran again in 2005, this time receiving more than a hundred submissions.

By the second competition, the theme system was in place and designers had more tools to design and build their theme. Alex's experience in the second competition, however, foreshadowed problems that would dog the community in later years. In hosting 138 themes on his site, Alex had to review all of the code to make sure there was nothing malicious, and to ensure that each theme used coding best practices. He decided not to host the competition again in 2006 due to the sheer amount of work it required. WordPress' growth meant there would be even more submissions, far too many for one person to review. This problem persisted as the project grew: how does one balance a low barrier to entry with achieving good code quality, particularly in third-party plugins and themes?

Still, the 2005 competition showed off the flexibility of the brand new theme system, which appeared in February 2005, in WordPress 1.5. ¹ In the end, the theme system was built using PHP, which is a templating language itself, after all. Using a PHP template tag system was fast and easy, particularly for WordPress developers and designers who were learning PHP. It was "cheap and easy, and well-known and portable," says Ryan. The theme system breaks a theme down into its component parts — header, footer, and sidebar, for example. Each part is an individual file that a designer can customize. Designers use template tags to call different elements to display on the front end. This bundle of files is a WordPress theme. A native WordPress theme system, as opposed to a templating system such as Smarty, meant that designers could design and build themes without learning an entirely new syntax.

Bundled with WordPress 1.5 was a new default theme — an adapted version of Michael Heilemann's Kubrick. While some welcomed the new theme, others were unhappy that it was chosen:

^{1.} WordPress versions were skipped between 1.2 and 1.5. This was due to the length of time between the two releases.



The Kubrick Theme, which was WordPress' default theme until 2010.

One of the problems with Kubrick was that it contained images; if a user wanted to change their theme they had to use an external image editor. Some felt that users should not be expected to download additional software just to change their site's design. Others thought Kubrick too complex; it had .htaccess issues, and that other (better) default theme choices existed. The thread on the forums reached five pages with substantial flaming.

These types of fires ignite quickly in bazaar-style development. They can get out of hand as people take their opinions to blogs and social media. As with many debates in free software communities, the Kubrick debate burned ferociously for a short time before fizzling out. But the brief outbreak portended later debates about WordPress themes. There's something about themes that ignites passions more than other aspects of WordPress.

Still, by the release of WordPress 1.5, the software had two elements that define the project and the community: themes and plugins. These two improvements transformed WordPress from stand-alone software into an extensible platform. Extensibility creates the right conditions for an ecosystem to flourish. If a product is solid and attracts users, then developers will follow, extending the software and building tools for it. The theme and plugin systems made this possible, in both features and design.

Development in a Funnel

Following WordPress 1.5, the software development process changed, precipitated by a version control system shift from CVS to a more modern version control system, Subversion (SVN). ¹ The most active contributors at that time were Ryan and Matt, and when the move was made, none of the other original developers had their commit access renewed.

A committer is someone who can use the commit command to make changes to the group's central repository. The number of people who can do this on a project varies, with projects deciding on the number of committers depending on their own structure and philosophies. The question of who should have commit access to the WordPress repository comes up again and again. There are regular threads requesting that more people be given commit access.

The move from CVS to Subversion marked a long period in which WordPress development operated through a funnel. Contributors created a patch, uploaded it to Mosquito (and later trac), ² and it was reviewed by one of the committers who committed the code to the main repository. Over time, the funnel narrowed as Matt's focus went elsewhere and Ryan drove development. This "funnel" development style has advantages and disadvantages, and it was frequently the subject of discussion among the community, particularly on wp-hackers. The advantage of a funnelling process is that disagree-

^{1.} A version control system is a tool for managing the changes to a piece of software, document, or other collection of information. Each change is identified by a number and the name of the person who has made the change. They are often accompanied by comments about what that change is. A version control system allows a project to keep track of changes and also to revert changes as necessary.

^{2.} Mosquito was the first bug tracker used by the WordPress project. Later bug tracking moved to trac.

ments about code happen on the mailing list, before a change lands in the repository. The disadvantage is that one person has to review every patch, which frustrates developers waiting for their patches to be committed.

As WordPress began to take shape as a recognized free software project, with a defined development process and proper developer infrastructure, Ryan's previous experience guided many of these changes. WordPress differed in that Linux has only one committer — project founder Linus Torvalds — whereas WordPress had two in Matt and Ryan. Over the years this opened up to more and more committers. The other difference is that Linux has "maintainers" who maintain different subsystems before pushing patches upstream. This means that Torvalds doesn't review the thousands of patches that go into the kernel. He reviews a fraction of them and delegates review to trusted subsystem maintainers. Although WordPress in the future would move toward component maintainers, it never followed Linux in this manner.

There are a number of reasons that people request commit access: to speed up development, to prevent situations in which patches wait months for a review, to acknowledge the contributions of project regulars, to create a more egalitarian project structure. Adding a new committer to a project became a major decision and the project's approach changed dramatically from the wild west days of coding in WordPress 0.7. When the project started, anyone who demonstrated some technical expertise and minimal dedication got commit access. All of those developers could commit code to the repository whenever they wanted. But as the project and the number of users grew, it became more important to have some sort of filtering mechanism. A committer is the filter through which the code is passed. When someone is given commit access to the repository, it demonstrates a level of trust. It signifies that a contributor is trusted to know which code should make it into Word-Press.

Karl Fogel describes committers as "the only formally distinct class of people found in all open source projects." "Committers are an unavoidable conces-

sion to discrimination in a system which is otherwise as non-discriminatory as possible," he writes. As much as one tries to maintain that commit is a functional role, commit access is a symbol of trust, both in terms of coding skills and in a person's adherence to the project's core beliefs and ethos. A power dynamic exists between those who have commit access and those who don't.

Committers provide quality control. To decide who to give commit access to, a project maintainer has to first find people who not only write good code, but who are good at reviewing other people's code. This means being good at recognizing places in which code can be improved and providing constructive feedback. But there are other social skills that go along with being a committer. For one, the person needs to adhere to a project's ideals. Within Word-Press, this means being fully committed to the project's user-first approach. Committers also need to "play well in the sandbox." Someone may write flaw-less code, but if they are unable to work with others they aren't going to make a wonderful committer. It's important to make good choices about who gets commit access because once it's been given, it's difficult to take away.

In an attempt to avoid an "us and them" mentality in which committers have higher status than everyone else, the WordPress project had only two committers. This meant that everyone was subject to the same review process and the same rules. Opening it up to more people may have created dissatisfaction among those who didn't have commit access. But by not opening it up at all, developers who felt that they could never progress within the current project structure became frustrated. So few committers in a growing project also meant a mounting number of patches that languished on trac as they awaited review.

There is a perennial tug-of-war between those who contribute to the project and those who maintain it, and even among the project leaders themselves. Who gets commit access and for how long? What sort of status is attached to commit? Should only lead developers be committers? What is a "lead developers"

oper" anyway? Over the coming years these questions play out at various stages in the project's development.

A New Logo

As development progressed, WordPress' design and branding took shape. Some of the first lengthy discussions about WordPress' look and feel happened on the wp-design mailing list. This was a private mailing list of designers and developers interested in crafting WordPress' aesthetic. Michael Heilemann (michael), Khaled Abou Alfa (khaled), Joen Asmussen (joen), Chris Davis (chrisjdavis), Joshua Sigar (alphaoide), and Matt composed the main group.

The first focused design discussion was about WordPress' logo. Matt designed the original logo; it was simply the word "WordPress" in the Dante font:



The original WordPress logo.

Since the project was so small, community members had fun on the homepage, riffing on the logo with versions for seasonal holidays, birthdays, and other events.







These logos were created for WordPress.org special occasions.

Eventually, WordPress needed a professional logo. Usage was growing and WordPress needed a logo that properly represented it. As a free software project, the community was the first place to look for a logo. Community suggestions were solicited. A mixed set of results came back, which were shared with the wp-design group for feedback.

The first suggestions were from Andreas Kwiatkowski:







WordPress logo suggestions from Andreas Kwiatkowski.

A second batch came from Denis Radenkovic:



WordPress logo suggestions from Denis Radenkovic.

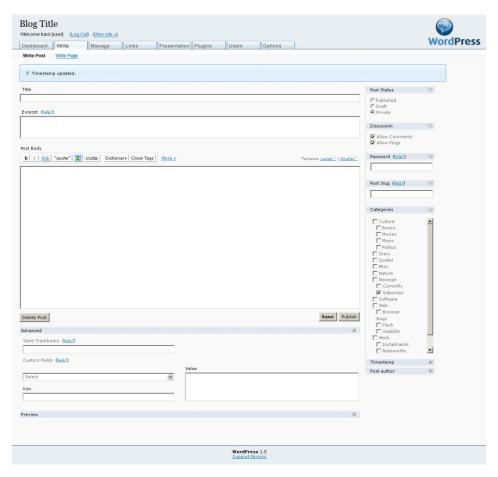
Logo feedback was mostly lukewarm, though some of the designers liked Radenkovic's heart logos, describing them as "instantly recognizable."

The heart logo was iterated on, with another version posted to the design mailing list:



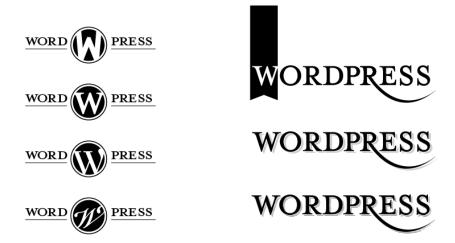
Joen Asmussen's iteration of the heart logo.

A version of the admin screen with Joen Asmussen's hear logo in situ was produced:



A version of the admin screen with Joen Asmussen's heart logo in situ.

Community members weren't the only ones tackling the logo. In March, Matt met Jason Santa Maria at South by South West and asked him to try redesigning the WordPress logo. They shared ideas about what they thought the logo should be: "the things that kept coming up were not only the idea of publishing but the idea of having a personal journal and a personal thing that might have some sort of tactile overtones," Jason says. "We were making links to things like letterpress and journaling and any sort of older representations of what it meant to publish something in a physical form." In April 2005, some of the early versions were shared with the wp-design group:



The first logo ideas sketched by Jason Santa Maria.

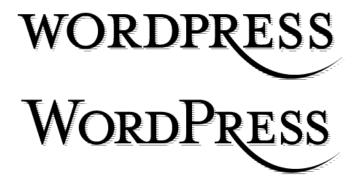
There were a number of responses from the designers on the mailing list: "a little too aristocratic" was one of the comments. The designers felt that Denis Radenkovic's design was more in line with WordPress' brand.

More designs were posted to the group:



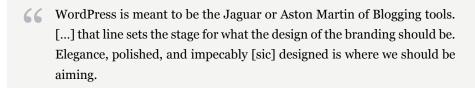






Further iterations on the logo design from Jason Santa Maria.

The members of the mailing list didn't seem to agree on WordPress' aesthetic. On one hand, there were people who felt that the logo should represent warmth and community, and on the other hand, something classic and elegant. To reach a consensus, discussions happened offline. Khaled reported back:



The logo was finally decided on May 15th, when Matt sent an email to the mailing list with the subject "I think this is it." Matt's message contained just one image:



The final design for the WordPress logo.

The major change to the logo, other than the new typeface, was the mark. The creation of a mark gave WordPress a stand-alone element of the logo which, over time, would be recognizable even without the word beside it. This could and would be used in icons, branding, and t-shirts. It's become instantly recognizable, helped by its appearance on WordCamp t-shirts the world over.

WordPress Incorporated

As the number of people using WordPress grew steadily, more and more needed to get done. Matt took a job at CNET, which allowed him to work on WordPress alongside his day job. Ryan was working at Cisco, often 60 or 80 hours a week; he would come home to work on his hobby, WordPress. Apart from time spent on the project, there are all sorts of associated costs that come with running a growing project. Server costs, for example, that increase as the project's popularity grows.

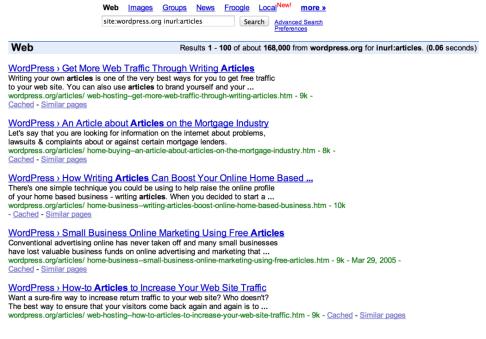
At the start of March 2005, WordPress 1.5 had seen 50,000 downloads. Just three weeks later, the number doubled to 100,000. To celebrate the landmark, there was a 100K party in San Francisco. On March 22, a group of WordPressers got together at the Odeon Bar in San Francisco.

Jonas Luster (jluster) was at the party. Jonas was an employee at Collabnet, the company behind Subversion. He and Matt had been talking about what a company built around free software should look like. Matt had an idea for an organization called Automattic: an umbrella company that would include several WordPress organizations. The first of these was WordPress Incorporated. At the party, Matt asked Jonas if he'd like to be involved. Jonas said yes.

Shortly afterward, Matt jumped on stage to announce WordPress Inc. — with Jonas Luster as employee number one. By the following morning, a couple of blogs had covered the announcement. A few days later, Matt went on holiday leaving WordPress' very first employee in charge.

Even as the party was going on, trouble was brewing. In February, a user posted to the WordPress.org support forums asking about hundreds of arti-

cles hosted at wordpress.org/articles/. The articles were about everything from credit and healthcare to web hosting. The thread was closed by a forum moderator. Blogger Andy Baio discovered the thread. He contacted Matt to ask about what was going on.



The Google search results that show the articles hosted on WordPress.org. (Google and the Google logo are registered trademarks of Google Inc., used with permission.)

Matt explained to Andy that he was being paid by a company called Hot Nacho to host the articles on WordPress.org and that he was using the money to cover WordPress' costs. "The /articles thing isn't something I want to do long-term," he told Andy, "but if it can help bootstrap something nice for the community, I'm willing to let it run for a little while." In addition to responding to Andy, Matt re-opened the support forum thread and left a response:

The content in /articles is essentially advertising by a third party that we host for a flat fee. I'm not sure if we're going to continue it much longer, but we're committed to this month at least, it was basically an experi-

ment. However around the beginning of Feburary [sic] donations were going down as expenses were ramping up, so it seemed like a good way to cover everything. The adsense on those pages is not ours and I have no idea what they get on it, we just get a flat fee. The money is used just like donations but more specifically it's been going to the business/trademark expenses so it's not entirely out of my pocket anymore.

On March 30, while Matt was in Italy, Andy published an article about it on his blog. The reaction from bloggers was bad: no matter what Matt's intentions, people saw the articles as a shady SEO tactic. A free software project should know better than to work with article spammers. Not only was Word-Press.org hosting the spammy articles, CSS had been used to cloak them. If everything was above board, why not do it out in the open? The articles also had an influence on WordPress.org's hosts, TextDrive, who hosted Word-Press for free on a server along with apps such as Ruby on Rails. Their servers were overloaded with hits from the links in the Hot Nacho articles.

With Matt out of town, Jonas dealt with the fallout from Andy Baio's article on Waxy.org. It wasn't clear where the line between WordPress.org and WordPress Inc. lay, but Jonas was the only official-sounding person. He fielded the tech community's ire and spent the next few days putting out fires. Jonas posted on his blog asking for calm, and that Matt be given the benefit of the doubt.

The Hot Nacho articles were perceived as the first move by WordPress Inc. to make money — an indication that Matt and Jonas were't going to monetize WordPress in an ethical manner. Jonas stressed that the articles had nothing to do with WordPress Inc., but since it wasn't clear at that time what WordPress Inc. actually was, people naturally lumped them together. By the next day, Andy had updated his post to report that WordPress' PageRank had dropped to o/o. WordPress.org had been removed from Google's search engine results.

The story escalated as major tech resources like *The Register*, *Slashdot*, and *Ars Technica* picked it up. On March 31, Matt posted briefly on his blog to say that he had just learned of what had happened and that he would get online to address the questions as soon as possible. The comments are littered with messages of support from people who would later be central to the project and even from Matt's rival. Matt also received support on WordPress' support forums.

On April 1, Matt issued a full response. In it, Matt explains that he was struggling to find a way to support the free software project, and that he felt that his options were limited:

To thrive as an independent project WordPress needs to be self-sufficient. There are several avenues this could go, all of which I've given a lot of thought to. One route that would be very easy to go in today's environment is to take VC funding for a few million and build a big company, fast. Another way would be to be absorbed by an already big company. I don't think either is the best route for the long-term health of the community. (None of these are hypothetical, they've all come up before.) There are a number of things the software could do to nag people for donations, but I'm very hesitant to do anything that degrades the user experience. Finally we could use the blessing and burden of the traffic to wordpress.org to create a sustainable stream of income that can fund WP activities.

Hosting the articles on WordPress.org attempted to mitigate the free software project's costs. For many people, Matt's response satisfied their concerns and questions. But for others, it wasn't enough. If a free software project has to resort to turning its highly ranking website into a link farm, what is the future viability of that project? Aren't there other ways to support it? Matt had been at the web spam summit in February, which had specifically addressed "comment spam, link spam, TrackBack spam, tag spam, and

fake weblogs." Hadn't he, at that point, realized that there might be something dubious?

As with most storms on the internet, once the articles were removed and Matt had apologized, the anger subsided. It did, however, have a lasting influence. The experience changed Matt's thinking about spam. Instead of viewing it purely as something that appears in an email inbox, he now saw it as web spam, which can quickly pollute the web. This influenced his thinking when developing Akismet, Automattic's anti-spam plugin. And while Matt had learned a harsh lesson about ethical ways to make money on the web, it would return to haunt him again and again. Any time WordPress.org clamped down on search engine optimization tactics, in themes for example, irate community members would bring up Hot Nacho.

Jonas' first few weeks at WordPress Inc. got off to an explosive start, and over the next few months he continued to work unpaid as WordPress Inc.'s only employee. He got in touch with major web hosts and created partnerships so that WordPress.org could make money by recommending hosting companies. He met with venture capitalists to talk about where WordPress was going.

At an IRC Meetup in August 2005, Matt discussed some of the ways he wanted to see the project supported. Instead of fundraising, he wanted to see a company that could generate revenue. He said that "the goal, eventually, is for it to be the biggest contributor someday, supporting community members to work on WP full-time." To protect the project from company liabilities, donations would be kept separate. This would ensure that if the company was sold, the project would be safe. In this chat, the "inc." that Matt refers to isn't WordPress Inc., but the as-yet-unannounced Automattic. When asked about employees, he said that the only one was Donncha, with Ryan Boren planned for the future. WordPress Inc. itself petered out, disappearing with much less fanfare than when it arrived. There wasn't money available in WordPress Inc. to pay Jonas a salary, especially when Matt was using his own salary from his job at CNET to pay Donncha to work on WordPress.com.

The wider community was confused about what had happened with Word-Press Inc., especially those who had watched Matt announce the company's launch on stage. In response, Matt posted a page on the WordPress Codex, explaining what had happened:

At the WordPress 100k party in March 2005, I talked about the formation of a "WordPress Inc." with Jonas Luster as the first employee. That never really got off the ground, I continued my job at CNET and Jonas (who I couldn't afford to pay a salary) ended up going to work for Technorati. It wasn't even planned to be announced at the party (since it wasn't clear logistically how it would happen) but everyone was really excited about it and I had an extra G&T (or two), we all got carried away.

The first movement toward making money to support WordPress was more of a stumble than a step. It did produce some important lessons, however, about how to run a business alongside a free software project. In any attempt to run a business based on a free software project, the company is beholden to two players: the company itself and the community. In terms of the company, investors have to be kept happy and employees have to be looked after. The company needs to make money. On the other hand, it is the community that is invested in growing the free software project, and assuring its integrity and independence. Walking the line between the two can be difficult for any community member, but particularly for a project founder or lead who has multiple reasons for securing the future of both.

WordPress.com

As WordPress Incorporated fizzled, Matt pitched a WordPress-based blogging network to his employers at CNET. Many major internet companies had blogging networks including Google, Blogger, Yahoo 360, and Microsoft Spaces. CNET also owned several domains, like online.com, that seemed perfect for a blogging network.

CNET decided against it, but the idea didn't disappear. Matt decided to build a blogging network himself. ¹

First, he needed the WordPress.com domain name. At the time, it was owned by Open Domain, an organization that registered domains and gave projects permission to use them in return for acknowledgement. It was unclear whether Open Domain was squatting on domains, or genuinely trying to help free software communities. (They'd also registered Drupal.com, then donated it to Drupal without incident). The WordPress community was understandably perturbed by the idea of someone squatting on WordPress.com. Owning the domain was key; there was little security in a blogging network without control of its own name.

After months of wrangling, Matt acquired the WordPress.com domain and work began. Donncha, as the developer of WPMU, was a perfect candidate — and fortuitously, was looking for new work opportunities. When Matt emailed the WordPress security mailing list to see if anyone was interested, Donncha got in touch.

The new WordPress.com ran WPMU trunk. Development was fast. Donncha

^{1.} CNET went on to be one of the first investors in Automattic.

worked on two servers and live-edited code. Without users to worry about, he moved quickly. He improved user-focused functionality and built network administration tools. The WPMU community helped, submitting patches to clean up admin screens. Features like domain mapping and tags, which didn't sit well in WPMU, went into plugins.

Andy Skelton (skeltoac) was WordPress.com's second employee — and first acquisition. Andy had developed Blogs of the Day, a self-hosted stats plugin that produced a list of each day's most popular blogs. After meeting him in Seattle, Matt brought Andy on board to create a stats plugin for Word-Press.com based on Blogs of the Day which, for a number of years, was featured on WordPress.com's home page.

WordPress.com opened to signups in August 2005, by invitation only, to control user growth on untested servers. Many who were involved with the WordPress project got WordPress.com blogs, including Lorelle VanFossen and Mark Riley. Every new WordPress.com member also got one invite to share.

People could also join by downloading the Flock browser, a browser with built-in social networking tools. "I thought Flock was the future," says Matt. "First we did invites, and then we thought well, we'll allow you to bypass an invite if you're using Flock because then we'll know that you're kind of a social, in-the-know person." Flock integrated with WordPress.com, and users could use it to post straight to their blogs.

Both of these measures — invites and Flock — allowed WordPress.com to grow in a steady and sustainable way. Putting in sign-up barriers controlled the flow of people and helped ensure scalability. Nevertheless, demand quickly outstripped supply; one invite even landed on eBay.

The influx of new bloggers also brought demands for support. Without a clear distinction between WordPress.com and WordPress.org, many bloggers made their way to the WordPress.org forums looking for help. This caused

some discontent among WordPress.org forum volunteers, who felt that they were doing free work for a service that would eventually become commercial.

The first attempt at WordPress.com-specific support was an email address. Developers responded to the messages, diverting their attention from writing code. "I found that I would spend half my day replying to users," recalls Donncha "and then being completely wrecked in that your mind is completely taken off programming new features, or improving things, fixing bugs, just because this whole thing is so tiring." Plan B was a mailing list, followed by WordPress.com-specific community support forums.

Eventually, support moved to a ticketing system led by Mark Riley, a veteran of the WordPress.org support forums who became WordPress.com's sixth full-time employee. For a long time, he was solely responsible for support, closing nearly 50,000 requests on his own. The next support person joined in 2008; today, WordPress.com users have a robust community on their own forums and a huge team of "Happiness Engineers" supporting them. (Although it's still not unusual for WordPress.com users to land on the WordPress.org forums.)

Creating a user-focused blogging platform like WordPress.com made sense in the context of the WordPress project: WordPress has always been focused on its users, on people who might not understand the mechanics of a server, but still want a website. WordPress.com took this accessibility to the next level, letting people fill out a form to get a blog with the power of WordPress. Still, WordPress.com is a balancing act, trying to satisfy those who want a simple website builder, with those who want the flexibility and power of the core WordPress software, and providing a middle ground for people who want a website without building one from scratch.

However, a hosted service like WordPress.com needs a revenue stream to pay for server costs, run the software, provide support, and pay staff. The free software project, with its haphazard donations and income from hosting companies, couldn't maintain such a network on a wide scale. WordPress.com needed a supporting business focused on WordPress' main audience: software users.

While the business end was coming together around the developers who had built WordPress.com, Matt was working on another product that would influence the WordPress community, an anti-spam plugin called Akismet.

Akismet

Online spam is the old annoyance of unsolicited mail, writ large and filling digital inboxes worldwide. Initially limited to email, it quickly became a blog issue: blog comment forms allow anyone to enter data, and any opportunity for data entry is a doorway for spam. WordPress, like every other blogging platform, is susceptible. Developers were working on anti-spam solutions as early as 2005, with plugins like Spam Karma and Bad Behavior.

Matt was also working on an anti-spam solution. His first attempt was a JavaScript-based plugin that modified the comment form to hide fields. Spammers downloaded it, picked it apart, and learned to bypass it within hours of launch. This is a common pitfall for anti-spam plugins; any widely-adopted plugin quickly attracts spammer attention, and a work-around soon follows. Regrouping, he tried a new tactic: crowd-sourced spam reporting. In late 2005 Matt launched the Akismet plugin for WordPress. Akismet — short for "Automattic kismet" — used the power of the community to create a plugin that evolved alongside spammer tactics.

Each time someone comments on a website running Akismet, Akismet checks the comment against all the spam in its database. If the comment is identified as spam, it's deleted. When spam comments inevitably get through, a site owner can mark them as spam to remove them and add them to the database. This means that as all the site owners using Akismet report spam, the pool of spam comments in the database grows, making Akismet more and more effective over time. "It's like all the kids on the playground ganging up against a bully." says Matt, "Collectively we all have the data and the information to stop spammers, certainly before they're able to have a big impact."

In November 2005, the wp-hackers mailing list discussed plugins to bundle

with WordPress core, and an anti-spam solution topped the wish list. Akismet came up, though not everyone was comfortable using a plugin with a commercial element; Akismet is only free for non-commercial use. (Payment is based on an honor system that asks commercial users to self-report.) Some questioned Akismet's data collection and storage methods. Akismet had one other significant shortcoming: it required a WordPress.com account, and WordPress.com hadn't officially launched. Using Akismet meant using WordPress.com, which meant finagling an invitation or downloading the Flock browser.

Despite the pushback, there was an equal amount of support. Some didn't find the pay-what-you-want system jarring, arguing that Akismet has server costs to cover. When WordPress 2.0 beta came out that month, it was bundled with Akismet. WordPress.com opened to the public two days later, making both services available to anyone.

Concerns that a money-making plugin ships with WordPress continue. Discussions about Akismet surface perennially in the community, including among core developers and at core team meetups. "It seems an unfair advantage (for Automattic) and it cuts against WordPress' goal of openness," says Mark Jaquith (MarkJaquith). "That being said, spam is still a huge problem and Akismet is still the leading product, even though there are now alternatives."

The public nature of WordPress development makes it difficult to develop a widely-adopted anti-spam tool. Dealing with spam via a service means that the plugin code itself can be open source, while the algorithms for identifying spam remain private. While there are often discussions about recommending a selection of anti-spam options rather than bundling Akismet with Word-Press core, this isn't yet viable. "The moment we recommend five plugins," says Andrew Nacin (nacin), "the spammers will all target the other four that don't have the ability to evolve and learn like Akismet does."

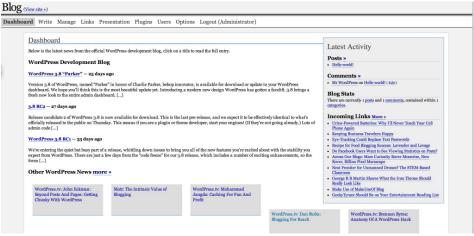
The problem of spam highlights the challenging intersection between business and free software: including a freemium plugin with WordPress doesn't

gel with the software's openness goals, but removing it would have a detrimental effect on users, contravening the project's user-first principles. Akismet is still bundled with core, and the debates continue.

Shuttle

As people experimented with ways to make money with WordPress, design changes were underway in the interface. Between 2005 and 2006, the WordPress community organized the "Shuttle" project to overhaul WordPress' admin screens. Their aim: to create a coherent, distinct look for WordPress by redesigning wp-admin, which had inherited its design from b2.

The group's aesthetic refresh reimagined and modernized wp-admin, iterating on the design without re-architecting the interface or adding new features. They started work in the wake of WordPress 1.5, which came out with a set of admin screens ripe for improvement:

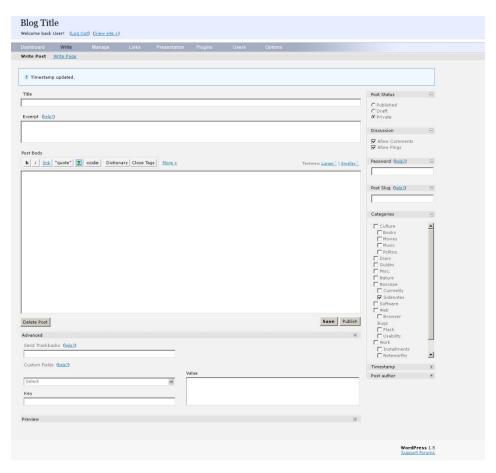


Just as dealing with spam revealed tensions in the development process, Shuttle's work highlighted a pressure point: squaring coherent design and free software development. Design decisions, which are usually highly subjective, seem not to lend themselves to a public process. To work effectively, Shuttle felt they needed to tweak their methods.

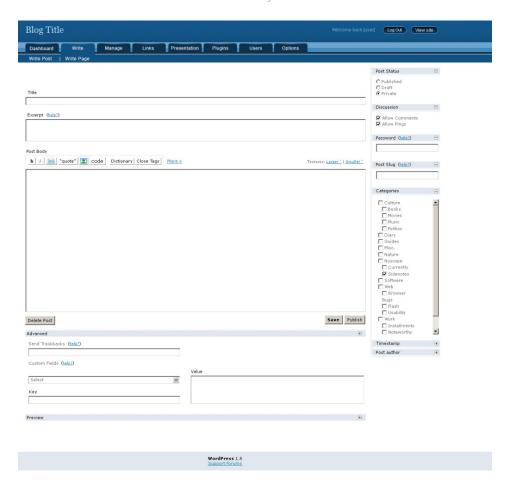
Linus's Law, outlined by Eric Raymond, says that "given enough eyeballs, all bugs are shallow." If there's a bug in the software, make the code available to many people; someone will see the solution. For an issue with a defined answer, this can speed progress considerably. With design so subjective in nature, however, Shuttle designers worried that an open process would lead to too many cooks in the kitchen, and that competing opinions would lead to stalemates.

Unlike WordPress' core developers, the Shuttle group communicated via private mailing list, wp-design. This list was open, but list archives weren't public. To be involved, a contributor had to be added to the group, and the group had to agree to add the new member. Discussions among members indicate that they deliberately tried to keep the group limited. "An open mailing list would become so much noise and so little signal so quickly that there would be no way we could move forward," recalls Chris Davis.

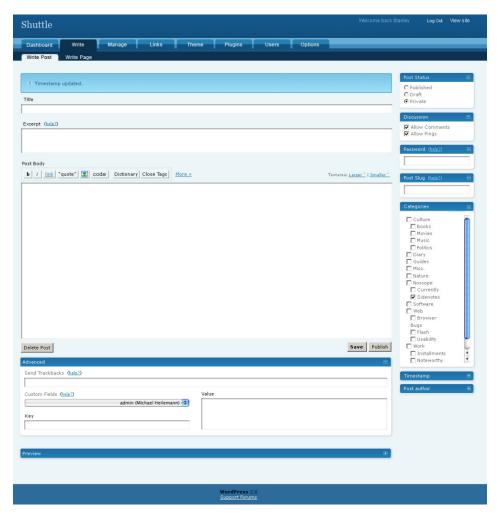
The group remained small, with three main designers — Michael, Joen, and Khaled — supported by coders responsible for realizing the design vision. The group sent designs around among themselves, offered feedback on one another's work, and iterated on the design. They focused on specific elements, mainly the Post screen (post.php). Over the course of the project, twenty-eight versions circulated among this group.



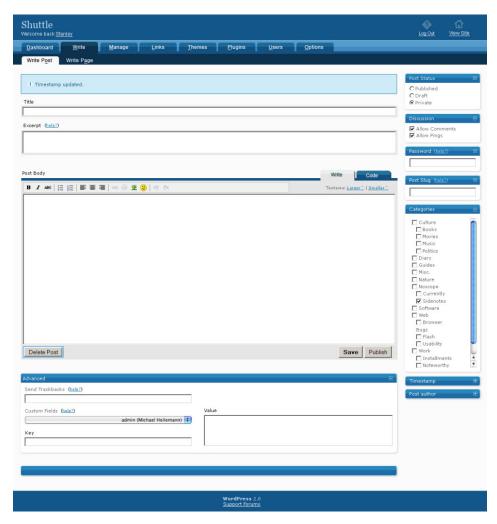
Version 8



Version 14



Version 21

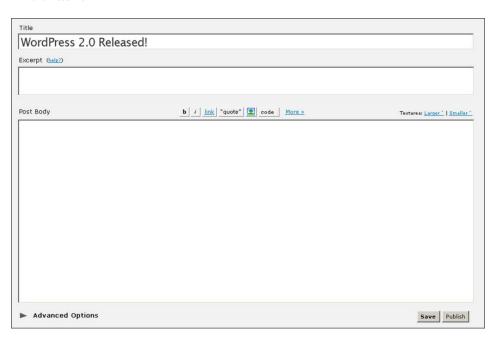


Version 26

As the design process continued, elements of Shuttle were implemented in WordPress. One of the earliest Shuttle designs increased the size of the title field in the post.php edit screen.



In WordPress 1.5



In Shuttle



WordPress 2.0

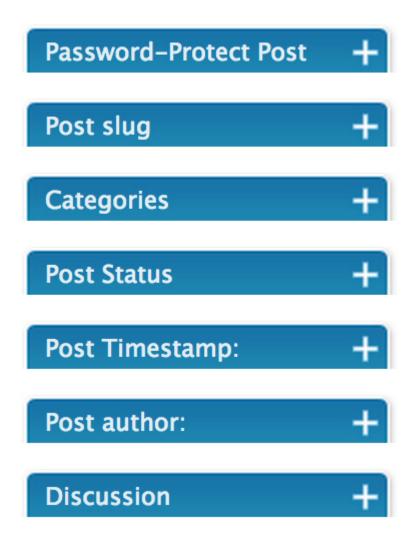
Another iteration of the post.php screen collapsed elements like post status, categories, and author.



In WordPress 1.5

Post Status	=
○ Published ○ Draft • Private	
Discussion	Ξ
✓ Allow Comments ✓ Allow Pings	
Password (help?)	=
Post Slug (help?)	Ξ

In version 8 of Shuttle



In WordPress 2.0

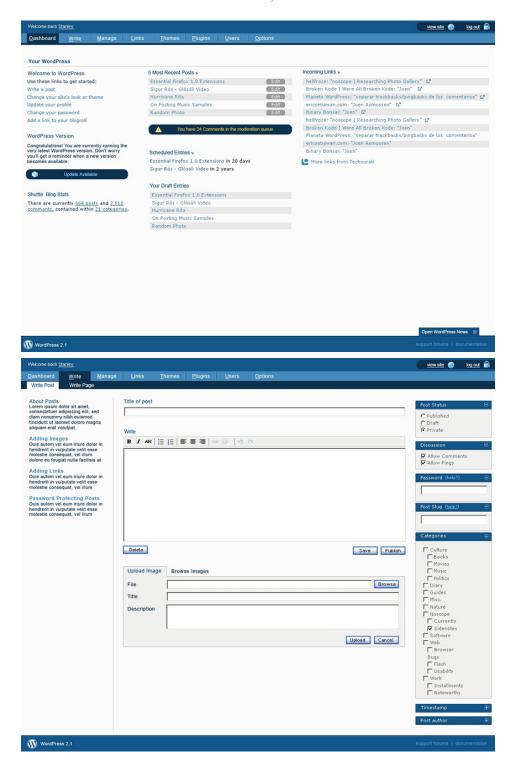
When WordPress 2.0 shipped with Shuttle-inspired changes, the feedback wasn't entirely positive. Molly Holzschlag wrote that "what WP2.0 has gained in interface appeal it's lost in some practicality too." Piecemeal implementation of their vision kept the Shuttle group from creating a single, cohesive redesign.

The project was beset by other problems. Despite the closed mailing list, progress stalled without a clear leader charged with the project's overall

vision. When one skims the mailing list's archives today, it reads like a design-focused discussion forum rather than the communications of a focused team with a clear task. As the Shuttle team discovered, a group of independent designers, each with their own ideas, can trip up design work as surely as a mailing list full of hackers.

It took the group a long time to complete work. They discussed minor design elements like rounded corners and gradients for lengthy periods, rather than examining the fundamental needs and wants of WordPress users. "I don't know if we were cooperating enough on getting a unified feel and a unified understanding of everything before we tried to actually apply our ideas to the problem," says Michael. Besides that, the contributors had jobs that absorbed their time, so work happened in fits and starts. While the original plan was to complete the admin redesign within three months, by mid-April 2005, this slid to September. The team eventually missed the deadline for WordPress 2.0 in late 2005. The next deadline (for inclusion in WordPress 2.1, which itself never materialized) was the end of January, though it was March 2006 before a complete set of mockups arrived.

It was then that Khaled sent out a comprehensive set of screenshots with his vision for the new WordPress admin:



The rest of the group loved the designs, and the developers began coding. Still, development dragged on. In mid-April, Michael Heilemann withdrew from the project, saying that he had to prioritize other commitments. The same month, Khaled asked whether Matt or Ryan would ever get around to implementing the design. The response placed the redesign as a medium priority. Changes would be iterative.

On May 14 2006, Khaled posted a complete set of designs to his blog, bringing the Shuttle project to a close. He was still under the impression that the mockups would be implemented in due course. They never were. Khaled and other members of the group felt disenfranchised, and drifted away from the community. Chris Davis and Michael Heilemann made the switch from WordPress to the Habari project.

The biggest failure of the Shuttle project wasn't the designs or implementation, but the process itself. To avoid getting bogged down with too many opinions, the group closed itself off from the community — which created a new set of problems. Isolated from the larger community, they lost touch with the development process. The project's closed nature limited opportunities for other enthusiastic designers to step in and move the work forward. For each person excited to see a spectacular WordPress redesign, there was another person resentful that a blessed group of designers was working privately on something the whole community had a stake in.

In one of the final emails on the wp-design mailing list, Matt outlined some of the things that he learned about design-oriented free software projects:

- Work should not be done in private
- Design by committee doesn't work, better to break up tasks and let individual people focus on one section
- Focus on lots of incremental changes, rather than giant redesigns (you end up in the same place, and probably sooner)

- · Document the process and decisions along the way
- Code concurrently with the designs (and iterate)
- Don't hype it, expectations get out of control
- · Avoid scope creep of features into designs
- · Set a deadline and stick to it

These tenets influenced the relationship between WordPress design and development, helping future design projects avoid the difficulties faced by the Shuttle group.

Automattic

It was time to give WordPress.com and Akismet a parent. WordPress, like many free software projects, started as a script built in a hacker's spare time. As the community grew and more people adopted the software, the hacker realized it could be a business — a for-profit venture, with dedicated employees and a company to cover costs.

In 2005, there weren't yet many businesses run alongside free software projects. Creating a company to house WordPress.com and Akismet would be a delicate balancing act to satisfy very different constituencies. The business is responsible to investors and employees, while the community of contributors has no stake in the business, but a huge stake in the project. Decisions come under scrutiny from both sides. As founder of the project and the company, Matt would be pulled in both directions.

What companies based on free software and their foundational projects share is belief in the power of free, open source software. A WordPress.com company would offer a service and generate income while keeping the core software free and accessible. Making money would be but one aim, alongside popularizing free software for the benefit of society. It seemed to make sense for a business to spring up alongside WordPress, one that shared its commitment to the open web and to democratizing publishing, and that would help sustain the WordPress project.

In December 2005, as the memory of WordPress Inc. faded, Automattic launched as a new home for WordPress.com and Akismet.

Automattic marked a new, but challenging, beginning for its employees, who had to balance the free project's aims with the company's commercial goals.

It's a balance that has affected both WordPress and Automattic throughout their close histories. The business generates income and provides contributors and support to the project, while the project creates the software that is the foundation of the business. The business needs to grow in a non-destructive, sustainable way, allowing the project to grow, mature, and attract a diverse group of contributors.

The company launched with four employees: Donncha Ó Caiomh, the original developer of WordPress MU, worked on WordPress.com's infrastructure with Ryan Boren, Matt, and Andy Skelton. They left their jobs and put their faith in WordPress — that it could grow beyond its roots as a small project into a platform that could sustain a blogging business.

In January 2006, Toni Schneider joined as CEO (or "adult supervision" for the still only 19-year-old Matt). Toni was a developer and later CEO of Odd-Post, a startup that was acquired by Yahoo! and became the basis of Yahoo! mail. After setting up the Yahoo! Developer Network, Toni joined Automattic for a new challenge.

Toni had his first encounter with the power of open source while working on OddPost. OddPost didn't have a spam filter and needed one, and an open source project provided the solution. Paul Graham had introduced his idea of Bayesian spam filtering; he open-sourced the idea, and Toni's team implemented it at OddPost. "It just showed me that this is a really powerful model," he says.

He was attracted to Automattic by the challenges of building a product around free software. WordPress already had brand recognition, but no one was yet making money from it. In a 2006 interview he said:

WordPress is an interesting new challenge because it's not like most startups, where the world still hasn't heard of you. WordPress is way past that stage. On the other hand, there is no business yet. Until Automattic came along, there was nobody working for it. It was all volunteers. So

taking that product momentum and somehow turning that into a business will be really interesting.

Other aspects of the project attracted Toni: the product wasn't a central, proprietary service, it wasn't owned solely by anyone, but by all of the people involved, and it gave users a say and a stake in a way other hosted services didn't — anyone can set up a WordPress blog. Unlike a service like Gmail or Facebook, WordPress is something you make your own. The idea of a new kind of company with a new kind of influence was too much to ignore.

Automattic brought together free software development experience with Toni's business experience to build a company organized around three key principles: a distributed workforce, a rapid-release development model, and a user-centric focus. All ultimately trace their roots to principles of open source development that still underpin Automattic today.

A distributed workforce seemed like the natural model. Contributors to a free software project come from all over the world, and collaborate online to build tools that suit their needs. Automattic's first four employees came from four different locations, and the company remains distributed, enabling it to hire people from all over the world based on their skills, not their location — a global talent pool.

Toni recalls how, in Automattic's early days, people expected its commitment to a fully remote workforce to break down. It goes against traditional business wisdom, which keeps employees supervised, in one place, and focused on hours worked instead of output. The first few employees were experienced at working in a distributed environment; new employees who found it difficult didn't last. Automattic responded by refining its hiring methods, developing a hiring process in which potential employees do a trial, working on real projects in the distributed environment, to see if the company is the right fit for them.

A rapid release model, in which developers constantly push small releases straight to the user, lets Automattic iterate quickly and improve constantly. The company eschews the traditional "waterfall model," in which development follows a strict sequence involving specifications, design, construction, integration, testing, debugging, installation, and maintenance. At Automattic, developers break down features into small components, create patches for each component, and launch code incrementally — and directly to bloggers. There are few roadblocks, and developers and designers push enhancements and new products to millions of users within a few seconds. Continuous deployment means that by May 2010, Automattic had over 25,000 releases, an average of 16 a day. Rather than optimizing for perfection, the process optimizes for speed.

A distributed workforce and rapid releases work for Automattic because the people who build its products have a direct connection to their customers, doing away with as many levels of mediation as possible. Every person in the company starts their Automattic career with three weeks of direct customer support, with one more week every year, giving each employee the opportunity to see how users interact with the products — and where the weak spots are. Developers stay happy because they can constantly push new ideas right to customers. Customers stay happy because they're constantly getting new toys to play with, and the chance to share feedback that refines the product.

Following Automattic's launch, the bulk of new hires came from the free software project. Seven of the first ten employees were from the WordPress community, all with an intimate knowledge of developing and using the software. Automattic had a wealth of developers who were not just experienced, but passionate and committed, evidenced by the considerable volunteer time they'd put into it.

From the start, Automattic was both exciting and contentious. It wasn't obvious where Automattic's boundaries ended and the WordPress project's began. Matt and Ryan, the two developers who led WordPress, were both employees of Automattic, which appeared to make it an Automattic project. It

was unclear even on the original Automattic "About" page, which lists Word-Press as an Automattic project.

The confusion was compounded by the name of Automattic's blog network: WordPress.com. "We gave the company this advantage of being able to call its service WordPress.com," says Toni. "It's been a curse and a blessing." The mainstream tech press frequently describes Automattic as the "maker of WordPress," which does a disservice to the hundreds of contributors who aren't employed by Automattic. The WordPress.org support forums are littered with questions about WordPress.com from bloggers who don't understand the difference.

On the other hand, Automattic puts millions of dollars into growing the WordPress brand, and a 2013 survey by WordPress hosting company WP Engine found that 30% of people had heard of WordPress. The name recognition increases the number of people opting for self-hosted WordPress sites rather than using Blogger, Tumblr, or other CMSs. There are many more people whose first exposure to WordPress is via WordPress.com, and a number of those eventually move to the self-hosted software. It's unlikely that the free software project would have had the money or the drive to do such extensive branding.

As for-profit entity, Automattic experimented with different ways to make money. Creating an enterprise version was considered, then scrapped — since WordPress itself can run a blogging network like WordPress.com, producing an enterprise version didn't make sense. Instead, it offered support services to enterprise-level clients. Prominent sites such as CNET, About.com, and the *New York Times* were using WordPress, and other sites, such as Gigaom and TechCrunch, shifted to WordPress.com. Automattic initially courted these sites as a marketing strategy, thinking that nothing says "WordPress can scale" better than hosting big, high-traffic sites. Toni approached big websites to offer to host them on WordPress.com; early takers included Scobleizer and the Second Life blog.

Automattic tested different subscription levels. In 2006, they launched the

Automattic Support Network at \$5,000 per year, later adding enterprise-level hosting via WordPress.com VIP at \$250 per month.

Just because software is free doesn't mean that services around that software have to be inexpensive. Companies are prepared to pay enterprise prices to ensure that their websites scale and stay online. Automattic, and other companies in the WordPress ecosystem, had to develop confidence, build up their pricing structure, and charge what they were worth.

Growing Pains

In January 2006, a Google survey found that WordPress powered 0.8% of websites. The project was growing, and with greater adoption came greater tension. Growing pains are common for organizations — especially in democratic communities where everyone has a voice — and WordPress was not immune.

WordPress contributors come from a range of backgrounds, and include formally taught developers, self-taught hackers, designers, people doing support and writing documentation, business owners, and bloggers. Contributor diversity is one of WordPress' strengths, but wrangling so many viewpoints brings its own challenges. Disagreements coalesce around three broad issues: approaches to development and community building, styles of communication, and opinions on who the software is for (users or developers, for example, or users and business owners).

The Shuttle project was but one example. While the participants communicated privately, hoping to streamline and expedite the project, other Word-Press contributors were concerned that work was going on behind closed doors and felt cut out of an important part of WordPress' evolution. Cofounder Mike Little was one of those vexed by the process.

In June 2005, the Shuttle project updated the write screen, introducing a new "pods" functionality that let users collapse parts of the screen. The changes were discussed only on the closed wp-design mailing list, precipitating a long discussion on wp-hackers about openness. While Matt saw the commit as a starting point for discussion, others perceived it as a wholesale change made without communication. Many in the community felt that discussion should happen ahead of the commit, and that the community should have been

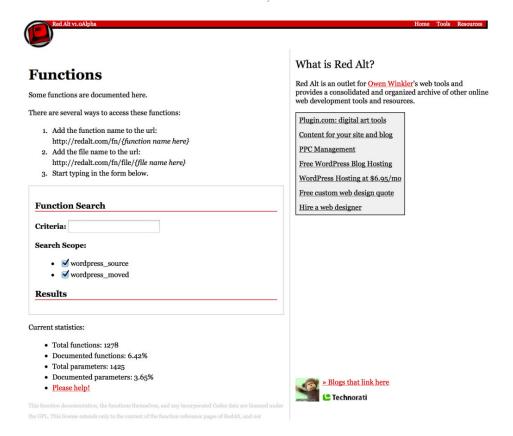
informed about Shuttle's work. That was, after all, how free software projects should function.

IRC discussions focused on Matt and Ryan as bottlenecks; only they had commit access, so all issues had to go through them. After lengthy conversations about how to make the process more open, Mark Jaquith and Sean Evans (morydd) became "bug gardeners," getting maximum trac privileges.

Inline documentation also generated heated debate. Many developers find exploring code a valuable learning tool, and there was strong community support for improving WordPress' inline documentation. However, when Rich Bowen (drbacchus) proposed documenting WordPress' functions, Carthik responded that inline documentation was frowned upon and would lead to bloat. Referring to a thread from May 2005, he offered:

Commenting is tricky. Some "well-commented" code I've seen had a bunch of lines of repetitive filler that "documented" what you could easily see by just looking at the code itself and doubled the size of the program. APIs should be documented religiously, but I think spending a ton of time on redundant comments for code only a few core hackers will ever look at will bloat the codebase and waste everyone's time. I also believe that well-written code usually doesn't need comments unless it's doing some sort of voodoo or workaround.

Rich's initial proposal was the first volley in a lengthy back-and-forth about the best way to generate documentation from the code and the best inline documentation format. Matt argued that documentation shouldn't be autogenerated, pointing to the Codex as the best place for documentation, and the conversation ultimately went nowhere despite ongoing community support. Tickets went ignored, and Owen Winkler created his own developer function reference:



Contributors from traditional coding backgrounds also butted heads with the self-taught hackers with whom WordPress is so closely identified, again over documentation. Many original WordPress developers were entirely self-taught. Michel's get-it-on-the-screen approach filtered through the project, sometimes at the expense of coding practices that more experienced developers took for granted — like inline documentation, which some hackers considered superfluous to writing code, even bloat. It would take some time before it became standard practice in the WordPress community.

Problems weren't limited to inline documentation. Mark Riley, one of Word-Press' longstanding forum moderators, pointed out in 2006 the many ways that the WordPress Codex was failing users. The Codex recommended that users hide which version of WordPress they were running — but the code itself contained a comment asking users to leave the information visible. Instructions were often confusing to less-technical WordPress users; a sec-

tion on permissions stated that "All files should be owned by your user account, and should be writable by you. Any file that needs write access from WordPress should be group-owned by the user account used by the webserver," assuming that all users would know how to configure this. Because it was so easy for non-technical users to download and install WordPress, Mark argued, documentation should be written in clear, simple language.

Release dates were another fault line. Almost every release cycle, Mark asked for the release date in advance so that he could ensure the support forums were properly staffed to handle the barrage of questions. Again and again, a release would arrive and surprise him. "All I am trying — and yet again completely failing — to ask," he pleads "is that IF you want support for the product it would nice to at least let the forums know. You guys just don't see it do you? You really don't have a clue."

Each of these issues highlights the tension between developers and non-developers on the project. WordPress encouraged people from all backgrounds to get involved, but developers weren't always interested in supporting them. Many developers in the project were self taught, with the free software do-it-yourself attitude — if they could teach themselves PHP, why couldn't others? Mark Riley's mounting frustrations are clear on the wp-hackers mailing list, as he repeatedly posts questions from the support forums and requests help from developers.

These challenges are unsurprising. When so many passionate people come together to work on a project, disagreement is inevitable. A free software project is a melting pot of people with different ideas, opinions, and backgrounds.

Conventional wisdom says that this approach to creating software shouldn't work. But somehow it does. Despite the challenges, contributors stick around, new contributors constantly join, and the project grows. In the end, what matters isn't the specifics of any one conflict, but how the community resolves them and moves on.

WordCamp 2006

The WordPress community has a long tradition of getting together to have fun and work on design and development in person. As early as June 2004, contributors were meeting in San Francisco to socialize and hold "upgrade parties." (Before the days of the one-click upgrade, users had to upgrade their sites individually using FTP; contributors gathered to help people upgrade, or to migrate from other platforms to WordPress.) A dedicated WordPress conference was the next step.

Matt, along with Tantek Çelik, had helped organize an informal technology conference called BarCamp, a series of open, workshop-style events where attendees helped create the schedule. In July 2006, Matt announced that he would host a BarCamp-style event called "WordCamp" later that summer in San Francisco. "BarCamp-style" is a code phrase for 'last minute,'" he joked.

The event — which he announced without a venue or schedule — would be on August 5th. More than 500 people from all over the world registered: Donncha flew in from Ireland, and Mark Riley from the UK. When WordCamp did get a venue, it was the Swedish American Hall, a Market Street house that served as headquarters for the Swedish Society of San Francsico.

WordCamp 2006's schedule reflects the project's concerns and its contributors' passions. Mark Riley gave the first-ever workshop on getting involved with the WordPress community, now a staple talk at WordCamps. Andy Skelton presented on the widgets feature that he was working on for Word-Press.com. Donncha spoke about WPMU, and Mark Jaquith explored Word-Press as a CMS, one of the most-requested sessions. There were presentations about blogging and podcasting, and about journalism and monetizing.



The first WordCamp. (cc license Scott Beale (Laughing Squid))

WordCamp San Francisco 2006 also saw Matt's inaugural "State of the Word" presentation, in which he focused on keeping the software simple, with streamlined installation and user-friendy theme and admin pages. He invited more people to contribute to documentation and support, highlighting Mark Riley's work, and discussed future updates in a Q&A afterwards. This WordPress year-in-review and "coming soon" talk has been a feature of every WordCamp San Francisco since (and in 2015, of the first-ever WordCamp US in Philadelphia, Pennsylvania).



Matt giving his State of the Word presentation. (cc license Scott Beale (Laughing Squid))

The event, despite the short lead time, was a success and the first of what would be a global conference series. WordCamp returned to the Swedish American Hall in 2007, to be followed by WordCamp Beijing in September 2007 and additional WordCamps in Israel, Argentina, and Melbourne, Australia.

Mirroring WordPress itself, these events are organized and supported by volunteers. There was no formal WordCamp program — if someone wanted to organize an event, they did it. Like their BarCamp ancestors, they remained informal and user-led. It wasn't until later, when the project had grown and the number of WordCamps across the world exploded, that WordCamps started to get some structure.

Speeding Up the Release Cycle

Shuttle wasn't the only piece of the project that dragged. More than a year elapsed between Shuttle-inspired WordPress 2.0 and the next version, Word-Press 2.1. Matt describes the period as "a dark time in WordPress development history, a lost year." It was time for a streamlined development process.

WordPress' approach to new versions gives each major release two numbers: 1.5, 2.0, 2.9, 3.4, 4.0. Patch releases get an additional decimal point (2.0.1, for example). Many other software projects, like Drupal, give each major release a round number; over a period of years, the version number climbs. Decimalization avoids that, althought it took WordPress a while to settle on regular numbering.

The release cycle was sporadic in the early days. Version numbers jumped haphazardly. Some releases arrived in a few months, while 265 days went by between 1.2 and 1.5 — the codebase had so many changes that WordPress skipped the interim version numbers, going straight from 1.2 to 1.5. Version 1.6 was inflated to 2.0, because of the number of features in it and because 314 days had elapsed between the releases. But the delay between 2.0 (released December 31, 2005) and 2.1 (released January 22, 2007) was the longest to date.

The mailing list was active, and more developers than ever were attracted to the project. WordPress had been downloaded 1.5 million times. But despite active conversation, no one was shipping code. The release post for Word-Press 2.1, with its plethora of new features, demonstrated the constant desire

to slip in one more feature, rather than waiting to include it in the next release. Feature-packed releases brought myriad improvements, but at a cost: delay.

The delay frustrated contributors because of long release cycles, and because commit access was still restricted to Matt and Ryan. Each free software project approaches commit access differently, and WordPress has a mixture of people who support a controlled, Linux-style commit policy, and those favoring open access. For many developers, the restrictive commit policy was partly to blame for delays.

Ryan argued that a defined funnel avoided situations in which "bridge-burning arguments happen in the repository rather than in ticket comments." When committers are limited, approach and implementation discussions take place before any code touches the main repository, where it's difficult to remove. An open commit policy makes development more agile, but "loose control leads to spaghetti code and flame wars over inconsequential issues," claimed Douglas Daulton, a supporter of the funnel, in a wp-hackers post.

In the context of these discussions, Ryan codified a commit process that remains part of development today:

- · Every commit must be accompanied by a ticket.
- Before being committed, the code is reviewed by at least two people —
 one for a code review and the other for an integration/architecture
 review.
- These reviews are carried out by trusted contributors.

By March, 2006, incremental, positive changes were evident. Ryan proposed a focused #wordpress-dev IRC channel as a complement to the #wordpress channel, which had become a place for general chatter and support. Mark Jaquith pointed to the Bug Gardening scheme's success in opening trac up; extending privileges to "bug gardeners" responsible for triaging tickets distributed the workload and led to "a whole slew of people who are autonomously fixing bugs, submitting patches, and having them committed."

The trac mailing list was another positive change, transforming trac from simple bug-tracking, to a place for focused discussion and curtailing wp-hackers' tendency to wander down conversational rabbit holes.

As work on WordPress 2.1 went on, Ryan suggested getting WordPress 2.0 into Debian stable, the official version of the Debian open-source operating system. WordPress was already in the testing and unstable distributions, which each contain packages lined up for inclusion in the stable version. To be included in Debian stable, WordPress 2.0 would need to be maintained for three to five years, including backporting security issues to ensure that all previous versions remained stable. Mark Jaquith took on the task of maintaining the WordPress 2.0 branch, and the project committed to maintaining it for three years, until 2010.

Shortly after he began leading the legacy branch, Mark Jaquith received commit access. Mark had been involved with WordPress since 2004, coming to the project from Movable Type. In his two years of work he'd made many contributions, including the successful bug gardening scheme. It was a sign that the funnel was starting to broaden, and the beginning of a period when — slowly but surely — more committers were added.

Commit access was offered sparingly; it wasn't given out based on coding expertise or how much work a developer had done. Adding a new committer meant trusting them to uphold the project's user-first ethos. "It's not just that you've shown a commitment to contributing," says Peter Westwood (westi), "but you also have shown an understanding of the ethos of the community, their shared beliefs, and their philosophies."

Adding another committer didn't speed up the development cycle, so the team took a more serious look at the WordPress development process — or lack thereof. A discussion on moving to a 120-day release cycle started on wphackers, and Matt shared his thoughts on what a release timeline should look like:

- · 2 months of crazy fun wild development where anything goes.
- 1 month of polishing things a little bit, and performance.
- · Feature freeze.
- 1 month of testing, with a public beta release at the beginning.

The community response was positive. A 120-day structure provided a concrete deadline, and the shorter release cycles meant that a feature need not hold up a release, as the next version would, in theory, arrive predictably. (In practice, this often depended on what the feature was, who had spearheaded it, and how far along it was). WordPress 2.1 was the first version to ship with a concrete release date for the next version: April 23 for WordPress 2.2.

Publicizing release dates gave the project firm deadlines, which came to be seen as a promise — a release date promise that users could plan around. The project didn't quite make the next deadline, but was only a few weeks off; WordPress 2.2 released on May 16, 2007.

Trademarks

In March 2006, Automattic filed to register the WordPress trademark, and the competing interests of WordPress (the open-source project) and Word-Press.com (the commercial enterprise) again clashed.

Trademark registrations can be slow processes; a registrant has to demonstrate that they're proactively protecting that trademark. Toni Schneider spent many of his early years at Automattic doing just that. It was a challenge, he says, to figure out "how can we make this a very open brand that lots of people can participate in but it doesn't just turn into some mess that doesn't mean anything in the marketplace because everybody just uses it in different ways." The large ecosystem around WordPress can make it difficult for users to know who they're dealing with: the official project? Automattic? A third-party developer or consultant? Avoiding trademark dilution was critical to ensure clarity.

Any trademark can, over time, become generic: the meaning of the name morphs from identifying a specific thing to an entire class. The word "aspirin," which is used as a general term for a class of medications in the United States, is actually a registered trademark of Bayer in 80 other countries. Office machinery company Xerox once ran an advertising campaign to dissuade people from using "xerox" as a verb. The onus is on the trademark owner to prevent their trademark from becoming generic.

The first meaningful attempt to protect the WordPress trademark sought to establish control over the domain. To successfully register a trademark, the owner has to enforce the trademark consistently. For WordPress this meant a domain policy — a ban on using WordPress in top level domains for any sites other than WordPress.org and WordPress.com. Just before filing,

WordPress.org created a domain policy requesting that community members not use "WordPress" in their domains.

Once the application was submitted, Automattic began enforcing the domain guideline to protect the WordPress trademark. Many websites used Word-Press in their domain names — community websites, businesses selling WordPress products and services, WordPress fans, and more. There was confusion about what people could and couldn't do. Could community members use WordPress in the title of their website? Was it okay in subdomains?

In a comment thread on Lorelle VanFossen's popular blog, community members wonder whether they can use the label "on WordPress" (as in "Lorelle on WordPress") on their blogs. After lengthy discussion in the comments, Lorelle updated her post to add:

After many discussions with Matt and the WordPress Community and staff, it is official. It is a violation of trademark to use WordPress in your site's domain name. You may use it in the title and in blog posts, however, please note that using WP or WordPress in the site title implies the site specializes in WordPress content. Don't disappoint.

The new policy influenced everything from community sites to businesses. International WordPress groups that had set up their own websites — wordpress.dk, wordpress.fr, wordpress.pt — were particularly affected. These community gathering points often had translated documentation, links for localized versions of the software, and support forums to make WordPress fully available to non-English speakers. To these groups, the domain policy felt like a top-down order rather than a community decision. For others who believed that the WordPress name and logo belonged to the project itself, domain restrictions seemed counter to the WordPress ethos.

Also affected was wordpress-arena.com, a site running a WordPress theme contest. After Alex King's 2005 CSS competition, theme competitions became

popular community events. The contests had clear community benefits, increasing the pool of themes, allowing developers to show off their skills, and pushing the boundaries of theme development. Although he enforced the domain guideline, Matt left the site a message of support, also noting that "Unfortunately for every cool usage (like this competition, potentially) there are a dozen scammers and spammers misusing WordPress, selling spamming scripts or copies of WP itself."

Six months later, official cease and desist letters went out to sites still using WordPress in their domains. Attention centered on two commercial websites, wordpressvideos.com, run by Brandon Hong, and Sherman Hu's wordpresstutorials.com. Both were registered prior to WordPress' trademark policy, and presented a unique trademarking challenge. The main test of trademark violation is "likelihood of confusion." International community sites could easily be confused for the main WordPress project, as could sites selling plugins, themes, and other CMSs, but tutorials and books present a gray area. Similar sites in the Adobe community (photoshoptutorials.ws and photoshopessentials.com, for example) are not owned by Adobe, but are not seen as trademark violations.

Sherman Hu and Brandon Hong both received letters. As is often the case in the blogging world, a blogger wrote about it: in his post, Andy Beard remarks on Automattic's tardiness in registering the trademark and preventing others from using it. He also defends the two sites being singled out. Both provided WordPress services and cultivated their own communities; they weren't, he felt, the "spammy products" that Matt thought they were. Besides, just a year earlier, there had been a link farm on WordPress.org.

Others jumped to defend the two sites. Even those who supported Automattic's trademark position bristled when Matt branded the two sites as "snake oil," and Hu's customers and friends flocked to Beard's post to voice their support. Other prominent internet marketers, including copyblogger's Brian Clark, took issue with the fact that long sales letters were branded spammy and scammy.

Eventually, the sites came to an agreement with Automattic. Sherman agreed to add a trademark symbol beside every use of the word WordPress, and Hong's WordPress Tutorials site came out with a redesign. Sherman eventually shut WordPress Videos down in 2008, moving on to focus on his consulting business.

Since then, Automattic has consistently enforced the WordPress trademark. While to many it appears that Automattic is motivated by commercial benefit, its involvement brings advantages as well; as commercial entity, it's able to put resources into enforcement that the free software project doesn't have. Still, it would be several more years before all the WordPress trademark issues were resolved.

Habari

Three years in, the project included developers, support forum volunteers, documentarians, and others helping out. Many had been around since the early days, and while the project and software had grown and changed, some felt that the governance structure had not. A free software project can be run in many different ways. WordPress has always had a Benevolent Dictator for Life (BDFL) structure: the final decision often rested with Matt, even if it was Ryan Boren who made and implemented most of the technical decisions. Some contributors, however, felt that the project could benefit from a committee structure, with a team of people driving the project's direction and decision making. Others were unhappy with how Matt led the project, and left. The first major fork of WordPress didn't involve software; it was within the community.

Some of the unhappy contributors met in September 2006, at the Ohio Linux Fest in Columbus. They had lunch together at a Buca di Beppo. Among the diners were four WordPress developers — Owen Winkler (ringmaster), Rich Bowen (drbacchus), Scott Merrill (Skippy), and Chris Davis (chrisjdavis). During lunch they talked about their grievances. The same story came up again and again — patches were rejected because they didn't fit the project's vision. The conversation kept returning to the possibility of setting up a new free-and-open-source (FOSS) project. By the time the meal ended, the developers had decided to stop talking and act: they would create a new blogging tool. A few weeks later at ApacheCon, they chose a name: Habari, which is Swahili for "What's up?" or "What's the news?" They created a governance structure and development ethos for the project, and started work in earnest.

Habari launched in January 2007, and many of its founding principles are

in direct opposition to those of the WordPress project. The Habari Motivations page addresses the issues that the founding developers objected to in the WordPress project — and explains their different approach to running a free software project. It also highlights some problems that were afoot in the WordPress project three years after its launch. Every free software project — indeed every group or community — has its problems, especially as it becomes established. Tensions that were ignored during the initial heat of enthusiasm become entrenched, and as enthusiasm fades, those tensions surface.

Governance style was one major issue. Many weren't happy with the BDFL model, despite its prevalence in free software projects, from Linus Torvalds of Linux to Guido van Rossum of Python. A BDFL typically has final say about the project's direction and vision, but as a project grows, there are many people who wield influence and make decisions.

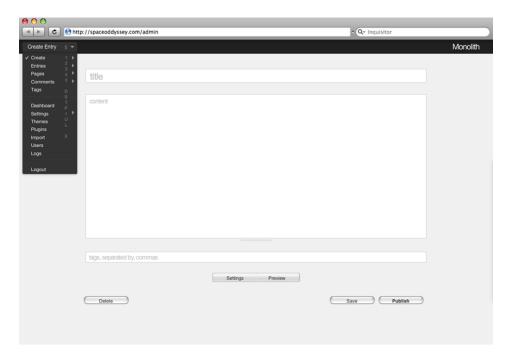
Rich Bowen, one of the developers who was dissatisfied with how WordPress was run, came from the Apache project. Apache has a committee model. The committee comprises developers and non-developers, all of whom have a say in how the project runs. Unlike WordPress, which requires that commits be approved by the committer and/or the patch reviewer, commits in Apache require consensus. Habari launched with a committee structure, much like Apache.

Designer Michael Heilemann was one person enticed by Habari. He'd designed the Kubrick theme and was looking for a new challenge after the Shuttle project failed before implementation.

Michael redesigned the Habari interface — which he says was both a good and bad experience. He enjoyed designing and implementing it, less so getting it approved. Because of Habari's committee structure, a lot of time was spent discussing the new admin interface. People with no design background weighed in with opinions and everyone received equal weight. This left Michael feeling like he couldn't get his work done and he ended up

leaving Habari. When asked whether he prefers a BDFL or an Apache-style model, he says:

It's easy to end up in very long discussions if everybody has equal footing. And that makes for a great democracy, but it's also very hippie, 60s, everybody gets to sit around and share their opinion, but that's not always something that's really worthwhile. You don't actually, necessarily, get a better product out of it. And so often you need somebody with vision, or at least somebody with a point of view with opinion to weigh in.



The Habari Monolith interface, designed by Michael Heilemann.

Commit access was another flash point. In the Apache project, a clear path existed to gain commit access to the repository. That wasn't the case in early-2006 WordPress. Matt and Ryan acted as a funnel through which all code would be reviewed. More committers were eventually added, but it was

a slow process and one that led to frustration, particularly among prolific contributors.

Coming from Apache, Rich Bowen brought a different perspective — which he shared with other dissatisfied developers. For Rich, WordPress didn't constitute a true meritocracy — there was no opportunity for those with ability to gain power and responsibility. The final decision over who did and didn't gain authority lay with the project's leader — it was entirely up to Matt's discretion. When Matt, in a discussion thread, said that WordPress is a meritocracy because commit access is provided to "the best of the best of the best contributors who prove their worth over time with high-quality code, responsiveness to the community, and reliability in crunch times," Rich pointed out that because the final decision lies with the BDFL, the community can never become meritocratic.

At the heart of the discussion was a fundamental disagreement about how a free software project should be structured. *In Homesteading the Noosphere*, Eric Raymond discusses project structures and ownership, looking at how these emerge over time. WordPress follows Raymond's outline: the project had a single owner/maintainer (or rather two — Mike Little and Matt Mullenweg). Over time, Matt assumed project leadership. In WordPress' case, commit access carried with it an implicit level of authority. Those with commit access are the arbiters of the code that ends up in core. Matt made clear on a number of occasions that he didn't "want it to be a status thing," but it still became one.

Matt posted to the mailing list in 2005, saying "Committing!= community status. It simply is a way to ensure that all the code that goes into the core is reviewed before being distributed to the world." But community members naturally ascribe more authority and trustworthiness to those with commit access. It was unclear what it took to become a committer or a lead developer. Instead, the roles developed organically. For the community, authority naturally followed commit access to the repository, and commit access followed high-quality code submissions along with an understanding of and commit-

ment to the project ethos. Commit is a symbol of trust; with only two committers, it appeared that the project leads did not trust others in the community.

This had another consequence: non-code contributions went unacknowledged. Commit access may have been given out sparingly, but authority and leadership were still achievable in theory by anyone who could write code. For those who worked hard in support forums, wrote documentation, or provided translations (among other supporting activities), there was no formal way to progress, gain status, or be acknowledged. Coders receive props for code accepted into core, but there was no equivalent system for those who worked or contributed elsewhere. When there were rumblings of discontent, it wasn't just coders who were complaining.

Habari's approach was radically different. Commit access was achievable by anyone. The Habari motivations page says "Our contribution model is a meritocracy. If you contribute code regularly, you will be granted permission to make contributions directly (commit access)." The project takes this approach even further — it isn't just coders who received commit access. Owen Winkler, one of Habari's founders, says:

There are some people who are committers, who are part of the primary management committee in Habari who I would never want to actually touch the code because they don't really do development. But we give them access to it because they've demonstrated that they're part of the community and they're actively trying to advance Habari as a project.

In Habari, commit access is an explicit sign of trust and responsibility. If you're building a project in which the two do not go hand-in-hand, keeping commit access solely as a checking mechanism makes sense. The problem? If it's not clear to people within the project what constitutes authority, commit access becomes one of its few indicators.

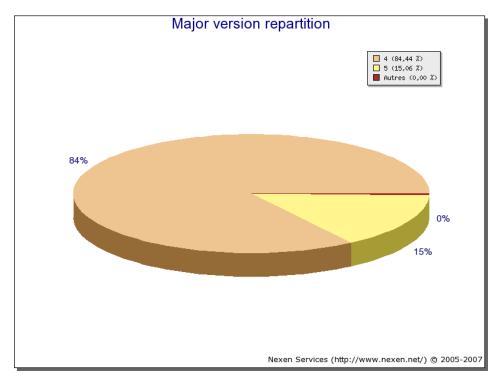
WordPress' focus has always been on users, and maintaining a good experi-

ence for them. One of the driving ideas behind Habari, on the other hand, was to create a tool that taught people about development, development best practices, and being part of a free software project. Rich Bowen, who did't know a lot of PHP, said that he hoped that the new project would teach him about it. Habari eschewed WordPress' low barrier to entry in favor of an approach that would cultivate fewer, but stronger, developers.

Habari was written in PHP 5.1, which gave developers access to PHP Data Objects. This provided a level of database independence that WordPress lacked. Habari developers found fault with WordPress for not using the latest coding practices, while WordPress developers felt that the Habari approach put users second. As Ryan Boren put it:

Screwing users because developers want to play is not cool. It's a good way to become irrelevant. A big reason WordPress is so popular is because it is not infatuated with the latest, greatest developer lust objects that require users to upgrade their platform.

In February 2007, when Ryan wrote that comment, PHP 4 was still running on 88.44% of websites. PHP 5 adoption was slow and many web hosts didn't support it. If WordPress had made the switch to PHP 5 it would have suddenly become unavailable on a huge number of hosts, breaking users' sites around the world.



PHP major distribution statistics in February 2007.

Habari's license choice also signified fundamental differences in FOSS beliefs. WordPress uses a GPL license, intended to secure the freedoms of users. Habari, on the other hand, uses the Apache License, a permissive license that allows developers to use the code in any way — even in a proprietary product. Owen Winkler outlined the reasons why the Habari project doesn't use a GPL license:

There's the idea of developer freedom. If you give the software away you should be able to give it away with no requirements at all. If you want to take it and make software that you sell, then go ahead and do that. Hopefully you won't. Hopefully you'll contribute. Or if you do, you'll contribute what you make back to the community somehow.

All these differences ended up being unresolvable, as developers felt increasingly disenfranchised despite slow changes within WordPress. Mark Jaquith,

who received commit access while the other developers were quietly working on Habari, recalls, "I felt like [...] Matt was right on the verge of loosening the reins, it felt like things were really starting to get good and they left. And I was like oh, if you'd just held on."

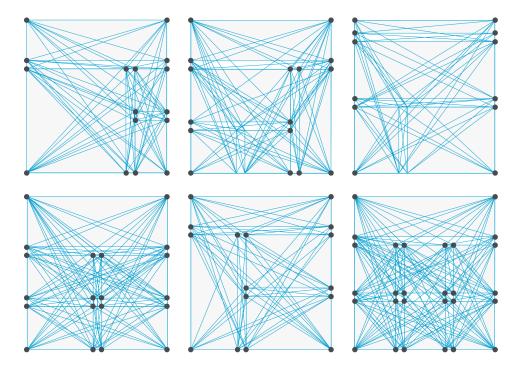
But they didn't. By the time the reins loosened they had founded their own project with their own ideals and focus. When there is a critical mass of people within a FOSS project who don't accept its core ethos, there is always the possibility of creating a fork. This is not, necessarily, a Bad Thing. Rather than struggling with the constant debates and infighting that comes from a clash of beliefs, sometimes it is better for two groups to separate. Then each project can keep a laser-sharp focus on the things that matter to its contributors, and on the software and project that they want to create.



Chris Davis, Owen Winkler, and Nicole Evans at Ohio Linux Fest 2007 (Image CC license Sean T. Evans)

Part Four

Tags and sponsored themes
Polarize opinions
(Happy cogs do too)

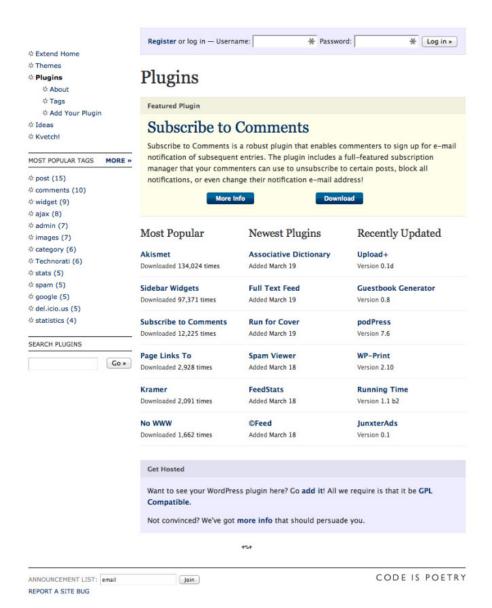


Creating a Folksonomy

In the wake of the exodus to Habari, the project began to evolve. In March 2007, Robin Adrianse (robin) became WordPress' first temporary committer when he received commit access for three months to help Ryan Boren address languishing trac tickets.

Also in March, the plugin directory launched. Before the plugin directory, developers hosted their plugins on their website. The directory gave them exposure to a huge number of WordPress users. Samuel Wood (Otto42) recalls how the plugin directory encouraged him to distribute his code. "I was writing them before, but I didn't give them to anybody. It encouraged me to release plugins because I had a place to put them."





The WordPress Plugin Directory in 2007.

WordPress 2.1 had launched in January 2007, after a release cycle of more than a year. WordPress 2.2 was the first to adopt the new 120-day release cycle. This goal, which would later become codified as *deadlines are not arbitrary* in WordPress' philosophy, was an ongoing challenge. It was tested in WordPress 2.2, which featured a new taxonomy system — the biggest database architecture change to date. Developing in an open source environment means leaving time for every voice to be heard, waiting for volunteers with busy lives to get things done, and discussing new features and architectural changes. It's a challenge that WordPress would have to address release cycle after release cycle.

In the early 2000s, the internet abounded with discussions about the best way to organize information. Content has metadata assigned to it, which can be used to organize and display information. Traditional web classification methods imposed a top-down categorization structure. A website created a category structure and users placed their content in the correct category. These structures were often rigid, forcing users to shoehorn their content into something that didn't necessarily fit. A new method of classification emerged — tags, a bottom-up classification form in which an index or a cloud can be generated based on keywords that the creator applies to the content.

Social bookmarking site Del.icio.us was the first to use tags. While Del.icio.us wasn't a bookmark management pioneer, its tagging system set it apart. Users tag the links they save, and the tags are then used to group together links in a user's own collection and across the entire social network. Visiting the link http://delicious.com/tag/php displays all links tagged PHP.

The classification system in which users classify content themselves, creating mass tagging networks, became known as a folksonomy.

In 2005, Technorati, the blog search engine, launched its own tagging system. It enabled users to run a tag search across major platforms such as Blogger and Typepad, CMSs like Drupal, and other services such as Flickr, Del.icio.us, and Socialtext.

WordPress lagged behind, and there was pressure from both the free software and WordPress.com communities to add tags to the platform. Word-Press' native classification form is hierarchical, top-down categories. To interact with WordPress, Technorati picked up the "tag" from the WordPress post's category. Many users found this unsatisfactory, as categories and tags are two different types of classification.

On his blog, Carthik Sharma wrote:

Categories can be tags but tags cannot be categories. Categories are like the huge signs you see on aisles in supermarkets – "Food", "Hygiene", "Frozen," etc., (sic) they guide you to sections where you can find what you are looking for. Tags are like the labels on the products themselves.

Categories and tags address two distinct use cases. Categories are more rigid, whereas tags are a lightweight way of classifying content. There was, of course, a plugin that did the job: WordPress users installed the Ultimate Tag Warrior plugin (though WordPress.com users could not).

In 2007, Ryan Boren opened a ticket to add tagging support to WordPress. Finally, WordPress would have tags. The next step was to identify the database schema.

A database stores all the content and data of a WordPress user. The database contains different tables from which data is retrieved. There is a post table, for example, which stores post-related data. The user table stores user data. Making changes to the database is not trivial. Any changes have to be done correctly because undoing them in the future can be difficult. Changes need to be performant. In a PHP/MySQL setup, increasing the number of database queries can slow the site down. The question arose: where should we store tagging data? Should it be in a new table? Or should it be stored in an existing table?

Ryan proposed two database schemas. One of these created a new table for

tags. Matt was keen on the second proposal — putting tags in the categories database table. He believed it didn't make sense to create another table identical to the categories table. In a comment on trac, he wrote:

We already have a ton of rewrite, API, etc. infrastructure around categories. Mostly I see tagging as a new interface to the data. On the display side, people want their tags listed separately from their categories, and probably something like a tag cloud function.

Previously, WordPress had already successfully reused tables; for example, posts, pages, and attachments are all stored in the same table, and at that time, the categories table also contained link categories. Tagging, from a user's perspective, enabled them to tag posts, display a list of tags, and display posts with the same tag. What was the point in duplicating the infrastructure when it could be achieved within the current table system?

Few developers supported putting tags in the categories table. Some believed the table would become bloated and argued that adding tags to it meant including additional code to keep the two taxonomy types separate. This additional code could introduce bugs, and make future maintenance and extension of the table difficult for developers.

On wp-hackers, April 2007 was spent discussing the new database schema for taxonomies. A suggestion that gained considerable community traction was splitting categories, link categories, and tags into their own individual tables — but it was impossible to reach consensus.

After checking in the single-table taxonomy structure (changesets #5110 and #5111), Matt posted a new thread on wp-hackers making the case for using the categories table. He argued that:

1. It would perform faster as no additional queries would need to be carried out to support tags. A separate tag table would require at least two extra queries on the front end.

- 2. It would provide a better long-term foundation. Tags and categories would be able to share terms (for example the category "dogs" and the tag "dogs").
- 3. There were no user-facing or plugin-facing problems.

In the thread, he also proposed an alternative, inspired by Drupal's taxonomy system: creating a new table for terms within a specific taxonomy. Terms are the items within a category, tag, or any other taxonomy; dog, cat, and chicken are all terms within an "animal" taxonomy. This additional table allowed terms to be shared among taxonomies, while having the same ID (the ID is what identifies an item in the database). Just one term — "dog" for example — would be saved in the database, and this term could be used in any taxonomy.

Ryan Boren proposed a compromise, one which enabled individual terms to be part of any taxonomy, while keeping the same ID. It was a three-table solution, with tables for terms, taxonomies, and objects. Discussion ensued, a new trac ticket was opened up, and a new structure was created based on this proposal. The first table, wp_terms, holds basic information about single terms. The wp_term_taxonomy table places the term in a taxonomy. The final table, term_relationships, relates objects (such as posts or links) to a term_taxonomy_id from the term_taxonomy table.



The database structure for WordPress taxonomies.

This approach had the advantage of assigning one ID to a term name, while using another table to relate it to a specific taxonomy. It's extensible for plugin developers who can create their own taxonomies. It also enables large

multisite networks, such as WordPress.com, to create global taxonomies — unified tagging systems in which users of different blogs can share terms within a taxonomy.

Like many WordPress features, tags landed on WordPress.com before they shipped in WordPress. From the beginning, the new structure caused huge technical problems. The increase in tables meant that WordPress.com needed more servers to deal with the additional queries. "It was slower to be completely honest," says Matt. "That was a cost that we saw in a very real way on WordPress.com, but also a hidden cost that we did impose on everyone who was doing WordPress in the world."

More than just a challenging code problem, the taxonomy implementation highlighted problems in the development process. Heavy discussion meant development dragged on. Some wanted to delay the release. Some wanted to pull the feature. Others wanted to revise the schema in a subsequent version. Andy Skelton responded to the wp-hackers discussion:

To include a premature feature in an on-time release degrades the quality of the product. I refer to not only the code but the state of the community. Increments are supposed to be in the direction of better, not merely more. Better would be to release on time with a modest set of stable upgrades.

To block release while the one new feature gets sorted out would be a maladjustment of priorities. If 2.2 seems light on sex appeal, so be it. Better to keep the release date as promised.

The 120-day release schedule was in danger because of one issue. Making major architectural changes to core just weeks before a release was contrary to the aims of the new development process. A thread suggested delaying 2.2's release. The architectural changes were too important to be done in an unsatisfactory way.

Eventually, Matt decided to delay the 2.2 release, pull tags out of core, and bring in widgets — a user-facing feature that would encourage people to update their version of WordPress.

Andy Skelton developed widgets for WordPress.com users; he built them to give bloggers more flexibility with their site's layout. Widgets are code blocks users can drag and drop into place through the user interface. They allow bloggers to add a calendar, a search bar, or some text (among other things) to a sidebar in any order they wish. It was a hugely popular feature on Word-Press.com; the plugin for WordPress was also a great success. Launching widgets on WordPress.com meant that many different users could test them before they made it into core as a feature.

The new tagging feature finally shipped in WordPress 2.3 — in a structure that was the outcome of extensive negotiating and haggling. This wrangling process has had consequences for WordPress developers ever since. Shared terms have had lasting implications for core developers, plugin developers, and users. The problem with shared terms is that an item could have multiple different meanings, but the database treats all of them identically. For example, the word apple. A developer creates the taxonomy "Companies" and the taxonomy "Fruit," and the user places the term "apple" in both. Conceptually, this is a different item — a company and a fruit — and they appear in the user interface as two distinct entities. But the database treats them as the same thing. So if a user makes changes to one — for example, capitalizing it — changes are made to both.

In a post in 2013, Andrew Nacin wrote that, "Hindsight is 20/20, and shared terms are the bane of taxonomies in WordPress." Each term is represented in two different ways. Since an individual term can appear in multiple taxonomies, it's not straightforward to identify the actual term in the actual taxonomy that you want. It has become a challenge to build new features that use one identification method when there are parts of WordPress that use the other.

A case in point: to attach metadata to a term, there must be one object identi-

fier. However, the public ID uses a different identifier. It is extremely difficult to target data consistently when it is identified in multiple ways. WordPress has a long-term commitment to maintaining backward compatibility, so creating a new schema isn't possible. The effort to get rid of shared terms must progress step by step, over a number of major releases (this is being carried out over three releases in the 4.x series).

The over-engineered taxonomy system came about through argument and compromise. When the bazaar model works, it can produce software that people love to use. The model fails when intractable arguments result in compromises that no one is 100 percent happy with. The new taxonomy system did, however, contain one notable benefit. Neither of the original proposals for the taxonomy schema (putting tags into the category table, or creating a new table just for tags) would have allowed developers to create custom taxonomies, and the latter became a major element in WordPress' transition from a straightforward blogging platform to a bonafide content management system.

Even with these setbacks, software development continued mostly on schedule. Since tags were pulled from 2.2, there were only 114 days between Word-Press 2.1 and 2.2, and then 129 days between the release of 2.2 and 2.3. While delays would recur in some future releases, there was nothing that resembled the long, dark year between 2.0 and 2.1.

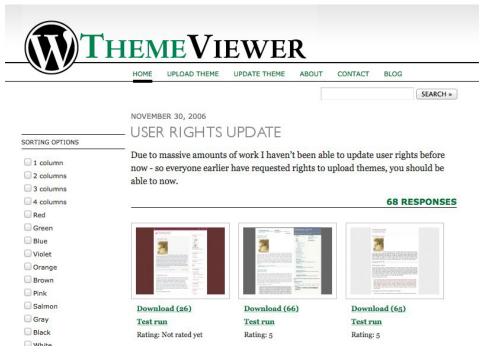
Sponsored Themes

A community of hobbyists drove WordPress for a long time, but eventually, the hobbyists wanted to support their hobby. Developers charged for customizations; Automattic was building a blog network along with related products like Akismet. Theme designers, too, wanted to make money for the time and effort they put into developing themes for the project.

It isn't immediately obvious how someone can make money and still uphold the ethos of a free software project. How can the two goals co-exist? In the early days of the WordPress economy, the distinction between freedom and free beer was blurry. Community members fumbled for answers: is it acceptable to make money with a GPL project? Who has the right to make money out of a project that belongs to its volunteers? How can one run a theme business when the core product is free?

The period between 2006 and 2009 was one of experimentation and discovery for businesses in the WordPress ecosystem. During these tumultuous years, the community wrestled with commercialization while the theme marketplace grew. WordPress users — web users — have always been concerned with their websites' look. As WordPress became more popular, many bloggers built their own themes and realized that they could generate income from them.

Themes lagged behind plugins for an official repository. For a long time, themes were hosted on themes.wordpress.net, an unofficial theme directory. Theme developers could simply upload their theme and users could browse the directory.



The WordPress Theme Viewer in 2007.

The system was susceptible to spam and duplicate themes. Some theme developers abused the system by downloading their theme multiple times, to boost their ranking and appear among the most popular search results. The Theme Viewer was at the center of the first big debate about themes.

Theme designers tried theme sponsorship as a way to make money from their designs. Designers often use a link to their website in their theme as a credit. Kubrick, for example, links to Michael Heilemann's website. Every site that installs the theme links to the designer's website. The number of incoming links to a website is a variable in Google's PageRank algorithm: the more incoming links, the higher the PageRank, the further up in Google's search engine results. If thousands (or even hundreds) of people install a theme, the designer can watch herself soar up Google's search results. If that link comes from a high-authority website, even better.

Designers soon realized the link doesn't have to be to their own website. Links have an intrinsic value, particularly to internet marketers. With a link in a

WordPress theme, marketers don't have to approach individual sites to ask them for a link. All they have to do is pay a web designer to include it in their theme, release the theme for free, and soon hundreds of sites are linking back to their desired URL.

Theme sponsorship approaches varied. Sometimes, companies contacted well-known theme authors to sell links in their themes. Theme authors could also be proactive. Authors advertised and sold their themes on websites, others auctioned themes at Digital Point, or they simply offered links for sale. In those early days, once the sale was made, designers would promote the theme on different WordPress theme sites, including official sites such as the Word-Press Codex, community resources like the WordPress Theme Viewer, and reputable blogs such as Weblog Tools Collection. These themes were often distributed with a Creative Commons 3.0 license, which permits free sharing and theme adaptation, provided the credit link remains.

Websites focused on making money online became aware of theme sponsorship. Tutorials and articles about theme sponsorship proliferated, and sponsorship became part of an acceptable link-building strategy.

Some theme creators published themes with visible text links but didn't tell their users about the link, others used PHP or CSS to hide the links, while others still made it very clear that the theme had been sponsored.

For those in favor of theme sponsorship, the matter was simply about being paid for their work. Why should they work for free? Selling sponsored links ensured they could create and distribute free themes, which benefited the whole community. They argued that designing a good theme takes time and that non-sponsored themes were inevitably of poorer quality than sponsored ones.

Sponsored themes quickly became prevalent, with even respected authors selling links in their themes. Many considered it a "great business model"; finally, a way to make money from WordPress! Besides, those who supported the model argued that the default WordPress blogroll contained links to all

of the original developers of WordPress - Alex, Donncha, Dougal, Michel, Matt, Mike, and Ryan - all of whom were benefiting in Google's search results.

Others felt that themes.wordpress.net was becoming a spam repository. More than 50% of themes on the WordPress Theme Viewer were sponsored themes. These contained links to everything from iPhone repair services to gambling websites, and from web hosting to flower delivery. Some themes were uploaded multiple times with only minor changes, thereby increasing the number of links on the Theme Viewer. Critics of theme sponsorship — many of whom were designers themselves — said that the themes polluted the community. They weren't against theme designers making money, but they didn't want to see the WordPress community become a hive of spam and SEO tricks. Theme sponsorship had opened the floodgates to SEO and internet marketers.

Buying and selling links went beyond the WordPress community. A few years earlier, Matt Cutts, the head of web spam at Google, had explained how link-selling affected PageRank. Google's algorithm detected paid links, and while it wasn't foolproof, it worked pretty well. Paid links made it harder for Google to gauge a website's trustworthiness. As a result, Google took away that site's ability to affect search results:

Reputable sites that sell links won't have their search engine rankings or PageRank penalized – a search for [daily cal] would still return dailycal.org. However, link-selling sites can lose their ability to give reputation (e.g. PageRank and anchortext).

WordPress users who installed sponsored themes could be penalized for links that they weren't even aware they were hosting. And, hidden links could further reduce a user's PageRank. In a post in April 2007, Matt Cutts condemned hiding links in a website and asked web masters to disclose paid links.

There were plenty of themes that contained links that weren't sponsored. Designers would include a credit link to their website in the theme's footer. Designing and releasing a WordPress theme allowed designers to increase their profile on the web. Like internet marketers, their websites benefited from higher search engine results, and website visitors might click on the link, generating more business for the designer.

It was common at that time for a designer to release their themes under a Creative Commons license, which asks users to leave the credit link intact. In the middle of the sponsored link furor, one designer took the next step. Tung Do (tungdo) authored the popular WordPress resource WPDesigner.com, along with a number of WordPress themes. In April 2007, he announced he would release his themes under the GPL. "Despite that I'm just ONE theme designer and despite that I don't contribute directly the WordPress code (sic)," he wrote, "I believe that switching to GPL is a step in the direction to support the WordPress team and to help the WordPress theme community grow (positively)."

Weblog Tools Collection (WLTC) was the first website to take direct action against sponsored themes. At WLTC, designers submitted themes and Mark Ghosh, who ran the site, regularly wrote about theme releases. In April, Mark weighed in on sponsored themes. While he didn't condemn them outright, he did institute a new policy:

All themes with sponsorship links will be labelled as such when they are published, non-sponsored themes will be published first, and we require sponsorship disclosure to be made to us when authors make us aware of their new themes. If this disclosure is not provided and the theme has sponsored links, the author will be barred from being able to post their new themes on weblogtoolscollection.com until further notice.

The 166 comments Ghosh received highlighted just how divisive the issue was. Viewpoints ran to both extremes. Many users were unhappy about links

being placed in their websites — this was particularly concerning to people whose websites had a moral or religious bent. While users supported linking to theme authors, they weren't happy that links for credit cards or flower delivery were being displayed on their website. Theme developers said that it was a way for them to fund themselves and the creation of free themes, and that they were sad to see it being abused.

A few days later, Matt followed Mark's lead and posted on WLTC about sponsored themes. He had become aware of the trend back in September 2006, when he had downloaded the Barthelme theme from plaintxt.org and discovered a link to a New York flower delivery service. For him, there were three main issues:

- that sponsored links negatively impact a user's Trustrank and that the user hadn't made this decision themselves;
- that sponsored themes are adware;
- that theme authors who sell links and release their work under a creative commons license contravene the GPL.

All of these factors meant a negative experience for WordPress users. While the project allowed people to make money from WordPress-related products and services, it didn't support methods detrimental to users. Whatever the original intentions of sponsored links, themes had become so polluted that they undermined the trust that a user had in the software and in the community. As a user-focused community, the project needed to regain that trust.

The argument that theme authors deserved to be compensated for their work held little weight when WordPress itself had been built by volunteers. There was no opposition to people making money from WordPress, but official project resources should only promote companies and individuals in line with the core project ethos.

Matt closed the post, linking to a vote on a proposal to remove sponsored themes from WordPress.org. The discussion on the thread has arguments for and against theme sponsorship; some voted for a complete ban, others for sponsored theme disclosure, while others felt theme designers should be allowed to include any links they want in their theme.

Whatever the results of the vote, the tide turned against sponsored themes. These were not looked upon favorably at WordPress.org, with sites and people who had promoted sponsored themes already banned from the forums. Even Matt Cutts weighed in, saying that he agreed 100 percent with Matt's position on sponsored themes.

In July, Mark announced on WLTC that he would no longer promote sponsored themes, and shortly after, Matt announced that all sponsored themes would be removed from themes.WordPress.net. Despite a positive reaction from much of the community, there was a backlash, primarily directed at Mark and Matt.

Some theme developers saw theme sponsorship as a valid way of making money, and were angry about being branded as "unethical." This was particularly the case when they saw other theme developers behaving unethically, from downvoting other developers' themes and using sock puppetry to upvote their own, to stuffing themes with copious links to their website.

Despite the sponsored theme ban on official WordPress resources, link sales continue today. The Digital Point forums, for example, are filled with themes available for sponsorship. Theme sponsorship is not without its dangers. In 2012, a former theme sponsor posted on the Webmaster world forums about Google penalization for "inorganic" incoming links:

Some 2+ years ago in throws (sic) of questionable wisdom I sponsored about five or six WordPress themes where the "Designed by" link in the footer gets replaced by a link to your site. They were nice looking and "relevant" themes, at least as far as the name and pictures used in design suggest. They were not used much initially and I did not think much of them until these "unnatural links" notices started flying a month ago. Google confirmed that these links were the issue, but with the themes in

the wild there wasn't a whole lot that the sponsor could do about it other than contact the websites using the theme and asking them to remove the link.

Sponsored themes were the first large-scale attempt at making money from WordPress themes. Custom design and development existed too, but link sales appeared to be a valid way of making money, particularly at a period when the web teemed with SEO experts and internet marketers on an unremitting search for ways to climb Google's search results. Sponsored themes brought WordPress, not for the first time, into proximity with SEO, both white hat and black hat. Selling links in a theme slipped easily into questionable SEO practices; it also turned out to be an unsustainable business model. With Google as the rule-maker, a simple policy change could wipe out an entire market. And as sponsored themes started to disappear from the community, theme designers and developers looked for new ways to support their hobby.

Update Notifications

Peter Westwood became a core committer in July 2007, bringing the number of people who could commit code to four. Westi got involved in the project in 2004 while working as a software engineer — he had written a script that downloaded WordPress and installed it on a server. He helped with the Codex, and found and fixed bugs. Like many other developers, he had little PHP experience when he came to the project.

The wp-hackers mailing list was in its third year, but productive discussion there diminished over time. More and more decision-making happened elsewhere. For example, in February 2007, Ryan integrated phpmailer with WordPress. The code was committed after a short discussion on trac. It wasn't until September that a phpmailer conversation took place on wp-hackers — one that few committers participated in.

Exchanges on the mailing list inclined less toward development, and more toward meta-discussions about the mailing list itself, from the high signal-to-noise ratio, to ideas to improve mailing list etiquette.

Andy Skelton wrote about the problem with wp-hackers:

There is just one thing I want to make clear about wp-hackers: a hacker is not someone who discusses or pays lip service or dissents or casts a vote or says what can or should be done. Hackers aren't committee members. Hackers are more interested in proving what can be done than arguing about it.

There was too much talking and not enough hacking on wp-hackers, and

opinion often swayed conversations rather than fact. Mailing lists can become dominated by people who have time to comment, rather than those doing the work. The latter might have the most valuable feedback, but they're often too busy to keep up with a high-traffic mailing list.

WordPress isn't alone in this phenomenon. A 2013 study of the Apache Lucene mailing list (PDF) found that "although the declared intent of development mailing list communication is to discuss project internals and code changes/additions, only 35 percent of the email threads regard the implementation of code artefacts." As well as discussing development, mailing list participants discussed social norms and behavior. The study also found that project developers participate in less than 75 percent of the discussions, and start only half of them. Developers prefer to communicate on the issuetracking software — a finding resonant with WordPress, as developers ultimately switched from the mailing list to WordPress trac.

Mailing lists tend toward bike shed discussions, ¹ a term derived from Parkinson's law of triviality:

Parkinson shows how you can go in to the board of directors and get approval for building a multi-million or even billion dollar atomic power plant, but if you want to build a bike shed you will be tangled up in endless discussions.

An atomic plant is so vast that only very few people can grasp it. The board of directors assume that somebody has the knowledge and has done the groundwork. In contrast, everyone can build a bike shed, so everyone has an opinion on how it should be done, and especially what color it should be painted.

^{1.} The notion of a bike shed was popularized in FOSS projects by Karl Fogel. In his book, *Producing Open Source Software*, he reprints an email from Poul-Henning Kamp to the FreeBSD mailing list with the title "A bike shed (any color will do) on greener grass...," in which Kamp uses the "painting the bikeshed" analogy to describe discussions on the mailing list.

In his book *Producing Open Source Software*, Karl Fogel notes that as the technical difficulty of an issue goes down, the "probability of meandering goes up:"

...consensus is hardest to achieve in technical questions that are simple to understand and easy to have an opinion about, and in "soft" topics such as organization, publicity, funding, etc. People can participate in those arguments forever, because there are no qualifications necessary for doing so, no clear ways to decide (even afterward) if a decision was right or wrong, and because simply outwaiting other discussants is sometimes a successful tactic.

With its community growth and low barrier to entry, the WordPress project has been susceptible to bike shed discussions like any other free software project. A Google search for "bikeshed" on the wp-hackers mailing list displays the discussions in which someone has cried "bike shed," as does a similar search on trac.

In 2007, for example, discussion about what to call links got heated. A member of wp-hackers asked, "Anyone know why it's still called Blogroll in admin, when it's called Bookmarks in functions (wp_list_bookmarks) and yet displays by default as a list of "Links" in the sidebar?" The original post, "Blogroll, Bookmarks, Links," generated a total of 79 emails on the mailing list alone, and the discussion spilled over to a trac ticket.

Of course, one person's bike shed is another person's bête noire, and there were times when wp-hackers was alight with community members who insisted on giving specific issues serious consideration. One such instance was in early September 2007, before the release of WordPress 2.3, which contained the update notification system. This system alerts users when a new version of WordPress or of a plugin becomes available to install. The system collects information about the WordPress version, PHP version, locale setting, and the website's URL from a user's site, and sends it back

to http://api.wordpress.org. A further piece of code carries a plugin update check, which sends the website's URL, WordPress version, and plugin info (including inactive plugins) to api.wordpress.org.

For some, the data collection appeared contrary to the free software project ethos. They thought that collecting the blog URL was unnecessary. A ticket on WordPress trac requested that update checking be anonymized. Others had no problem with WordPress collecting the data, but were unhappy that WordPress did not disclose it. A number of people who didn't oppose the changes nevertheless felt that there should be a way to opt out, so that users who required complete privacy would be able to turn off data collection.

This debate goes to the heart of one of WordPress' design philosophies: *decisions, not options*. This idea is heavily influenced by a 2002 article written by GNOME contributor Havoc Pennington. Many free software user interfaces cram in options so that they can be configured in multiple ways. If an argument ensues in a software project about whether something should or shouldn't be added, a superficial solution is to add an option. The more options one adds, the more unwieldy a user interface becomes. Pennington writes, "preferences have a cost [..], each one has a price and you have to consider its value." He outlines the problem with too many options:

- When there are too many preferences it's difficult for a user to find them.
- They can damage QA and testing. Some bugs only happen when a certain configuration of options is selected.
- They make creating a good UI difficult.
- They keep people from fixing real bugs.
- They can confuse users.
- The space that you have for preferences is finite so fill it wisely.

WordPress developers carefully consider the introduction of any new option, and have become better at it over time. When the data collection question arose, they were extremely reluctant to introduce new options. Westi posted to wp-hackers:

One of the core design ideas for WordPress is that we don't introduce options lightly. The moment you think of making a feature optional you challenge the argument for introducing the feature in the beginning.

What benefit would an opt-out button for update notifications provide to users? The purpose of the notifications is to help users to stay up-to-date and secure. Adding an option to opt out of update notifications would only reduce the number of people who updated their sites, and increase the number of insecure instances of WordPress. The benefit to adding the option didn't outweigh the cost.

Consequently, and despite the extensive discussion on wp-hackers, Word-Press 2.3 was launched as planned, with the following note in the announcement post:

Our new update notification lets you know when there is a new release of WordPress or when any of the plugins you use has an update available. It works by sending your blog URL, plugins, and version information to our new api.wordpress.org service which then compares it to the plugin database and tells you whats (sic) the latest and greatest you can use.

The project also published the first version of a privacy policy on Word-Press.org.

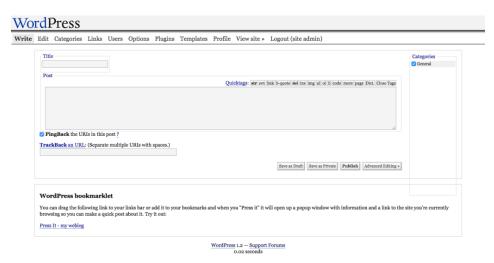
Amid these discussions, the project structure changed when Peter Westwood and Mark Jaquith became lead developers. The announcement post describes them as "a few old faces who are taking on bigger roles in the community." Both were active committers who had taken on greater leadership roles. Both had participated in many of the more challenging discussions in the community, and they didn't always agree with current project leadership. They both, for example, opposed Matt's proposal for the taxonomy structure, and Mark was one of the people who voiced concerns over data collection in WordPress

2.3. They added new perspectives to the project leadership: for the first time since the early days of the project, there were people other than Matt and Ryan to help guide and shape development of both the software and the project.

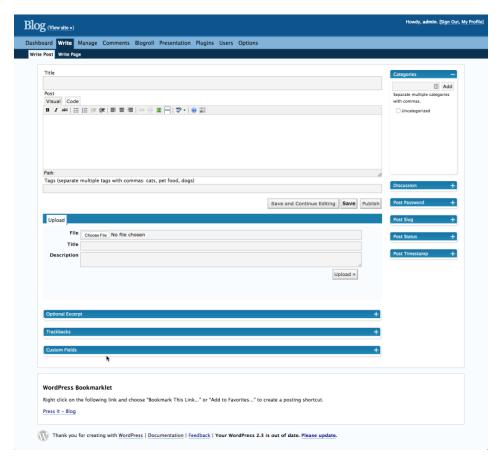
Happy Cog Redesign

Shuttle had failed back in 2006 and WordPress' admin still needed a redesign. Matt turned to design studio Happy Cog. Jeffrey Zeldman, Happy Cog founder, led the project, along with WordPress' logo designer Jason Santa Maria and UX designer Liz Danzico.

Whereas Shuttle focused on aesthetics, Happy Cog identified and corrected information architecture problems, and updated and improved WordPress' look and feel. Despite the project's user-first ethos, the admin screens had become cluttered, as new features were sometimes added in a haphazard way. The change between WordPress 1.5 and WordPress 2.3 speaks for itself.



The Write screen in WordPress 1.5.



The Write screen in WordPress 2.3.

Happy Cog produced designs that WordPress developers then coded. The project included user research and an interface audit to identify WordPress' strengths and weaknesses, and to inform new structural and interface designs.

WordPress, as a free software project, was an unusual client for a traditional design agency. Matt and Jeffrey formed a buffer between the Happy Cog team and the community, but the designers, nonetheless, knew this was an entirely different type of client. Jason Santa Maria says:

Any other client will have customers and their own community, but you

really have to just manage the people inside of a company, whereas when you're dealing with an open source project, you deal with the people that you're talking with, but there's this whole gamut of other people that you will only ever get to talk to a small portion of. I think that that's really difficult.

Plus, I think that on an open source project like this, it's inherently different, not just because it's more of a CMS than an informational website — the design needs are different — but it's just a different kind of way to work, knowing that whatever you do probably isn't going to stick around for very long. It's going to continue to evolve and continue to be adapted. Usually, in the very near-term as well, not even three-four months from now, but next week.

An audit and usability review were among the first steps. Liz Danzico researched and produced a 25-page document on WordPress. WordPress needed an admin that didn't intrude on the user. In the audit, she quotes Mark Jaquith: "That's when I know WordPress is doing its job: when people aren't even aware they're using it because they're so busy using it!"

Liz spoke to Mark Riley, whose support forum experience gave him direct access to users' complaints. One of the major problems he highlighted was the clutter that had amassed in the Write screen between WordPress 1.2 and WordPress 2.0. Features had been added and then tucked into modules using the pods introduced by the Shuttle project. There were many actions a user could take on the Write screen, and many of them were confusing or hidden.

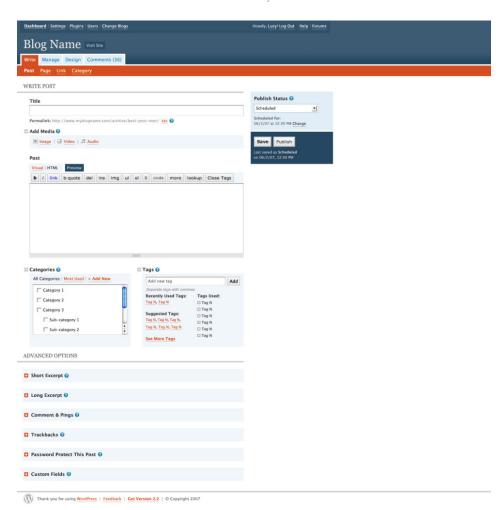
Discussion focused on navigation structure: labelling, position, and functionality grouping. Should they go with an object-oriented navigation (Posts, Pages, Comments, etc.) or an action-oriented navigation (Write, Manage, etc.)? Liz's first hunch — supported by the newly launched Tumblr — was that users preferred navigating by nouns. She felt WordPress' verb structure was confusing. The first navigational structure iterations introduced both a noun version and a verb version. In the end, however, and after limited user

testing, the team went with a mixture of nouns and verbs: Write, Manage, Design, Comments. This meant that the functionality for different content types was scattered over different menu items — to write a post, for example, users would go to "Write." To manage the same post they would navigate to "Manage."

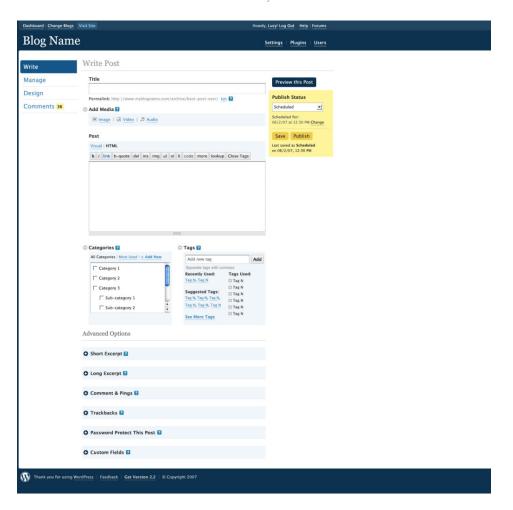
Happy Cog provided extensive and detailed proposals and research for Word-Press, and shared them with Matt. Their reports display a sensitivity to web users, and an appreciation for simplifying and streamlining WordPress.

When it came to the design stage, Jason Santa Maria created three designs to present to Matt, who would choose one to move forward.

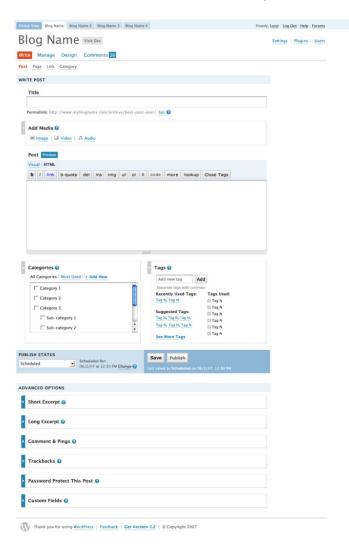
He designed three early mockups:



Mockup Number 1.



Mockup Number 2.



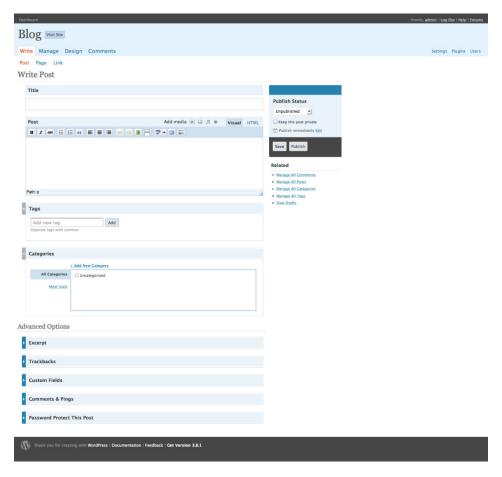
Mockup Number 3.

Matt chose the visually lighter design. Jason had taken Shuttle's heavy blue palette and lightened the interface. An orange accent color complemented the lighter blues.

When the design was finally signed off, WordPress trunk started to transform. As changes took place, community feedback was posted to wp-hackers. Was the admin actually more usable? Major changes broke familiar patterns.

Some comments compared the design to Shuttle's; a few community members even wanted to implement Shuttle's interface.

Just before release, a sneak peek was posted to the development blog, and WordPress users installed the release candidate to get a better look. The response echoed that of the rest of the community. Regular WordPress users were surprised by the functionality changes to the Write screen. For some, it was a step backward.



The Write screen in the WordPress 2.5 admin.

WordPress 2.4 was the first version to fall significantly behind the 120-day release cycle. Versions 2.2 and 2.3 were mostly on schedule, but the Happy Cog redesign brought in major changes to the codebase. Rather than just

delaying release, a version was skipped, moving straight from WordPress 2.3 to WordPress 2.5, which was scheduled for release in March.

But there were bigger problems with this release cycle than just the delay. The community felt that they had not been consulted; they felt disenfranchised. In some ways, the redesign was destined to fail before it even began. With no participation and no process, there was no way to ensure community buy-in. Jeffrey Zeldman, reflecting on the process, says:

It worked for us, from our perspective, that we were a small team reporting to a single client who had life or death approval over everything. We had to please one user: Matt. He could say yes or no. We completely bypassed the community. That enabled us to get a design done that we felt was crisp and focused and achieved certain goals. And that sounds great. Except that, because the community wasn't involved, inevitably, the design then became unpopular because nobody got their say in it. And if I could go back and do it again, I would involve them up front, and find ways to get my feedback without it turning into a committee clustercuss.

As with Shuttle before it, problems surfaced in the design process. Free software projects are collaborative enterprises; when part of the process moves behind closed doors to avoid the problems of working by committee, new problems arise. However much a project tries to avoid it, that committee exists and must have its say.

Premium Themes

In the wake of sponsored themes, theme developers were looking for ways to make money. Some made money from customizations, but increasingly, people wanted to make money with WordPress products rather than with services. Why build one site when you can build one theme and sell it multiple times? If theme developers couldn't sell links, they could do the next best thing — sell themes directly to WordPress users. There was, however, some hesitation around this. When the project removed sponsored themes from official resources, people interpreted this in different ways:

"WordPress doesn't support sponsored themes."

"WordPress doesn't want me to make money."

"Automattic doesn't want me to make money."

Some people felt that Matt only wanted Automattic to make money from WordPress, a situation that wasn't helped when, after the sponsored themes debate, Matt announced a WordPress.com theme marketplace, resulting in cries of hypocrisy. Despite laying the initial groundwork, Automattic decided not to go ahead with the plan. "It didn't seem right to go into it when we hadn't really worked out all the licensing issues yet," says Matt. ¹

While the WordPress.com theme marketplace was set aside, employees inside Automattic were still curious about whether people would pay for a blog design. Noël Jackson (noel), a former Automattic employee, recalls the time when premium WordPress themes started to appear:

^{1.} The theme marketplace didn't launch until 2011, four years after the initial announcement.

It was interesting, especially in the beginning when it started happening. It was interesting to see revenue figures for themes that were released as a premium theme — not a WordPress.com premium theme — but someone selling their theme and keeping the GPL license and thinking, "Well, people are actually buying this." There wasn't an issue with it. I think that made everybody happy.

Bloggers who used WordPress dabbled with making themes. They released them for free. "A funny dynamic happened," recalls Cory Miller (corymiller303), the founder of iThemes. "People started hitting my contact form and saying will you customize this, or will you do this theme, or will you do all that stuff, and I was like I'm, I'm kind of a fraud here. And so I started charging for my work." This is the familiar tale that some of the most prominent WordPress business founders tell today. Many of the people who run these businesses started out simply by making themes. These were often accidental businesses, with accidental businesspeople — people who came to the community to scratch their own itch and found themselves inundated with requests for help, support, and customizations.

Although sites like Template Monster sold WordPress themes as early as 2006, the last quarter of 2007 saw the first surge in WordPress premium theme releases from within the WordPress community. Brian Gardner's Revolution — one of the first premium WordPress themes — launched in August 2007. A few weeks after, Tung Do released Showcase. Later that year also marked the launches of Proximity from Nathan Rice, Solostream from Michael Pollock, Cornerstone Theme from Charity Ondriezek, Premium News Theme from Adii Pienaar, and PortfolioPress from Magnus Jepson. Early the following year, Chris Pearson released Thesis.

Most of the theme vendors followed a similar path: from blogger to hobbyist themer. From releasing a free theme to testing the brand-new market. Few had career aspirations — these were side projects to make them money in their spare time. Some also did independent development for clients. But

the idea that selling WordPress themes could be big business didn't cross their minds. "Even when I quit my job to spend more time working on these themes," says Adii Pienaar (adii), co-founder of WooThemes, "and eventually rebranding and calling that effort WooThemes, I still thought that I was going to build a business around the custom design/development stuff, around consulting."

Theme sellers weren't sure how to price and license their themes. There was no community consensus about licensing and nothing clear from the project. Theme authors created their own license. A common model was offering a single-use license to use a theme on one site, and a developer or bulk license to use a theme on more than one site. These licenses restricted the number of sites on which a theme could be installed, and what the user could do with a theme. Some, for example, required that the user retain the author credit in the theme, which enabled the authors to charge users to remove the attribution link.

Users downloaded a free theme at no cost, or paid for a premium one. The label "premium," however, implied that paid themes were *intrinsically better*, as though attaching a price tag elevated premium themes above free (and theoretically inferior) themes.

These commercial themes were often branded as "premium themes," but there was little consensus about what made a theme "premium." When Weblog Tools Collection (WLTC) asked, "What Makes a WordPress Theme Premium?," responses from community members were varied: "better documentation and support," "less bloggy," "better design," "better features," "better code," and "more functionality." Several people argued that money was the only difference between free and premium themes.

What distinguished designers and developers making free and premium themes was the time and effort they put into them, and the level of effort required to set them up. In an interview in June 2008, premium theme developer Darren Hoyt talks about the differences between creating a free and premium theme. He outlines his considerations:

- That hand-coding and tweaks to the files should be minimized with the inclusion of a custom control panel.
- That users shouldn't have to download plugins so all theme functionality was bundled with it. "We tried to make Mimbo Pro more than just a theme or 'skin' and more like an application unto itself."
- That best practices for commenting code, valid markup, and wellwritten CSS are followed.
- That documentation be provided and evolve.
- That buyers get ongoing support and interactions with the developer.

Brian Gardner, designer of Revolution, said in a March 2008 interview that for him, a premium theme differs in how the site looks and acts. "If people respond to a site and say 'wow, I can't believe WordPress is behind that,' that's what premium themes are all about."

Attitudes varied widely between users, developers, and other community members. The user who interviewed Brian Gardner was a keen Revolution advocate. He commends the guaranteed support, comfort, safety, and the feeling that he's being looked after. A price tag doesn't necessarily equate to these things, but some premium theme developers make customer support a priority — and their theme sales rise. WordPress was no longer confined to the world of personal blogging. Businesses, particularly small businesses, used WordPress to build their websites. Paying a small fee for peace of mind was a worthwhile trade-off; it brought the promise of ongoing support. A free theme came with no guarantees.

Some theme developers were frustrated by premium theme sellers. "Premium,' when it comes to WordPress themes," writes Ian Stewart in 2008 (iandstewart), "simply means 'it costs money' and not 'of superior quality." The false dichotomy set up by the "premium" label undervalues themes released for free. Justin Tadlock (greenshady) released the Options theme to prove that there was nothing to stop developers from releasing a free theme fully packed with bells and whistles. He was one of the first to explore an alternative business model, setting up his own theme club. In contrast to

theme sales, he wanted to create a community around theme releases and support. Later that year, he launched Theme Hybrid.

The issue of whether someone *should* be selling themes wasn't clear-cut. Some thought that you had to choose: you could either be involved in the community, or make money selling themes or plugins.

In a discussion on a wp-hackers thread from March 2008, the author concluded that a person either focused on making money or contributing to the community. But Mark Jaquith pointed out that the two aren't mutually exclusive: it's possible to make money with WordPress, while still making a positive contribution to the project. In the same thread, Matt outlined how he saw businesses best interacting with the WordPress community:

A GPL software community is like the environment. Yes you could make profit building widgets in your widget factory and not pay any heed to the forests you're clearing or the rivers your (sic) polluting, but in a few years you're going to start to deplete the commons, and your business and public perception will be in peril...Contrast that with sustainable development, with giving back to the community that sustains (and ultimately consumes) your services and you have the makings of something that could be around for generations to come.

Matt didn't see the premium theme market as in step with the community. He proclaimed premium theme sellers were in "murky waters," pointing out that there wasn't much money in the enterprise. In a 2009 conversation with Ptah Dunbar, Matt said that he didn't like where premium WordPress themes were going, and that the premium theme market wasn't helping the community to grow.

Whatever the community's perception, users pay for themes, and companies that sell themes make money. Take ThemeForest, for example. The market-place sells themes and templates for WordPress and different CMSs, as well as HTML templates. Upon launch in September 2008, ThemeForest sold

mostly HTML templates; WordPress themes were 25% of sales. By September 2009, WordPress themes were 40% of all ThemeForest sales. In 2013, WordPress themes were 60% of all sales.

The discussions weren't just focused on whether people should make money from WordPress. A bigger question was: how should themes be licensed? WordPress itself is licensed under the GPL. The GPL's copyleft distribution terms ensure that distributions and modifications of the software carry the same license. Derivative works also carry the license. Is a theme derivative of WordPress? There were arguments for and against, speculation, and opinion — much of which was based on interpretations (or secondhand interpretations) of the license. Court cases are rarely fought around the GPL. Those that come close are often settled out of court, as with the Free Software Foundation vs. Cisco lawsuit, which happened at the same time as the WordPress community's debate over WordPress themes. The community was divided into two camps — those who thought themes didn't have to be GPL, and those who thought they did.

There are a number of different factors, and one is whether a WordPress install and its theme is an "aggregation" or a "combination." The GPL FAQ distinguishes between the two: an aggregate means putting two programs side by side (like on a hard disc or a CD-ROM). People who thought that themes don't have to be GPL argued that WordPress with a theme is an aggregate. They believed that a theme modifies the output of WordPress, but doesn't necessarily engage with its internals. WordPress core developers, however, stated that themes use WordPress core internals. For a theme to be completely independent, it would need to use none of WordPress' internal functions.

For those who accepted that PHP was linked with WordPress in such a way that the theme inherited the GPL, there was still another possibility: distributing with two licenses — which is what people often refer to as a "split license" — or what Matt described as "packaging gymnastics." While the PHP in a WordPress theme works with WordPress internal functions, the CSS,

JavaScript, and images do not. Therefore, a theme developer can package their theme with two licenses: one for the PHP and one for the other files. For theme authors concerned about piracy and copyright, this protected their intellectual property, while ensuring they followed the letter of the GPL. For the project, however, this was simply an evasive game that did an injustice to the spirit of the GPL.

Piracy was a major concern for many theme authors. They worried that anyone could buy their theme, legally distribute it, and even sell it. Putting a proprietary license on a theme, however, doesn't stop people from distributing them. Themes from commercial sellers cropped up on torrent sites all over the web and were sold on forums such as Digital Point for a cut price. It was easy, if a user wanted, to download a commercial theme for free (though it often came loaded with additional links and malware).

Other fears were around making money. How could a business make money by selling a product that the buyer had a right to give away — or even sell themselves? Designers and developers were reluctant to distribute with a license that they thought would damage their business. While Matt suggested they look into doing custom development, theme sellers were interested in selling products. It's more immediately obvious how you can scale a business selling products than with services. After all, if you don't factor in support and upgrades, it's possible to sell a digital product ad infinitum, creating a relatively passive income for yourself. Time and resources constrain doing custom design or development for clients.

Revolution was the first theme to be distributed with a 100% GPL license. Brian Gardner, Revolution's developer, has a typical theme developer story — he started as a tinkerer, did some contract work, started to sell themes, and realized he could make a business out of it.

Developers often came to the project with an implicit awareness of the free software and hacker ethos; they were comfortable with sharing code. Theme sellers came through another route: first they were bloggers, then tinkerers, then designers. As opposed to developers, theme sellers believed they had to

protect their designs. "I and others that were starting to sell themes at that point wanted to protect our work," says Brian. "We were almost scared of the open source concept where the design and images and the code we felt was all ours and really wasn't derivative of WordPress itself so we sold things on a proprietary level."

Matt's ThemeShaper blog comment made Brian reconsider his stance. Matt wrote:

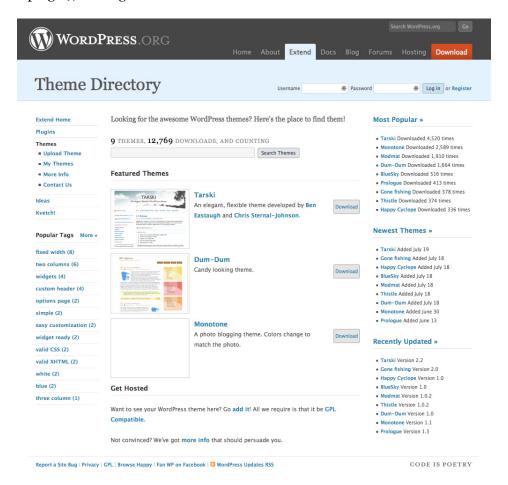
66 I'm happy to give significant promotion to theme designers who stop fighting the license of the platform which enabled their market to exist in the first place, just email me.

This was the encouragement that Brian needed. He emailed Matt to tell him he was interested. Before making the switch, Brian flew to San Francisco with fellow theme author Jason Schuller to talk to Toni and Matt. They discussed why theme sellers were using proprietary licenses and their fears around piracy. Matt and Toni made it plain: they were happy for theme sellers to make money, but themes needed to be GPL. In all of the confusion around the GPL, the message had become mixed. Theme sellers thought that they were expected to give themes away, not just that they were expected to distribute themes matching WordPress' principles of freedom.

A few days after the meeting, Brian announced that in the future, Revolution would be GPL. Jason Schuller followed suit.

In the midst of these debates, themes found a new home on WordPress.org. The theme viewer that had been hosted on themes.wordpress.net was riddled with problems: themes had security holes, and many of them had obfuscated code. The system was continually being gamed, there were duplicate themes, and many contained spam. The theme directory on WordPress.org was set up to rectify this; it was a place developers could host their themes, and where users could find quality WordPress themes. In July 2008, the Theme Direc-

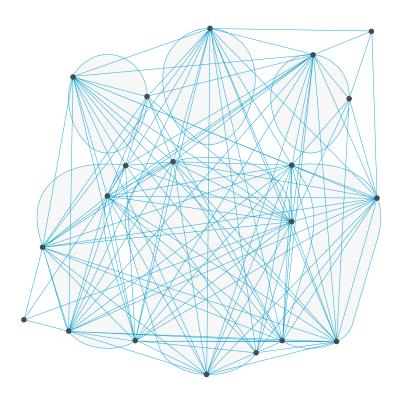
tory launched on WordPress.org, using bbPress (which, at that time, was not a plugin), making it easier than ever to distribute free themes.



The WordPress Theme Directory in 2008.

Part Five

Love the GPL
A community that grows
Free access for all



Riding the Crazyhorse

According to Ryan Boren, WordPress 2.7 ushered in "the modern era of WordPress." It also brought a new face to the WordPress project. WordPress 2.5's redesign wasn't well received, though the reasons why weren't clear. Was the user interface the problem? Or did people dislike it because they felt cut out of the process?

Jen Mylo (jenmylo)¹ and Matt are old friends. At the time, she ran a usability testing and design center at a New York agency in conjunction with Ball State University. The center's usability studies used the latest eye-tracking technologies with clients, including television networks such as ABC, NBC, and MTV. When a TV network missed a usability test window, Jen offered the slot to WordPress at cost.

The usability review had three stages conducted in two rounds. In Round 1, they tested WordPress 2.5, gathering "low hanging fruit" recommendations to improve the admin's UI. Using the recommendations, the development team created and tested a prototype (Test1515) to learn whether users' experiences had improved. In Round 2, they created and tested a more drastic prototype — dubbed Crazyhorse² — based on the Test1515 findings.

The research team used three main testing methods in Round 1:

- 1. Talk-aloud, in which participants are asked to think aloud as they carry out tasks.
- 1. At that time, Jen Mylo's name was Jane Wells. Her name changed in 2013.
- 2. Unlike WordPress releases, smaller projects, like Crazyhorse, don't always follow the jazz-musician naming convention.

- 2. Morae screen activity and video recordings, which allow researchers to watch participants remotely.
- 3. Eye-tracking technology to identify granular problems.

Twelve participants tested WordPress' admin. In Round 1, despite finding WordPress generally easy-to-use, the researchers identified several problems, including:

- 1. Verbs vs. nouns: users found it difficult to conceptualize tasks because they weren't action-oriented (Write/Manage). Instead, users perceived content in a more object-oriented way. (Posts, Pages, Comments, etc.)
- 2. Users didn't spend time on the dashboard. They used it as an entry point for other pages.
- 3. The write post screen caused problems for users. Tags and categories appeared below the fold; some participants forgot to add categories and tags before publication returning to the post screen to add them afterward.
- 4. The comments screen was confusing. Users didn't understand that they had to click on a commenter's name to edit a comment; they looked in the wrong place when asked to move a comment to spam.
- 5. The difference between uploading and embedding media in the media uploader confused users.

Round 1 testing on WordPress 2.5 uncovered minor issues with settings, the media library, link categories, and tag management. Users also wanted more control over dashboard modules and the post edit screen.

In addition to a laundry list of small interface issues that presented simple fixes, such as changing comment author links, we were faced with larger issues such as the desire for user-determined hierarchies on long/scrolling screens, ambiguity in the Write/Manage navigation paradigm, and a disconnect between the act of adding media to a post and the ability to manage it. — Usability Test Report (PDF)

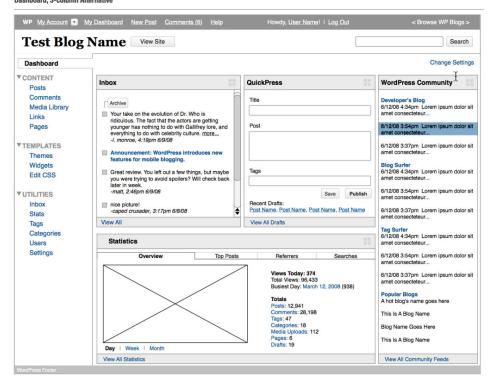
Minor changes were incorporated into the Test1515 prototype and tested — though they were so minor that participants didn't react strongly either way. The team created Crazyhorse to:

- maximize vertical space,
- reduce scrolling,
- · increase access to navigation to reduce unnecessary screen loads,
- enable drag and drop on screens that would most benefit from user control, and
- redesign management screens to take advantage of natural gaze paths.

Jen and Liz Danzico — who continued to work on WordPress' usability in the Crazyhorse project — created the design for the prototype. They sketched multiple ideas: front-end editing, accordion panes, and a top navigation. They chose the simplest prototype: a left-hand navigation panel, similar to Google Analytics and other web apps.

WordPress Prototype 1.1

Dashboard, 3-column Alternative



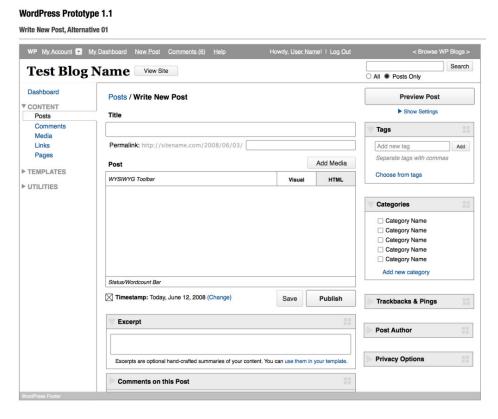
The dashboard in the Crazyhorse prototype.

WordPress developers built the Crazyhorse prototype in a Subversion branch, based on the prototype document (PDF), which outlined changes and rationale. The project focused on user experience and functional development, so the prototype retained WordPress 2.5's visual styles. As in Round 1 testing, participants carried out tasks; talk-aloud, Morae, and eye-tracking helped assess results.

Most participants preferred Crazyhorse over WordPress 2.5 and every new feature tested provided actionable information for the next version of Word-Press.

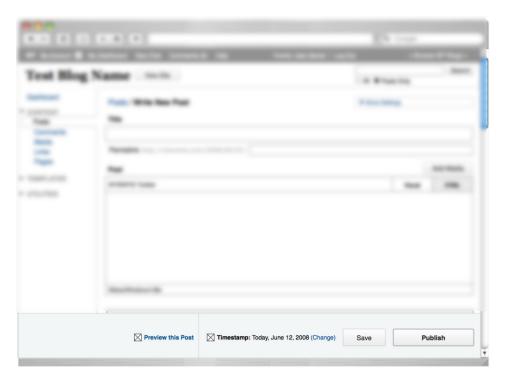
Participants loved the navigation on the left-hand side of the screen. They also preferred the object-oriented approach to organization. (Posts, Pages, Media, etc.)

Participants thought the Crazyhorse dashboard was more useful, and people appreciated the ability to customize it. They liked QuickPress, though they weren't sure if they would use it. With action links beneath comments, users found it easier to edit and moderate them.



The Write Screen in the Crazyhorse prototype.

The new Write screen had a drag and drop feature — allowing users to decide which elements got prime screen real estate. They also liked access to post comments; they felt that the new media uploader — with media library integration — was a huge improvement.



The bottom publish bar in the Crazyhorse prototype.

Users panned a publishing bar that floated at the bottom of the screen — they'd look at the bar a few times before realizing it contained the Publish button. Some users compared it to a banner ad or thought it part of their browser.

While Happy Cog and project Crazyhorse did user research, they ended up with quite different results. For Happy Cog, Liz interviewed community members and conducted in-person user testing. The Crazyhorse project, however, used eye-tracking technology. This meant that the testers didn't have to rely solely on what participants said; they had insight into what participants were actually looking at during tests. Additionally, gaze trails revealed how users navigated the screen with their eyes, allowing testers to ask: what draws user attention first? Do they miss important UI elements? Do they understand what they're seeing?

With the Crazyhorse prototypes a proven success, fleshing out its design was the next step. When Crazyhorse first merged with trunk, it was a set of live wireframes. Design changes had not been introduced to prevent swaying participants by color or typeface preferences. By the time the Automattic meetup in Breckenridge, Colorado, took place in 2008, Crazyhorse was ready for some color.

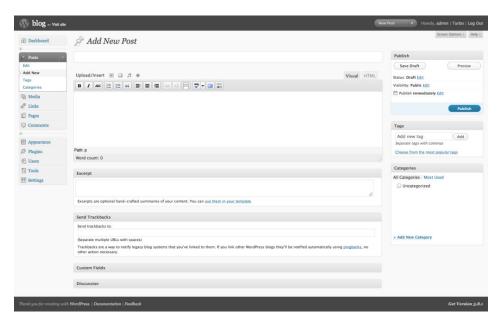
At Automattic meetups, small teams work on projects assigned at the beginning of the week. Matt Miklic (MT) (iammattthomas) ³ took on Crazyhorse with free design rein. In redesigning the admin, Jen and MT produced many designs. There was a heavy blue variant reminiscent of Shuttle-inspired WordPress, and a version using the light blue, grays, and orange of Happy Cog. Eventually, these two main variants melded into a gray color scheme that WordPress featured until 2013. Andrew Ozz (azaozz) received commit access to help implement the Crazyhorse changes.

Jen's community connection differentiated the Happy Cog and Crazyhorse processes. She kept the community abreast of what was going on. She did testing as an adjunct to the WordPress project to verify actual usability flaws with little community involvement. If it had been just a matter of user color preferences, the Crazyhorse project would have been fruitless. But when testing revealed WordPress' interface needed to change, community dialogue ensued. The designs and the usability report were shared on the development blog. The team surveyed users on navigation options, and the community discussed issues on the wp-hackers mailing list. When WordPress 2.7 released, the launch post lists the posts Jen and the developers wrote about the process. Up to that point, it is the only iteration of the WordPress admin to have such an information trail.

With the Crazyhorse project, WordPress' admin changed drastically — twice in 2008 alone. When screenshots of the changes appeared on community blogs, the inevitable question was "why are they changing it again?" Word-Press 2.5's design hadn't settled in before another huge change came about with the implementation of Crazyhorse in 2.7. A UI change meant that users of varying skill levels needed to relearn how to use WordPress; the growing

^{3.} At that time, Matt Miklic's name was Matt Thomas. His name changed in 2014.

WordPress tutorial community would need to retake every screenshot and reshoot every video. However, when WordPress users upgraded, the feedback was positive. Users loved the new interface; they found it intuitive and easy to use — finally demonstrating that it wasn't change they had been unhappy with just nine months earlier — but the interface itself.



The Write Screen in the WordPress 2.7 admin.

WordPress 2.7 brought the WordPress Plugin Repository to the admin screen. Users no longer had to download a plugin and upload it using FTP. They could search the plugin directory for the features they needed right from their admin, and install the plugin with just a few clicks. This made it much easier for WordPress users to quickly find and install plugins, removing FTP's technical barrier to entry.

WordPress' documentation also improved. In December 2006, Matt posted to wp-hackers, apologizing for his stance on inline documentation. Inline documentation patches were committed to core. In WordPress 2.7, PHPDocumentor was added, through a big push by Jacob Santos (jacobsantos) and Jennifer Hodgdon (jhodgdon) to get WordPress functions documented in the code. There was also the beginning of an official user handbook.

After completing the Crazyhorse redesign, Jen joined Automattic to work on WordPress. At that time, there was a close core developer group who led the project working in IRC and in Skype. In October 2008, Jen first appeared on wp-hackers. She brought fresh eyes and a completely new perspective. Her background in user testing and user experience was largely absent in the community until she joined the project. "Having someone with actual formal training in testing and user experience, it was just useful," says Mark Jaquith. "It was not just useful then, but it also changed us. Or at least it changed me. Where I started thinking in these ways as well and becoming better at stepping out of my own head."

This new focus on user testing and user experience meant that the software would work for everyone who wanted to install it — not just a small set of users.

Themes Are GPL Too

As the project transformed, so did the wider economy around WordPress. When Brian Gardner released the Revolution theme under the GPL in late 2008, theme developers watched with curiosity to see how it would influence his business, as it seemed counterintuitive to give a product away.

As theme authors watched and waited, commercial theme licensing came to a head. Toward the end of 2008, 200 themes were pulled from the WordPress theme repository. A statement was added to the About page of the Theme Directory that said, "All themes are subject to review. Themes for sites that support 'premium' (non-GPL or compatible) themes will not be approved." This meant that the Theme Directory no longer allowed free GPL themes that linked back to the site of a premium theme seller, whether the themes they sold were GPL or not.

Premium theme developers and the wider community were annoyed. What was the problem with theme authors selling themes? The themes hosted on the Theme Directory were free and complied with the GPL. As so often in the past, people conflated the actions of WordPress.org with Automattic and the company came under fire. Some perceived theme removal as a sign that Automattic didn't want anyone making money.

The theme sellers were genuinely unhappy. Their themes were pulled without warning. Many theme sellers saw their free theme releases as a way of supporting the free software community, and spent considerable time ensuring that they met the theme repository's standards. They felt as though a rug had been pulled from underneath them: they'd done their best to comply with WordPress.org standards, but suddenly it wasn't enough.

An email from Matt made the rounds in the community:

Thanks for emailing me about the theme directory. The other day I noticed a ton of bad stuff had snuck in like lots of spammy SEO links, themes whose sites said you couldn't modify them (which is a violation of the GPL), etc. Exactly the sort of stuff the theme directory was meant to avoid.

There were also a few that violated WP community guidelines, like the domain policy. So since Monday we've been clearing stuff out en mass. If you're kosher with the GPL and don't claim or promote otherwise on your site and your theme was removed, it was probably a mistake. Give us a week to catch up with the bad stuff and then drop a note.

In a podcast on Weblog Tools Collection, Matt discussed his position on the premium theme market (transcription). In the interview, he describes how, while updating a friend's website, he was looking for WordPress themes in the directory. He found themes with SEO links or linked to SEO sites — behavior that the Theme Directory had been set up to avoid. The Word-Press.org team questioned whether they wanted to allow GPL themes that only served as advertisements for non-GPL themes elsewhere.

In the interview, Matt discussed the distinction between "premium" and "free" themes, and the importance of correct labeling. When it comes to "premium" themes, Matt argued that the word "proprietary" makes more sense than "premium" or even "commercial." GPL themes, such as Brian Gardner's Revolution, could be commercial.

I love what Revolution has done, where they say 'Ok, so we still sold the theme, and we still bundle the support and everything like that with it, but it's also available as GPL.' So they're able to, within the GPL frame-

work, create a business and respect the underlying license of the community that they are building on top of.

Matt made it clear that theme developers were free to do what they wanted on their site, but the WordPress project was equally free to do what it wanted on WordPress.org, and that included whether it should or should not promote businesses that sold non-GPL WordPress products.

Part of the aim of the theme and plugin repositories is to promote theme and plugin developers. The project doesn't want to promote theme developers who follow the license to get on WordPress.org, but then violate Word-Press' license elsewhere. So, theme sellers who sell non-GPL products outside of WordPress.org aren't promoted on the site.

The interview delineated what WordPress.org would and would not support. People got an answer, whether they liked it or not. The storm calmed and cleared the way for 2009, when businesses started to embrace the GPL.

In the months following the debate, people wondered how to sustain a business under the GPL. As the first to embrace the license, Brian Gardner advised other premium theme sellers. In April 2009, Spectacu.la, the theme shop that first posted about themes being removed from the repo, announced that it was going fully GPL. It was followed in June by iThemes and WooThemes.

In July, Matt announced that he had contacted the Software Freedom Law Centre. They provided an opinion on theme licensing:

...the WordPress themes supplied contain elements that are derivative of WordPress's copyrighted code. These themes, being collections of distinct works (images, CSS files, PHP files), need not be GPL-licensed as a whole. Rather, the PHP files are subject to the requirements of the GPL

while the images and CSS are not. Third-party developers of such themes may apply restrictive copyrights to these elements if they wish.

WordPress themes are not a separate entity from WordPress itself. As Mark Jaquith wrote later, "As far as the code is concerned, they form one functional unit. The theme code doesn't sit 'on top of' WordPress. It is within it, in multiple different places, with multiple interdependencies. This forms a web of shared data structures and code all contained within a shared memory space."

Following that announcement, more theme sellers adopted the GPL license, though not all went 100% GPL (i.e., including CSS, images, and JavaScript). Envato, for example, whose marketplace, ThemeForest, was growing in popularity, opted for GPL compliance — with two licenses, in which the PHP was GPL, but the additional files were proprietary.

Themes that are packaged using this split license follow the GPL. The PHP carries a GPL license and other assets do not. The other elements — CSS, images, JavaScript, etc. — usually have some sort of proprietary license. This ensures legal compliance. It aims to protect author rights by removing the freedoms guaranteed by the GPL — the freedom to use, modify, and distribute modifications. Users are not free to do what they want with a theme licensed in such a way because the CSS and JavaScript are just as important to a theme as the PHP that interacts with WordPress' internals. But it would be a number of years before this licensing debate would occur.

Improving Infrastructure

Jen Mylo emphasized usability, as well as encouraged more people to contribute to WordPress. Conversations happened on wp-hackers and trac, but it wasn't always obvious how new people could get involved with the project. Project growth compounded the problem; it wasn't easy for a new contributor to understand what was going on, nor how to contribute. Jen wrote about how to get involved, and the development blog announced patch marathons and bug hunts.

Jen brought more structure to the project: she reinstated weekly development chats with agendas and prevented discussions from disappearing down rabbit holes. When she joined the project, core developers communicated in two main ways: via the IRC chat room and by private Skype channel. Skype's drawback is that it's closed — it doesn't create opportunities for other people to get involved. Also, because the main blog at the time, wpdevel.wordpress.com, was on WordPress.com and not WordPress.org, it didn't feel official. There had been little project management; developers wrote code and pushed it out when it was ready.

At this time, Matt stepped back. Ryan Boren led development, while Jen stepped up to project-manage the software and took a leadership role within the community.

She tried to address communication fragmentation within the project. By 2009, project communication happened in different places: trac, wp-hackers, the #wordpress-dev IRC chat room, wpdevel.wordpress.com, and the Word-Press.org development blog. Jen highlights the state of each of WordPress' primary communication channels: the #wordpress-dev channel had become mostly inactive; wp-hackers had thousands of subscribers, but was often

just a troubleshooting forum; the development blog was used for official announcements only; the wpdevel.wordpress.com blog (directed now to http://make.wordpress.org/core) housed team progress updates; Trac had become an unworkable mess with hundreds of irrelevant tickets; and the ideas forum contained many highly voted, but irrelevant threads.

Communication improvements were discussed in a forum thread. Suggestions included: a place other than trac for people to raise things; a way to make it easier for people to write automated unit tests, allowing the community to vote on ideas; greater documentation integration for WordPress and trac; adopting P2 for discussion; and using BuddyPress — a social-networking plugin that is a sister project to WordPress — on WordPress.org.

Amid suggestions were complaints: it was noted that no one official read the ideas forum, timezone differences made IRC meetups difficult to attend, and too many communication channels existed — far too many for people to keep up with. Some people complained about community governance and a lack of transparency. As Jen observed, "Your post just proves the point that communication is an issue. I would not say that WP lacks a clear direction, I would say that it simply hasn't been communicated properly."

Jen wanted to clarify how project decisions were made. It wasn't uncommon for people to toss feature requests into IRC chat. People needed to know what each communication channel was for and understand the correct channels to ask questions and request features.

Much of the development discussion had shifted from wp-hackers to trac. Trac's main benefit is that it focuses discussion directly on the bug, feature, or enhancement at hand. That said, as more and more people started using it, it became — just like wp-hackers — susceptible to intractable, bikeshed discussions.

Smilies were at the heart of one such recurring discussion. In 2009, a ticket requested replacing WordPress' smilies with Tango/Gnome smilies. Ryan Boren committed the patch.

The smilies landed first on WordPress.com, which receives daily codebase updates. The feedback was negative and reaction on the trac ticket spiralled; contributors were unhappy that smilies had been changed without discussion. They argued that WordPress had changed users' content, without giving them any say in it. The discussion spread from trac tickets to community blogs. Some wanted a public poll to aid the decision.

Ryan Boren eventually reverted the change, saying: "Back to the prehistoric smilies that everyone complains about but evidently likes better. Use I was a fool for not appreciating the explosive topic that is smilies, my bad." 1

As well as trying to fix communication problems, some worked on improving documentation. To commit a patch in WordPress core, there is a review process. The WordPress Codex, on the other hand, is the opposite: any contributor can publish documentation immediately. This is a low-friction way to create documentation, but because it lacked rules and structure, it became difficult to navigate; pages fell out of date, and — despite the efforts of the documentation team — it became a mess. User documentation is packaged up with developer documentation, often on the same page, and for many WordPress users and developers, the Codex became less useful. In the meantime, WordPress tutorial blogs proliferated. In the absence of good, official documentation, people went elsewhere.

The Handbook Project sought to create references for theme and plugin development. The team launched a trac instance and wordpress.com blog to manage the handbooks. It can be difficult to recruit long-term help on documentation. With the low-entry barrier, many people make their first WordPress contribution through documentation, but as they figure out the project's contours they move on to contributing to core. The original handbook project was passed between different people, and by 2014 it was near completion.

^{1.} The smiley debate was reignited in 2014, when WordPress.com updated its emotions and a proposal was made to produce high-dpi smiles for use on retina displays. Once again, people had strong opinions, as seen across community blogs. As of 2015, the smiles are still not updated.

In mid-2009, WordPress dropped the long-term security branch — something Mark Jaquith had maintained since 2006. The plan was to maintain it until 2010. During that period, however, there were major changes to WordPress' security. Backporting those changes into the 2.0.x branch meant complex rewriting that could have introduced new bugs or instability. The developers found that few people were on 2.0; new feature proliferation meant that people upgraded more readily. The legacy branch continued until just six months shy of its 2010 target, and was deprecated in July 2009.

Long-term support branch (LTS) requests remain — specifically from big companies that use WordPress as a CMS — though it's unlikely that Word-Press will ever start a new branch. Matt wrote to wp-hackers:

Not backporting is a conscious decision. I would rather invest 100 hours in backward compatibility in a new version than 2 hours in backporting a fix to an obsolete version of WordPress. Plus, as noted by everyone else, backporting was often impossible because it wasn't one or two line fixes, it was architecture changes that would touch dozens of files. The LTS was actually **less** stable with these "fixes" backported because it had almost no one using it.

Rather than supporting an LTS branch, the project focuses on easy updates and compelling features that entice users to upgrade. This iterative process has continued to improve throughout the project's history, from Matt's first mention of upgrades in his 2006 State of the Word address, to automatic updates introduced in WordPress 3.7. This approach focuses development on keeping users secure, rather than trying to maintain older software branches.

Meeting in Person

In December 2009, the core team — Matt, Mark, Ryan, Westi, Andrew, and Jen — met in Orlando, Florida. Despite working together on the project for years, it was the first time that some of them were meeting face to face. Working from the Bohemian Hotel lobby, they discussed live project issues, including "the merge, canonical plugins, the WordPress.org site, community stuff, and all the other things that are important but that we never seem to have time to address." As well as discussing WordPress' vision and goals, they had a trac sprint that edged them closer to shipping WordPress 2.9.



From left to right: Mark Jaquith, Jen Mylo, Andrew Ozz, Peter Westwood, Matt Mullenweg, Ryan Boren.

They posted results to the WordPress news blog, highlighting the breadth of the discussion:

Direction for the coming year(s), canonical plugins, social ii8n for plugins, plugin salvage (like UDRP for abandoned plugins), WordPress/MU merge, default themes, CMS functionality (custom taxonomies, types, statuses, queries), cross-content taxonomy, media functions and UI, community "levels" based on activity, defining scope of releases, site menu management, communications within the community, lessons learned from past releases, mentorship programs, trac issues, word-press.org redesign, documentation, community code of conduct.

Meeting in person allowed them to bounce ideas off of one another and to get work done. Jen recalls:

Orlando, and when it was time to eat we would go into the dining room and we would eat. And we'd come back and we'd work, and we were on our laptops and actually going through trac as well. And doing bug scrubs, but then we would stop and we would have just conversations and we'd go outside maybe or we'd go out to lunch. And so we kind of mixed it up, and it was just so helpful. Both in terms of just getting to know each other better, and the actual work.

Meetups continue to be part of core development, from small and focused ones with the core team to large gatherings involving the whole community. Members meet at WordCamps, or at dedicated meetups to do code sprints and to discuss the general project and development direction. They provide an opportunity for people to discuss issues without the barrier of a screen, and also to socialize, hang out, and get to know one another better. When community members meet, they generate new ideas and thrash out old ideas in detail. Meetups aren't, however, without side effects. Meeting in person, by its nature, excludes everyone who isn't physically present. In a free software project, it's important to balance offline meetups with online activity, which allows everyone to have a say.

The canonical plugins project was discussed at the first core meetup. The WordPress plugin repository was growing, and many plugins did the same thing. Large, complex plugins can transform WordPress, though some plugins had poor code quality, while some were out of date. Sometimes, a developer drops a plugin, leaving users without support or updates — a big problem if a user relies heavily on the feature. The core development team felt that some plugins warranted a similar process to the core development process, where a group of coders lead a plugin's development, deciding what goes in and what doesn't, in a similar way to how WordPress, BuddyPress, and bbPress are developed. Rather than having ten SEO plugins, or ten podcasting plugins, for example, there would be one canonical plugin, sanctioned by core with its own official development team.

WordPress' core development team supported the proposal, which Jen wrote about on the blog; the strong relationship between WordPress core and canonical plugins would ensure plugin code was secure, that they exemplified the highest coding standards, and that they would be tested against new versions of WordPress to ensure compatibility.

Early discussions focused on what to call this cluster of plugins. The community voted and decided on "Core plugins." Then, a team got to work, which included Westi, Aaron Campbell (aaroncampbell), Austin Matzko (filosofo), Stephen Rider (Strider72), and Pete Mall (PeteMall).

Health Check, which checks a website for common configuration errors and known issues; PodPress, a popular podcasting plugin which had been abandoned; and a proposed plugin to shift the post by email functionality from core into a plugin were the first canonical plugins.

But plugin developers weren't so enthusiastic. They liked having ownership over their own plugins. The WordPress project was accused of trying to stifle the growing plugin market. Discussions continued among developers about how core plugins might influence them. Justin Tadlock said:

There's been some great discussion here, but it seems a little one-sided. Most of the people leaving comments are developers. What would make the conversation much better would be to hear from more end users.

I will refrain from sharing my opinion until I can gauge what a larger portion of the user base is feeling because, quite frankly, that's the portion of the community that influences my opinion the most.

User feedback on the thread was positive: any help sifting through the mass of WordPress plugins was a benefit. Why should users have to sift through fifty contact form plugins when there could be one, officially sanctioned plugin that could serve 80% of users? The project didn't intend to kill off the plugin market, and Mark Jaquith tried to calm developer fears: "Core plugins will be safe and stable," he wrote, "but limited in scope and probably a little bit boring and not completely full-featured."

The core plugins project, however, was beset by other problems. While there was potential for success, they lacked the tools to work effectively across a broad group of plugins. "We didn't have the toolset at the time to do it properly," says Aaron Campbell, "without stepping outside of the WordPress ecosystem quite a bit and relying on something like a GitHub or something like that, which we prefer not to rely on for things that are really kind of the core of WordPress."

To properly manage core plugins, the WordPress project's infrastructure would have to change. When the plugin repository was built, it was designed with one author per plugin; developer collaboration tools didn't exist. (While the plugin repository has become more flexible — it's now possible, for example, to have multiple plugin authors — traditional developer collaboration tools are still lacking.) A system to submit contributions, discuss and modify patches, and merge them are useful for multiple developers working on a single plugin. To develop WordPress, tools have been built around the Subversion repository to make that possible, and the modified trac instance

encourages collaboration. But each core plugin would need a replica of the infrastructure that WordPress uses itself, and it became obvious that the plan was untenable.

On top of this, many of the developers were burned out from WordPress 2.9 (and taking a break with the promise of a major release cycle in WordPress 3.0). They didn't have the time or energy to build core plugins, as well as develop the core product itself. Despite the coverage the project got across the community, and despite the initial burst of energy, the canonical plugins project eventually fizzled out.

Update Notifications Redux

Community blogs became important gathering spaces for those who wanted to communicate outside the core project's official channels. One of these was WP Candy, a blog started by Michael Cromarty and later taken over by Ryan Imel. Another was WP Tavern, run by Jeff Chandler. WP Candy and WP Tavern became places where the community could share and discuss ideas, as well as vent outside the project's central channels — and over time, both have hosted many major community debates.

One of the biggest debates was around data collection.

When WordPress 2.3 shipped with update notifications, the initial debate quieted down. Lynne Pope (Elpie) reopened the discussion in 2009 on WP Tavern's forums, and also posted to wp-hackers. Lynne pointed out that Matt had said data collection would be reviewed in WordPress 2.5. She discussed URL collection and asked whether WordPress had a need to collect them, suggesting that an anonymous identifier could replace the blog URL. In the discussion thread on WP Tavern, Lynne went further into her concerns:

wordpress.org is not a legal entity so there is nobody to sue if data is misused. You can't sue a community. There is no disclosure about what data is collected or how it will be used. People are just supposed to trust that volunteers working on an open source project can be relied upon to keep personal data private?

She referenced WordPress.org being cracked in March 2007; if someone were to crack WordPress.org again, they would have access to all the data.

Since much of the data is freely available on the internet, many were unconcerned about the collection, but Lynne pointed out that what isn't readily available is the totality of that information (WordPress version, PHP version, locale setting, plugin information, and the website's URL as a package). In 2009, people were growing more concerned about internet privacy. People signed up for social media services that collected huge amounts of data, used to target advertising. A 2009 paper reported that personally identifiable information could be leaked from social networks (PDF) and third parties could link that data with actions on other websites. At the same time, internet users were becoming more vocal about privacy concerns. In February 2009, for example, when Facebook changed its Terms of Service to say that user data would be retained by Facebook even if the user quit the service, the company faced an outcry and was forced to backtrack.

In the midst of these privacy concerns, WordPress was a bastion of the independent web. If a person has privacy concerns, they can avoid using social media; but they can create a website using something like WordPress, on their own server, with complete control over their own data. For some people in the community, data collection tarnishes this independence. There is potential for abuse, and even if there is trust in the people who have access to this data now, there's no guarantee that others with access to the data will use it in the same way in the future.

Mark Jaquith, who had originally opposed the data collection, responded to Lynne on wp-hackers:

The more I thought about it, the more my knee-jerk objections faded away. Your server is doing an HTTP request, so the server knows your server's IP address. You can figure out what blog domains are hosted on that IP with a search on Bing or several other search engines. So if Word-Press.org really wanted to know your URL, it could find it. Again, that's just based on the IP address, which you HAVE to send for HTTP to work.

If your URL is discoverable, and your IP address has to be sent, withholding the URL doesn't actually get you more privacy, ultimately.

While wp-hackers saw some of this discussion, it mostly took place on WP Tavern. The discussion thread generated 291 responses — the most popular post in the forum's lifespan. It was also heavily discussed on Weblog Tools Collection under a post from Jeff Chandler, titled "Is WordPress spyware?"

The issue was reopened on WordPress trac, and was proposed for the development chat agenda. Some community members felt that their privacy concerns were valid, and that they weren't being taken seriously. In the thread, Matt posts that WordPress.org only stores the latest update sent, but no historical data. Historical data is only held in aggregate so that statistics can be provided for plugin and theme developers.

Mark joined the discussion on WP Tavern to share some of the reasons he changed his mind:

- An IP address, which must be sent by the server, is not significantly more anonymous than a URL.
- URLs allow WordPress to verify the identity of a blog. When URLs are
 hashed it's no longer possibly to verify the blog identity. Without
 proper verification, systems that involve plugin rankings based on
 usage or popularity are open to manipulation and abuse.
- The privacy policy was updated to cover api.wordpress.org.

The core developers stuck with their *decisions, not options* philosophy; no option was added to turn off update notifications. By the time it was raised again, in 2009, the project could apply another one of its philosophies to making the decision — the 80% principle: if 80% of users find something useful, then it belongs in core; if not, then it belongs in a plugin. A number of plugins were created to disable update notifications, but only a fraction of people used them. A clear notification of a website or plugin update was more impor-

tant than adding a preference to satisfy a small number of people within the WordPress community.

WordPress continues to collect data about sites, which is used in a number of ways. The project, for instance, can make informed decisions about which technologies to support. Using the data, it was possible to tell that, in 2010, around 11% of WordPress users were using a PHP version below 5.2, and that fewer than 6% of WordPress users were using MySQL 4.0. Using that information, the development team was confident about dropping support for PHP 4.0 and MySQL 4.0. Browser usage data also helped in the decision to deprecate support for Internet Explorer 6.

Data is helpful when there is a security issue with a plugin, too. The project can detect how many sites have a plugin active and can determine the severity of the issue. In the case of a security issue in a popular plugin, web hosts are informed so that sites with insecure versions of a plugin can be blocked at the host level. Update notifications were also an important stage in the road toward automatic updates for minor releases, which were introduced in WordPress 3.7.

The WordPress Foundation

Throughout this time, Automattic held WordPress' trademarks. Trademarks are an important asset to companies, to free software projects, and to anyone who has a product to protect. A trademark represents a project's reputation, and is a symbol of official endorsement. Free software licenses protect the terms under which a program can be distributed, but they don't grant trademark rights. In a 2009 article on trademarks in open source projects, Tiki Dare and Harvey Anderson report that of the 65 licenses endorsed by the Open Source Initiative (OSI), 19 don't mention trademarks, 19 prohibit trademarks in publicity, advertising, and endorsements, and a further 26 explicitly exclude trademark rights.

Trademark law protects a piece of code's marks and branding — not the code itself. A software project's code exists in its community's commons, but the trademarks do not. The growing issue of free software trademarks was conceded in 2007 with GPLv3. One clause states that the license may be supplemented with terms "declining to grant rights under trademark law for use of some trade names, trademarks, or service marks." This reflects that free software communities accept that a trademark is not necessarily linked to the software.

Users and consumers associate a trademark with the original project; the trademark denotes trust, quality, and dependability. It also helps to verify identity: if you're dealing with a company bearing the Widget Company logo, then you expect to be dealing with Widget Company. This matters in the free software community as much as in the corporate world. A free software project's trademark carries certain assumptions: that the project maintainers and developers are either involved with or officially endorse that product

or service, and that it meets quality standards. "Being the source of code arguably matters more than source code in an open-source business," write Dare and Anderson. "The code is easily replicated, as it is open, but the trust associated with source (or origin) is not replicable. Trademarks are all about source."

Automattic registered the WordPress trademarks in 2006, but some contributors — who had helped build the software or started their own local communities — felt that they had as much right to the trademarks as Automattic. Some community members believed that the community owned the codebase and thus should own the trademarks, not the corporate entity. What Automattic did have, and the community at large didn't, was the structure and money to protect the trademarks from abuse and dilution. This often came at the cost of good relations with the community.

Automattic had always intended to place the trademarks with the WordPress Foundation, which is a separate entity from the company. Automattic acted as a short-term trademark guardian, protecting the trademarks until another body could take over. This was made clear to the company's investors at the outset. Phil Black, one of Automattic's first investors, recalls knowing that the trademarks would not remain with the company. "It wasn't like Matt was proposing something to us where we felt like a significant asset was being lost," says Phil. "A significant asset was being transferred to the right third party as we thought that it should have been."

The Foundation counterbalances Automattic, providing checks and balances should Automattic ever be acquired. "Let's say Evil Co. ran Automattic," says Matt, "and Evil Co. only cares about making money. The balance between WordPress.org and the WordPress Foundation and WordPress.com is such that I think even Evil Co. would do the right thing with regard to the community and the code and everything."

The Foundation took longer to set up than expected; various factors needed to be in place before it launched. Before the trademarks could be transferred, they needed to be properly secured and protected. Toni Schneider managed this during his early days at Automattic. It also took a long time to register the non-profit with the IRS. Because non-profits are tax-exempt, it can be difficult to set one up. Matt wanted the Foundation to hold the trademarks, but simply holding trademarks is not considered a legitimate non-profit activity. Applications sent to the IRS were denied for several years. In the end, the WordPress Foundation received 501(c)(3) status as an organization charged with educating people about WordPress and related free software projects.

The WordPress Foundation's website states its mission:

The point of the foundation is to ensure free access, in perpetuity, to the software projects we support. People and businesses may come and go, so it is important to ensure that the source code for these projects will survive beyond the current contributor base, that we may create a stable platform for web publishing for generations to come. As part of this mission, the Foundation will be responsible for protecting the WordPress, WordCamp, and related trademarks. A 501(c)3 non-profit organization, the WordPress Foundation will also pursue a charter to educate the public about WordPress and related open source software.

The WordPress Foundation was launched in January 2010. Automattic transferred the trademarks later that year in September. As part of the transfer, Automattic was granted use of WordPress for WordPress.com, but not for any future domains. Matt was granted a license for WordPress.org and WordPress.net. As well as transferring the trademarks for WordPress itself, the company also transferred the WordCamp name. As with WordPress itself, this protects WordCamps as non-profit, educational events in perpetuity.

The community was pleased with decoupling WordPress the project from Automattic the company. It gave people more confidence that Automattic was not out to dominate the WordPress commercial ecosystem. Despite some initial confusion about how people were allowed to use the WordPress trademark, eventually it settled down.

In the same year, both Matt and Automattic explored different ways to support the WordPress project. Matt set up another company, Audrey Capital, which is the home for his investments. Audrey Capital allows him to hire developers for tasks that he doesn't have time for, and this separation offers some balance between people who contribute to WordPress and who aren't employed at Automattic.

"The idea was to kind of have five people at Automattic working on Word-Press core, five people at Audrey working on Word-Press core, and then I'll try to get the different web hosts to each hire a person or two each, and so there'll be between the three, fifteen-ish people, full-time on Word-Press.org," says Matt.

Developer Samuel Wood (Otto42) was Audrey Capital's first employee. Matt and Otto share a love for barbecue. Otto was looking for someone to sponsor a BBQ team at the international barbecue festival in Memphis, Tennessee. Knowing Matt liked barbecue, Otto asked him to sponsor the team. Matt said yes and went to Memphis for the festival. The following year, Matt sponsored the group again, and eventually asked Otto to work for him at Audrey. Andrew Nacin — who would go on to become a lead developer of WordPress — joined Otto, and since then, Audrey has hired three more people to work on the WordPress project.

At the same time, changes at Automattic would have an ongoing influence on the project. By August 2010, the company had more than sixty employees. The sheer number of people meant that the completely flat structure was becoming harder to manage. The company moved to a team structure in which groups of people worked on different projects: themes, VaultPress, and support, for example. One of the newest teams at Automattic was the Dot Org Team, dedicated to working on the free software project. Ongoing members were Ryan Boren and Andrew Ozz, WordPress lead developers; Jen Mylo, formerly WordPress' UX lead responsible for the Crazyhorse redesign; and Andrea Middleton, who managed WordCamps.

Teams are fairly fluid inside Automattic, and people come to the Dot Org

Team to work on the WordPress project, often bringing with them the knowledge and skills that they've developed elsewhere in the company. Employees can also do a "Dot Org rotation," which means that they work on the Word-Press project for a release cycle.

The Dot Org Team has helped mitigate the effects of hiring from the community. Seven out of the first ten Automattic employees came from the Word-Press community, and over the years, the company has hired a number of contributors. While this has been good for individuals and for Automattic, it hasn't always had a positive effect. When WordPress.com was almost the sole focus, contributors worked on the core project, which benefitted both the project and Automattic. Some early contributors who became Automattic employees found themselves spending less and less time on the project. Mark Riley, who was employed to do support, found that he had no time to help out in the WordPress.org support forums. For other people, this has happened slowly, over time, as Automattic has expanded into other products, while the core project evolved in a different direction — one with governance and structures, wildly different from the days of throwing up patches, heated discussions on wp-hackers, and waiting for Matt or Ryan to commit code.

The Dot Org Team has formed a bridge between the company and the community, ensuring that there are people within Automattic whose attention is 100% on growing the WordPress product and project. In 2014, the number of people working on WordPress from Automattic expanded even further. The Dot Org Team split into two: a developer team that works on the core software and on WordPress.org (Team Apollo), and a community team that is focused on events and the community (Team Tardis).

WordPress 3.0

WordPress 3.0 arrived in 2010, bringing change not only to the software, but to the development process and project structure. Commit access was opened up and all these changes shaped how the project works today. WordPress' philosophy — *deadlines are not arbitrary* — was seriously challenged.

In January 2010, Dion Hulse (dd32) received commit access during the 3.0 release cycle. In the post announcing Dion's access, Matt outlines a new goal for the project:

One of the goals for the team in 2010 is to greatly expand the number of people with direct commit access, so the emphasis is more on review and collaboration. Right now commit access is tied up with being a "lead developer," of which we've always found a small group of 3-5 works best, but now we want commit to be more a recognition of trust, quality, and most importantly activity, and something that can dynamically flow in and out as their level of commitment (har har) changes and decoupled from the "lead dev" role.

This new approach and decoupling commit access from the lead developer role signaled a big change when every patch went through either Matt or Ryan. There was a need to extend trust to contributors, without necessarily giving them leadership roles within the project. While there were no formal rules, several contributors received commit access: Ron Rennick (wpmuguru), focused on multisite, Dion focused on HTTP, and Daryl Koopersmith (koop) worked on front-end development, while Andrew Nacin (nacin) was the codebase generalist.

As well as a symbol of trust, extended commit access meant that tickets and bottlenecks were cleared quickly. When lead developers got distracted by life and work, Ryan Boren carried the load. New committers reviewed and committed tickets.

April 13, 2010 was WordPress 3.0's release date. Similar to prior releases — despite having a deadline — development focused on scope and headline features, rather than meeting the date. Three main features were defined in the scope chat: merging WordPress MU with WordPress, menus, and a new default theme to replace Kubrick.

Merging WordPress MU with WordPress came for several reasons: Word-Press MU was difficult to maintain, 95% of the code was the same as the main WordPress codebase, and Donncha had to manually merge new features post-release. Because WordPress MU hadn't gained attention from plugin developers, it felt separate from the main WordPress project. To give users a clean upgrade path, WordPress MU merged with WordPress.

Ron Rennick, a longtime MU user, assisted with the merge. He and Andrea, his wife, had used WordPress MU for years for their homeschooling blogging network. His script turned a WordPress install into a WordPress MU install. He reverse engineered his script to bring MU functionality into WordPress, ensuring a way to convert a single WordPress install to a Multisite install.

Ron ran a diff ¹ against the WordPress MU code, looked for differences in the codebase, and merged them into WordPress core. Ryan Boren and Andrew Nacin cleaned up the code. Ron also merged features absent from WordPress MU in plugins, such as domain mapping — a feature originally developed by Donncha.

Plan A was to allow users to upgrade to WordPress Multisite with one click. "The reason we decided not to do that," says Ron, "is that a lot of the shared hosts would not have been happy if their users could just take any WordPress install, click a button — without actually knowing anything about what was

^{1.} A diff is a comparison tool that compares the difference between two files.

going to happen — and convert it over to Multisite. The decision was made to actually make it a physical process that they had to go through." To change a WordPress installation into Multisite, WordPress users have to edit wpconfig. They need basic technical knowledge.

Terminology was one of the biggest headaches surrounding the merge. In WordPress 3.0, the project decided to move away from the word "blog," and instead refer to a WordPress installation as a "site." More and more people were using WordPress as a CMS, so the "site" label felt more appropriate. However, in WordPress MU, the parent — example.org — is a site, while the subdomain blog.example.org is a blog. With WordPress MU and WordPress merging, which one was the site? An individual WordPress install, or a WordPress install that hosted many blogs? WordPress MU became WordPress Multisite, but that wasn't the end of it.

To complicate matters further, WordPress MU had a function get_site_option, which gets options for the entire network, and get_blog_option which gets options for individual sites. The functions, therefore, don't relate entirely to the user interface. That was just one of the functions that caused problems, as Andrew Nacin noted.

Custom post types and custom taxonomies were two big changes in Word-Press 3.o. The default content types in Word-Press are posts, pages, attachments, revisions, and nav menus (from Word-Press 3.o.), and the default taxonomies are categories and tags. In Word-Press 3.o., custom post types and taxonomies were given a user interface. So instead of being restricted to just posts and pages, developers could create themes and plugins that had completely new types of content for users, such as testimonials for a business site or books for a book review website. This opened up totally new avenues for theme and plugin developers, and those building custom sites for clients.

Menus were the big user-facing feature for WordPress 3.o. At the time, it wasn't easy for people to add navigation menus to their websites. Menu plugins were popular, so much so that it was obvious that the feature met the 80/20 rule. (Would 80% of WordPress users take advantage of the feature?

If yes, put it in core, if not, keep it in a plugin.) The menus ticket was opened in January 2010. The first approach was to create a menus interface similar to the widgets interface. By mid-February, however, little progress had been made. Proposals competed on how menus should work. Ryan and Jen contacted WooThemes to discuss bringing their custom woo navigation into WordPress core. This was just days before the planned feature freeze on February 15, 2010.

WooThemes' custom navigation made it easy for users to add menus to their websites. Developer Jeffrey Pearce (Jeffikus) worked with Ptah Dunbar (ptahdunbar) on the core team to modify WooThemes' code for core, and to prepare core for the feature. At the time, core updated jQuery to match the version WooThemes' theme framework used. The original WooThemes codebase created new database tables for the menus. As a general rule, WordPress avoids adding tables to the MySQL database. Instead, core developers used custom post types — existing core functionality.

However, Jeffrey found the time difference challenging. Jeffrey is based in South Africa; core development work happens mostly on US time zones. Development chats took place at 20:30 UTC, which was 22:30 in South Africa. Additionally, Ptah and Jeffrey kept missing each other on Skype.

An environment in which everyone had a voice and an opinion wasn't something that WooThemes was used to in their development process. Adii Pienaar, co-founder of WooThemes, described the process as excruciating. One of the main points of contention was that WooThemes had originally put the menus in the center of the screen with boxes to add menu items on the right-hand side. WooThemes had invested time into designing it that way, but the menu interface was flipped around to match WordPress' left to right interface convention.

The menu integration was one of the first times that the project had worked directly with a commercial business (other than Automattic). While the process was not always completely smooth, both sides benefitted from collaborating. WordPress got its menu system. While not exactly the same as

the menu system that WooThemes created, it accelerated development. WooThemes got the satisfaction of seeing its code used by every WordPress user. Not everyone felt that WooThemes received adequate credit, though Jeff didn't share this viewpoint. "Just to have our name on the contributors' wall — that to me was good enough," he says. "It's nice just to be able to say, I built a part of WordPress. No one can ever take that away from me. That was recognition enough for me."

WordPress 3.0 ended up being a huge release, and while menu discussion continued, launch was delayed again and again. By April, the core team was still sending around wireframes — discussing whether menus should be pulled from 3.0. The release candidate kept being pushed back. Matt reiterated one of WordPress' key philosophies:

Deadlines are not arbitrary, they're a promise we make to ourselves and our users that helps us rein in the endless possibilities of things that could be a part of every release.

Feature-led releases meant delays. Menus caused the hold-up with Word-Press 3.0, with prevarication over the user interface and implementation. The final release was packed full of features that included the new menus, the WordPress Multisite merge, custom post type and taxonomy UI, custom backgrounds and headers, and an admin color scheme refresh. Any of these features could have been pushed to the next release, but there was no willingness to do so.

One of the more controversial changes in WordPress 3.0 was a new function called <code>capital_P_dangit</code>. This function ensures that the letter "p" in WordPress is capitalized. People felt that WordPress was messing with their content — that this automatic correction was the start of a slippery slope. For some, it was overbearing pedantry, for others, censorship. WordPress has no business changing what people wrote. Some saw it as incommensurate with the project's core freedoms: openness, freedom, and community.

Most importantly, the filter broke URLs in some instances. This was reported before WordPress 3.0's release, but because the filter had already worked well on WordPress.com, it wasn't fixed immediately. For example, a user reported that his image, named "WordpressLogo_blue-m.png" was broken because it had been renamed to "WordPressLogo_blue-m.png." Upon upgrading to WordPress 3.0, other users — those with folders with the lowercase "p" — had the same problem. As well as folders, URLs with the lowercase "p" were broken. Hosts saw an uptick in support requests. "When 3.0 arrived," says Mike Schroder (dh-shredder) of Dreamhost, "we had a deluge of support with broken URLs due to capital P dangit () applying to all content. This was a particular problem because it was popular among customers to use /wordpress as a subdirectory for their install. We helped customers with temporary workarounds in the meantime, but were very happy to see the issue fixed in 3.0.1." Mark Jaquith added a fix, but many contributors believed WordPress should never have broken users' websites in the first place.

The capital_P_dangit function isn't the only WordPress function that filters content. Other filters include emoticons, autop, shortcodes, texturize, special characters, curly quotes, tag balancing, filtered HTML / kses, and comment link nofollows. From the core developers' perspective, capitalizing the "p" in WordPress didn't actually change the meaning of the sentence, except in edge cases such as, "Wordpress is the incorrect capitalization of WordPress."

Core developers became frustrated by the hyperbole around the filter and the time spent arguing about it. In a comment on Justin Tadlock's blog, Mark Jaquith said:

Calling corrections censorship is absurd. It is no less absurd when the capitalization of a single letter is called censorship. There is actual censorship going on all around the world at this very moment. I'm damn proud of the fact that WordPress is being used to publish content that

makes governments around the world afraid of the citizens who publish it. I'm incredulous that people are making a fuss about a single character (which is only one of dozens of automatic corrections that WordPress makes). It's free software that is easily extended (or crippled) by plugins. If the thought of going the rest of your life without misspelling Word-Press it too much to bear, you have an easy out. Take it, take a deep breath, and try to pick your battles."

A website Mark created reflects the position of many of the core developers on the capital_P_dangit discussion:



While this had all of the hallmarks of a bikeshed, there were some procedural issues that community members felt ought to be taken seriously. Whether the WordPress software capitalized the "p" in WordPress or not, the method by which the function was added to core broke accepted procedure: no ticket was opened, no patch uploaded to trac. The code was simply committed. For some, this set up an "us vs. them" mentality, where some core developers could commit code as they saw fit, while everyone else in the community was subject to a different process.

Despite these development snafus, with WordPress 3.0, the platform

matured, making "WordPress as a CMS" a reality. It also introduced a new default theme for WordPress, ushering in a new approach with new annual default themes. Gone was Kubrick, with its bold, blue header. The new theme, Twenty Ten, showcased WordPress' new menus feature.

WordPress 3.0 ushered in changes to the project and the development process. It opened up WordPress to a new generation of people who became increasingly active. Over the coming releases, some of those committers would take on leadership, both in terms of development and in the wider community.

The WordCamp Guidelines

By the time WordPress 3.0 came out in 2010, 107 WordCamps had been held across the world, in countries as diverse as Thailand, Germany, the Philippines, Canada, Israel, and Chile. WordCamps create spaces in which Word-Press users, developers, and designers converge to listen to presentations and talk about WordPress. Participants meet project leaders, socialize, and get to know one another. WordCamps attract new contributors, and developers meet with users to learn about problems they experience with WordPress.

WordCamps have always been informal, and through the early events, the organization was just as informal as the events themselves. In the beginning, interested community members simply decided to organize a WordCamp. They contacted Automattic for stickers, buttons, and other swag. A blog for WordCamp organizers was set up in 2009, so that organizers could communicate with one another.

In May 2010, Jen took over as central WordCamp liaison, instituting changes in WordCamp organization. Jen said that "WordCamps are meant to promote the philosophies behind WordPress itself." Without any real structure and oversight, things happened contrary to WordPress' core philosophies. For example, WordCamps accepted sponsorship from people and companies in violation of WordPress' license — the GPL. While non-GPL compliant developers and companies are welcome to attend WordCamps, they're not able to organize, sponsor, speak, or volunteer. This is because WordCamps are official platforms of the WordPress project, and the project doesn't want to endorse or publicize products contrary to its own ethos.

Without central oversight, issues arose at WordCamps. Many WordCamps ran without budgets. Some organizers took money for themselves. One

WordCamp accepted sponsorship money, the WordCamp folded, and the sponsorship never returned. Another opened for registration just so that the organizer could compile a mailing list to which they could send marketing emails.

WordCamps needed better oversight, including clear guidelines. From May 2010 onward, that started to happen. Jen published the first set of Word-Camp guidelines.

WordCamps should be:

- about WordPress.
- open to all, easy to access, and shared with the community.
- · locally organized and focused.
- · open to lots of volunteers.
- stand-alone events.
- · promote WordPress' philosophy.
- · not be about making money.

In some quarters, the changes went down badly. Others were more relaxed about the changes, but they, too, asked why people who promoted non-GPL products would be banned from speaking. While many WordPress theme shops were 100% GPL, those that weren't 100% GPL were indignant that they would have to be GPL-compliant just to speak at a WordCamp.

There were frustrations about the way in which the guidelines emerged. They were published without consultation with WordCamp organizers and appeared to be an edict from above. Brad Williams (williamsba1) says: "I think it probably would have been more beneficial across the board for some more open conversations between the Foundation and the organizers to make sure, one, that these guidelines make sense and that we're all on the same page and if there was any concerns get those out in the open." As with previous decisions, the guidelines weren't part of a conversation between the Foundation and the WordCamp community. When they appeared, they seemed unilateral and the rationale was poorly communicated.

Some guidelines responded to community problems. It is important that WordCamps focus on the software. At least 80% of the content should be about WordPress. Presentations about social media, SEO, and broader technology issues should not be the event's main focus. Other guidelines were more about ensuring that events about WordPress mirror the project's organization and ethos. Like the project, WordCamps ought to be volunteer-driven, from the organizers, to the speakers, to the volunteers who help out during the day. The WordPress project was built by volunteers and Word-Press events run on volunteer power. WordCamps should also be accessible to anyone who chooses to attend. This means keeping ticket prices intentionally low.

The guidelines have evolved over the years, with community feedback. While not everyone is happy with them, WordCamps continue to flourish around the world.

Dealing With a Growing Project

By the time WordPress 3.0 launched, more people were interested in Word-Press than ever before. In the early days the project attracted developers, bloggers, and people interested in helping others via support or writing documentation. But several factors meant that people with diverse backgrounds were getting involved.

WordPress 2.7 demonstrated that making software isn't just about writing code; design, user experience, UI expertise, and testing are all very much part of the process. Useful software requires a diverse set of eyes. This means attracting new contributors by illuminating the different ways one can contribute to the project.

While development, documentation, and support are obvious ways to participate, in 2009, Jen Mylo wrote about the different ways for people to contribute to the project. One was graphic design. After a 2008 icon contest was successful, the project tried to find more ways for designers to contribute. A new trac component for graphic design tasks ensued, and designers were invited to iterate WordPress' visual design. People were also encouraged to participate with usability testing. WordPress 2.7's success stemmed from user testing during the development cycle. The development team was keen to replicate this process in future releases. Jen also invited people to contribute by sharing ideas, feedback, and opinions.

As well as her work on the development blog, Jen and other project leaders

spoke at WordCamps to encourage community involvement. Developing a strong community was becoming as important as software development.

Project infrastructure changes also affected WordPress' growth, particularly in the third-party developer community. Users could readily find themes and plugins. Plugins iterated more quickly; the plugin directory launched in March 2007 in WordPress 2.3. Later that year, the plugin update notification system arrived, and from WordPress 2.7 onward, users could install plugins from their admin screens. Theme improvements were similar, if a little later. The theme directory launched in July 2008; it arrived on admin screens with WordPress 2.8 in 2009. Giving users more access to plugins and themes meant third-party developers had much greater access to users than ever. The theme and plugin directory were growing exponentially.

The theme directory was becoming more difficult to manage with the exponential theme growth. Joseph Scott (josephscott) developed the first version of the theme directory, and spent much of his time reviewing themes and providing feedback. While many theme issues were security-related, Joseph also advocated for best practices. Soon the work became too much for one person.

Joseph wrote:

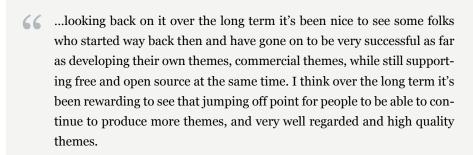
The theme directory has been chugging along for more than a year now. During that time we've tinkered with the review process and some of the management tools, but haven't really opened it up as much as we'd like. It's time to rip off the band-aid and take some action; to that end, we're looking for community members to help with the process of reviewing themes for the directory.

No one knew how the experiment would turn out. A rush of people signed up for the new mailing list; guidelines were drawn up. Though the overall response was positive, some felt that the guidelines were too restrictive — that some theme requirements should be recommendations. On the WP Tavern forums, Justin Tadlock outlined some concerns, specifically that guide-

lines didn't allow themes with custom template hierarchies or custom image systems. Some believed the theme review team should check for spam and other objectionable practices. Other developers simply decided to remove their themes from the directory.

Manpower was a problem for those reviewing themes. The review queue was clogged with 100 themes by July 2010; new themes were added every day. Only three or four people were actively reviewing themes. Over time, automated processes and new tools have improved the theme review process. For example, the theme check plugin tests the theme against all of the latest theme review standards.

But despite the teething problems, the theme reviewers have a system that benefits both users and developers: users get safe themes approved by Word-Press.org, and theme developers get feedback and help on their themes. There have been other, long-term benefits. Joseph says:



As the WordPress project settled into concrete groups, communication needed to improve. Core product development was discussed on wpdevel.wordpress.com. Other teams were scattered over mailing lists and wordpress.com blogs. Toward the end of 2010, a new blog network was set up on WordPress.org — make.WordPress.org became the new home for WordPress contributor teams, with blogs for core, UI, theme review, and accessibility. Over time new blogs such as support, documentation, plugins, and community, were added.

Each make.WordPress.org blog runs the P2 theme. Created by Automattic for internal communication, P2 is a microblogging tool that allows users to post on the front end — similar to Twitter — without the 140-character limit. Threaded comments on posts allow for discussion. Unless made completely open, only people who are editors of a blog can write a post while anyone is able to comment.

The "make" blogs are an important centralized space on WordPress.org where contributors gather. If a contributor is interested in core development, they can follow the core blog; forum moderators can follow the support blog; people with a UI focus can follow the UI blog. Contributors can subscribe to the blogs and follow along with what's going on from their email inboxes.

By moving everything onto P2-themed blogs on make.WordPress.org, the conversation's tone has changed — everything takes place in public. This encourages a more respectful attitude among community members. The focus is on getting work done, rather than devolving into arguments.

These sorts of focused communication improvements have helped the project to build capacity and grow. What often happens is that a need appears, a call goes out, and if enough people answer the call, the project moves forward. This sort of community and capacity building is an important part of running a successful free software project. As the community grows, needs change and new contribution areas open up. A project that grows so far beyond its hacker roots that it encompasses a diverse set of contributors is a healthy one.

Thesis

By mid-2010, one theme was still a GPL holdout: Thesis, from DIYThemes. Created by theme designer Chris Pearson and blogger Brian Clark, Thesis was popular as a feature-heavy framework — it gave users many more options than most WordPress themes. Users can customize every element of their website via the user interface. On the original about page, Chris states Thesis' aim: "I wanted a framework that had it all — killer typography, a dynamically resizable layout, intelligent code, airtight optimization, and tons of flexibility." Tech blogs featured Thesis and high profile bloggers, including Matt Cutts, Chris Brogan, and Darren Rowse adopted it.

Chris Pearson was well-respected in the community; he'd already developed Cutline and PressRow before moving into the premium theme market with Thesis. A mid-2009 ThemeShaper post recalls Thesis' influence as "The Pearson Principle": "Bloggers want powerfully simple design on an equally robust framework." With themes such as Revolution and Premium News, theme developers were already creating feature-rich themes, and Thesis cemented that approach, ushering in the era of the theme framework ¹. Chris called this approach "ubiquitous design." A theme wasn't simply a website skin, it was a tool to build your website. It took another four years before theme developers stopped packing themes with options and started moving features into plugins.

While theme vendors adopted the GPL, Thesis held out. Discussions between

^{1.} The term "theme framework" is often used to refer to different things. In some instances, a theme framework is a base, or "starter" theme that a developer can build from. In other cases, it's a drop-in code library that facilitates development. But it's also used in marketing to users, when a theme framework is a feature-heavy theme with multiple options.

DIYThemes and Automattic went nowhere and relationships fractured. In June 2009, Brian and Toni were in discussions when a blogger's comment thread was hijacked. A long debate about Thesis and the GPL ensued. Matt urged people to move away from Thesis, saying "if you care about the philosophical underpinnings of WordPress please consider putting your support behind something that isn't hostile to WordPress' core freedoms and GPL license."

In July 2010, the WordPress/Thesis debate reignited after Chris Pearson's interview on Mixergy. In it, Chris shares Thesis' revenue figures, putting a conservative estimate at 1.2 million dollars within 16 to 18 months.

Just over a week later, Matt and Chris took to Twitter. Matt was unhappy about Chris flaunting revenue and the GPL — violating WordPress' license. Cutting remarks ensued until Andrew Warner from Mixergy set up an impromptu, live debate to discuss the issues. The hour-long discussion airs both sides of the argument. Matt argues that Thesis is built on GPL software — WordPress — and must honor the license. Matt suggests that Chris is disrespectful of all WordPress authors and that he's breaking the law. Chris said adopting the GPL meant giving up his rights and losing piracy protection. He argues that "what I've done stands alone outside of WordPress completely," and that Thesis "does not inherit anything from WordPress." The argument descends into a rambling discussion of economics, and the conversation ends when Matt threatens to sue Chris if he refuses to comply with the GPL.

Matt, Automattic, and WordPress took public action against Thesis following the interview. Matt offered to buy Thesis users an alternative premium theme, consultants using Thesis were removed from the Code Poet directory of WordPress consultants, and Chris Pearson's other themes — Cutline and PressRow — were removed from WordPress.com.

Matt wasn't the only one in the WordPress community to come out swinging against Thesis. Other lead and core developers wrote about their GPL / Thesis stance. Ryan Boren wrote, "where do I stand as one of the primary copyright holders of WordPress? I'd like to see the PHP parts of themes retain

the GPL. Aside from preserving the spirit of WordPress, respecting the open source ecosystem in which it thrives, and avoiding questionable legal ground, retaining the GPL is practical." Mark Jaquith noted that WordPress themes don't sit on top of, they're interdependent on WordPress:

...in multiple different places, with multiple interdependencies. This forms a web of shared data structures and code all contained within a shared memory space. If you followed the code execution for Thesis as it jumped between WordPress core code and Thesis-specific code, you'd get a headache, because you'd be jumping back and forth literally hundreds of times.

Even developers who believed themes aren't derivative of WordPress declared Thesis derivative. Developer Drew Blas wrote a script comparing every line of WordPress and Thesis. His script revealed several instances of Thesis code taken from WordPress. Core developer Andrew Nacin pointed out that Thesis' own inline documentation declared: "This function is mostly copy pasta from WP (wp-includes/media.php), but with minor alteration to play more nicely with our styling."

A former employee of DIYThemes left a comment on Matt's blog:

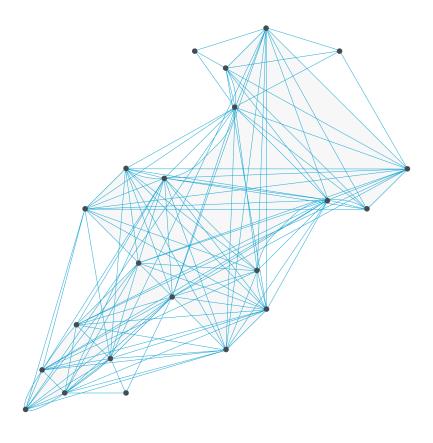
check out Thesis' handling of comments (thesis/lib/classes/comments.php). Large chunks of it are ripped right from WordPress. I know they are... because I'm the one who did the ripping. Whether I informed Chris of that or not doesn't matter because I no longer have any of our old chat logs to prove one way or another, but suffice it to say the latest public release of Thesis (and numerous versions before hand) contain obviously GPL code. Whether those portions get rewritten in the impending 3.0 release, I don't know... but for Chris to claim that he was responsible for and devised all of Thesis at 13:33 or so in the debate... Well, he was lying to you, either intentionally or not.

On July 22, — not even a week after the initial Mixergy interview — Chris Pearson announced that Thesis would be released under a split license. The public furor, compounded by pressure from inside DIYThemes, forced Chris to capitulate. Brian Clark drafted the license, shortly before leaving DIYThemes, citing "completely different opinions about the direction of the development of Thesis, the running of the company, and our relationship with the WordPress community." When Thesis 2 launched in 2012, it had a new, proprietary license.

The debate around Thesis and the GPL had far-reaching implications for everyone involved. Prominent blogs moved away from Thesis. Brian Gardner's Genesis theme became a popular choice. Thesis and Chris Pearson became less prominent in the community, focusing instead on cultivating and building a large customer base. The debacle also proved that WordPress will go to court to defend flagrant license abuse. There was, for a while, a relative calm in the community around the GPL. WordPress.org supported commercial theme sellers whose themes were 100% GPL and tolerated those that packaged their themes with two licenses. It would be another four years before the community found itself in another GPL argument on the four freedoms, this time between WordPress and Envato.

Part Six

Crazyhorse tests best Full GPL only, please Release leads, hurray



The Transition to Release Leads

From late 2011 on, the development process iterated. Not optimal, it lacked accountability. Bottlenecks festered and deadlines passed. Each release from WordPress 3.4 on endured major development process change; it wasn't until WordPress 3.8 that process experimentation slowed.

Experimentation started at the core team meetup in Tybee Island, Georgia, in December 2011. Lead developers, committers, and active core developers discussed the project's issues and roadmap, informing the scope setting meeting for WordPress 3.4 on January 4, 2012.

The scope chat notes cover the issues discussed. The team acknowledged process problems. Jen listed the issues: "lack of good time estimation, resource bottlenecks, lack of accountability, unknown/variable time commitments/disappearing devs, overassignment of tasks to some people, reluctance to cut features to meet deadline."

They split feature development into teams; two contributors would lead each team to reduce contributor overextension and project abandonment.

Ideally, a lead developer or a committer would lead each feature team. To help engage and mentor new contributors, one new contributor would pair with each lead or committer. Each team had to post regular updates and deliver their feature on time. They created a schedule with overlapping cycles that encompassed development, UX, and bug fixes to reduce bottlenecks.



The proposal for the 3.4 release process.

The team decided that releases would have a specific focus. WordPress 3.3 had been a cluster of disparate features, some of which had been pulled because they weren't ready. WordPress 3.4 was the first cycle to have an overarching focus — appearance/switching themes. The development team worked on improving both front-end and admin features that adjust a site's appearance.

Between WordPress 3.4 and 3.5, the project leadership approach evolved — a change that had started back in WordPress 3.0 when Dion Hulse became a committer. Though Dion received commit access, he was not a lead developer. This was the first step toward decoupling the lead developer position from commit access. To reduce bottlenecks, the project needed committers, but not necessarily more lead developers. Separating the roles offered opportunities for strong coders and patch triagers, and for those who wanted to contribute, but not necessarily in a leadership role.

And yet, confusion reigned on what the lead developer title actually entailed. Core team members perceived the role differently; no one agreed on what the lead developer title meant. For Mark Jaquith, the lead developer role has changed organically over the years. To begin with, the role related to coding. Over time, it transitioned, particularly around the growth of WordCamps: "We started going around and talking to users about some of the philosophy

behind WordPress and the direction we wanted to take. It became more of a general leadership role in practice." The role also evolved as lead developers worked with the community: often, lead developers responded to comment threads to address issues, or speak up on behalf of the project.

However, the role had never been formally clarified. While the lead developers handled many coding decisions, their additional responsibilities and authority were unclear. Did they have authority across the project? Should they make decisions in areas such as WordCamps, documentation, or theme review?

The lead developer role "didn't really have a set of responsibilities assigned with it or expectations," says Matt. According to him, the lead developer leads development, not other areas of the project; he believes that confering authority and responsibility to a development role makes it difficult for noncoders to achieve project authority and responsibility.

Matt had articulated as much, as early as 2005, in stating that commit access did not equate to community status. It may never have been Matt's intention to automatically confer authority on people with commit access, though extending commit demonstrated that committers had earned trust, and, as such, people naturally looked to committers as community and code leaders. Since roles and responsibilities were undefined, people simply perceived commit access as a general leadership role. The only non-coder who had an official leadership role in the project — other than the lead developers — was Jen, but she was an integral part of the core development team and there was no clear path for anyone to follow in her footsteps.

In June 2012, the confusion around the role brought conflict. Since Word-Press 3.0, a new generation of coders had driven development. Contributor changes were marked between the 2010 core meetup in Orlando, Florida, and the 2011 meetup in Tybee Island, Georgia. In 2010, just the small team of lead developers (Mark Jaquith, Andrew Ozz, Peter Westwood, Matt, and Ryan Boren along with Jen) met up. In 2011, the meetup had new faces including Dion Hulse, Jon Cave (duck_), Daryl Koopersmith, and Andrew Nacin.

From time to time, someone arrives and influences the project. In the early days, Ryan Boren drove WordPress' development, but post-WordPress 3.0, it was Andrew Nacin. "Nacin like Ryan is one of those guys that just has an ability to get in a flow, and just really crank and get focused intensely, and get through a ton of work," says Matt.

Nacin's project influence grew, and between WordPress 3.4 and 3.5, Ryan Boren proposed that since Nacin drove releases strongly, he deserved recognition and should be made a lead developer.

Rather than appoint Nacin as a lead developer immediately, Matt proposed an organizational shift in the project. Matt argued that the lead developer title was historical and non-meritocratic, that those driving the project should hold leadership roles. Matt wanted opportunities for new developers to assume project leadership roles. He proposed that, instead of having a small group of lead developers, the project move to release leads, nominating Andrew Nacin and Daryl Koopersmith to assume the role in the next release. Matt's proposal offered clear authority to individuals for a given release; release leads would have final say, both over the lead developers, and over Matt. Some in the "historical and un-meritocratic" roles perceived this move as an attempt to remove the old guard to make way for the new. While a number of the lead developers aren't active in core on a daily basis, they are in regular contact with those who work on core, providing advice on architecture and development.

On reflection, Matt says that there was a misunderstanding. He didn't mean to imply that the people holding lead developer roles were worthless or irrelevant, but that the roles did not reflect project reality. "A source of some of the conflict," says Matt, "is this idea that the lead developers sort of had the same role as me where they had sort of purview over everything across all parts of WordPress."

The lead developer role discussion raised dissatisfaction around project decision making. Many of those who ran day-to-day development felt that unilateral decisions were made without team consultation. Matt had taken a less

active role in recent years, as Jen and Ryan, supported by the other lead developers, drove the project, yet decisions were made and announced without consultation. This was a culmination of other issues within the core development team and in the wider project: checking in code without consultation, providing feedback only toward the end of a release, and decisions around WordPress.org — the site Matt owns, but that influences the entire community.

In response, some core team members — including lead developers and other team members — sent a group email to Matt to express their discontent with the project. They felt that Matt's perspective on the project's organization, authority, and responsibility, didn't reflect the project's realities. The group proposed an official project leadership team; they wanted to retain the lead developer title as a meritocratic title for core developers who aligned with WordPress' philosophies, demonstrated leadership, code expertise, and mentored new developers. While the group happily supported the release leads proposal, they felt that the decisions for architecture, code, and implementation should rest with the lead developers, and that decisions affecting the project should lie with a leadership team.

In response, those involved scheduled a Google Hangout to discuss the issues, air grievances, and find a way forward. As a result, things changed, and the first 3.5 release cycle post reflects some of those changes.

Andrew Nacin was promoted to lead developer, and core development adopted release leads with responsibility for an individual release cycle. They chose media as the scope for the 3.5 release; the development team had wanted to tackle it for some time, but with such a large scope, it hadn't been attempted. Daryl Koopersmith created a plugin, called Mosaic, which was the prototype for new media management. Much of it was written in JavaScript, where Daryl's expertise lay. But as a PHP free software project, there were few who could help him. As a result, Andrew and Daryl spent between 80 – 100 hours a week working on the release.

While the release itself was well received and media was overhauled, the

actual development cycle wasn't such a success. It was a huge amount of work, involving lots of feedback, codebase iterations, and coding a whole new feature from scratch. There were four major iterations to the user interface, including one 72 hours before the release. This meant that the new "release leads approach" got off to a faltering start. The intent was to have release leads guide and lead a release, not necessarily spend hours carrying out heroic coding feats. Once again, the release cycle focused on a single feature; it shipped because two coders broke their backs getting it done. But the next release cycle -3.6 — revealed that the release-specific feature development model was broken.

The Community Summit

The first en-masse, invitation-only WordPress community get-together — The Community Summit — took place in 2012. The Community Summit focused on issues facing WordPress software development and the wider WordPress community. Community members nominated themselves and others to receive an invitation; a team of 18 people reviewed and voted on who would be invited. The attendees — active contributors, bloggers, plugin and theme developers, and business owners from across the WordPress community — came to Tybee Island, Georgia, to talk about WordPress.

The main event, held at Tybee wedding chapel, was a one-day unconference. A few informal days for project work were scheduled afterward. In the morning, attendees pitched suggestions for discussion, discussion groups formed around tables, and twice during the day, individual groups shared their proposals for taking action.

The subjects discussed covered the spectrum of development and community issues. Development-specific topics included mobile apps, improving deployments, using WordPress as a framework, multisite, JavaScript, the theme customizer, and automatic updates. They talked about how to deepen developer experience, including better information for developers on UI practices. Broader community discussions focused on the role of the WordPress Foundation, open sourcing WordCamp.org, the GPL, and women in the WordPress community. There were discussions about different WordPress.org teams, such as UI, accessibility, theme review, and about improving documentation. Summit participants came from around the world; attendees talked about internationalization and global communities. Business owners raised issues such as managed WordPress hosting and quality control in com-

mercial plugins. Finally, there were discussions about making it easier for both individuals and businesses to contribute to the project.

With so much discussion, many different ideas surfaced. Some proposed ideas moved forward, while others languished lacking contributor support. Summit discussions resulted in:

- Better theme review process documentation to increase consistency and transparency.
- A documentation and Codex roadmap (developer.wordpress.org eventually launched).
- Language packs included in core in WordPress 4.0.
- Headers added to the P2 themes to instruct contributors on how to get involved.
- Published a make/events sub-team list.
- · Automatic updates for core.
- Individual plugin reviews on WordPress.org.
- Open sourced the WordCamp.org base theme.

As well as creating a space for contributors to discuss issues, many contributors met for the first time at the summit, and the in-person talks invigorated the community.

A new team — a plugin repository review team — formed. Up until then, Mark Riley carried the load reviewing plugins for the repository. The community believed plugins required the same rigor as themes. Plugin code quality was raised on community blogs and on wp-hackers. Otto started to review plugins too, and later Mika Epstein (ipstenu) and Pippin Williamson (mordauk) helped conduct plugin reviews. Later, Boone Gorges (boonebgorges) and Scott Riley (coffee2code) joined the team.

The plugin review team faces different challenges than the theme review team. A theme is a specific group of template files with a defined structure. It calls functions, it requires a header, footer, and a sidebar. A plugin can be anything at all, so there's no way to automate reviews, which can be a lot of

work. This review process cleared out malicious plugins, spam plugins, and plugins with security holes. A set of guidelines evolved to protect WordPress users.

Again, a small group of contributors created a team to address a specific project need. This has continued ever since the summit; a team develops training programs for people who want to teach WordPress, a team moderates WordPress.tv, and there's a team of contributors who help to support meetups. The summit allowed people to get together, to talk about their own interests, meet like-minded contributors, and move projects forward. The community got to be together as a community, to get to know one another socially — instead of through text-based, online communication.

The Spirit of the GPL

By early 2013, the GPL discussion had slowed. Not everyone liked it, but most accepted that the WordPress project would only support 100% GPL products. Many were surprised by a sudden flare-up around not just GPL legalities, but the "spirit" of the license. In a 2008 interview, Jeff Chandler asked Matt about the spirit of the GPL. Matt said that the spirit of the GPL is about user empowerment, about the four freedoms: to use, distribute, modify, and distribute modifications of the software. Software distributed with these four freedoms is in the spirit of the GPL. WordPress was created and distributed in this spirit, giving users full freedom.

The Software Freedom Law Center's opinion gives developers a loophole around themes — one that helps them achieve GPL compliance — but denies the same freedoms as WordPress. PHP in themes must be GPL, but the CSS, images, and JavaScript do not have to be GPL. This is how Thesis released with a split license — the PHP was GPL; the remaining code and files were proprietary. This split license ensures GPL-compliance, but does not embrace the GPL's driving user-freedom ethos.

The loophole may have kept theme sellers GPL-compliant, but Word-Press.org rejected that approach. In a 2010 interview, Matt said "in the philosophy there are no loopholes: you're either following the principles of it or you're not, regardless of what the specific license of the language is." Word-Press supports theme sellers that sell themes with a 100% GPL license. Those who aren't 100% GPL receive no promotion on WordPress.org or on official resources.

In early 2013, ThemeForest — Envato's theme marketplace — came under scrutiny. Envato runs blogs and marketplaces that sell everything from

WordPress themes and plugins, themes for other CMSs, to photographs, videos, and illustrations. WordPress is just one aspect of their business, though a significant one, and ever-growing. Envato became GPL-compliant in 2009 by releasing their themes with two licenses: GPL for the PHP, and a proprietary license for the remaining files and code.

ThemeForest has long been a popular choice for individual theme sellers. It offers exposure and access to a huge user community. As the theme shop marketplace saturated, it became more and more difficult for new theme sellers to break through.

Theme shops like StudioPress, WooThemes, and Elegant Themes dominate the market. ThemeForest offers everything a theme seller needs: hosting, sales tools, ecommerce, and a shop front. People can sell themes without the set-up work that can steal so much time. Theme sellers make good money out of selling on ThemeForest. As early as December 2011, Envato announced its first theme seller to make a million dollars in theme sales.

In January 2013, ThemeForest author Jake Caputo received an email from Andrea Middleton (andreamiddleton) at WordCamp Central. He was told that, as a ThemeForest author, he was not allowed to participate at official WordPress events. Jake had already spoken at two WordCamps, had plans to speak at a third, and was helping to organize WordCamp Chicago.

The issue was over theme licensing and WordCamp's guidelines. WordCamps are official WordPress events that come with the WordPress Foundation's seal of approval. Organizers, volunteers, and speakers must fully embrace the GPL — going beyond GPL compliance to pass on all WordPress' freedoms to users. The guidelines state that organizers, volunteers, and speakers must:

Embrace the WordPress license. If distributing WordPress-derivative works (themes, plugins, WP distros), any person or business should give their users the same freedoms that WordPress itself provides. Note: this is one step above simple compliance, which requires PHP code to be

GPL/compatible but allows proprietary licenses for JavaScript, CSS, and images. 100% GPL or compatible is required for promotion at Word-Camps when WordPress-derivative works are involved, the same guidelines we follow on WordPress.org.

ThemeForest vendors had only the split license, in which the PHP was GPL and the CSS, JavaScript, and images fell under a proprietary license. For Jake to become 100% GPL, he would have to stop selling on ThemeForest and find a new outlet for his themes. This meant losing access to the more than two million ThemeForest members — not to mention a significant portion of his income.

WordCamp Central's actions angered some community members; some thought it was unfair to ask theme sellers to give up their livelihood simply to speak at a WordCamp. Others supported WordPress.org; they believed the stance consistent with the GPL.

On both sides, people were frustrated for ThemeForest's authors. While the issue had little influence on the powers-that-be at WordPress or Envato, theme authors stuck in the middle suffered. With only the split license at Themeforest, they had one choice — jeopardize their short-term livelihood by moving off ThemeForest.

The argument raged in the comments of Jake's blog, spiralling to other Word-Press community blogs, and to the ThemeForest forums. Matt joined the discussion on Jake's blog, saying that if ThemeForest authors had a choice about licensing and could release their theme under the GPL, then "Envato would still be breaking the guideline, but Jake wouldn't, so it'd be fine for Jake to be involved with WordCamps."

Collis Ta'eed, CEO of Envato, responded on WP Daily, ¹ outlining Envato's licensing model rationale. As a designer, Collis' main concern is protecting

^{1.} WP Daily has since been acquired and its content moved to Torque magazine.

his designers' rights, while ensuring that customers can use the resources they purchase.

As with so many disagreements in the WordPress community, it came down to a difference in emphasis. While the WordPress project emphasizes user freedoms, Envato emphasizes creators' rights. Both felt strongly that they had the moral imperative, and backing down meant violating the principles that underpinned their organization. The WordPress project places user freedoms over and above every thing else. If this meant excluding theme authors who sold on ThemeForest, then so be it.

Collis, on the other hand, wanted to make sure that theme authors felt confident that their themes were safe from piracy. He was also worried about having a GPL option for authors. He wrote, "I worry that external pressures will force an increasing number of our authors to change their license choice, some happily, some not." Having just one (split) license meant that authors wouldn't be forced into that situation.

From the project's perspective, theme authors could choose to sell their themes on ThemeForest, or sell their themes under the WordPress community's ethos (and thus speak at WordCamps). In a podcast on WP Candy, Jake said he didn't feel he had a choice about where to sell his themes. ThemeForest had become such an important part of his income that he would have to forfeit that income if he moved elsewhere. After the podcast, Collis wrote a second post on WP Daily, in which he said:

I think I've been wrong in my stance. I would like to change that stance, and feel that ThemeForest should offer an option for authors, if they choose, to sell their themes with a GPL license covering the entirety of the theme.

Collis surveyed ThemeForest authors to gauge support for a GPL opt-in option. "I felt pretty guilty that our authors were paying some sort of price

for selling with us, that felt pretty wrong," says Collis. The results showed that verified authors were split; some said they would license their themes under the GPL, the same number said they would stick with the split license, and 35% said that they didn't know which license they'd choose. On March 26, Collis announced a 100%-GPL license for ThemeForest authors. Jake was once again allowed to speak at WordCamps.

The Problem with Post Formats

The 3.6 release cycle was challenging; it precipitated a new approach to the development process. Two core WordPress philosophies, *design for the majority* and again, *deadlines are not arbitrary*, were tested. The 3.6 release cycle process followed the cycle started in WordPress 3.4: there was a unified theme for the release — this time content editing. Small teams worked on key features. Some features need more research and development than can be achieved within a single development cycle, and the WordPress 3.6 cycle surfaced this flaw.

Post formats were 3.6's headline feature. Introduced in WordPress 3.1., post formats allow theme developers to lend a unique visual treatment to specific post types.

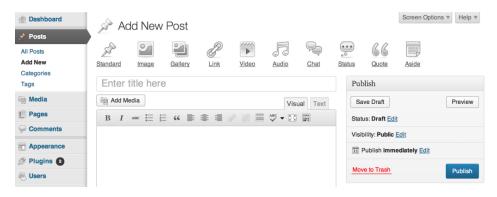
Post formats lacked a standard user interface. In WordPress 3.6, release leads Mark Jaquith and Aaron Campbell tackled the problem. The release cycle had different stages: in the scoping chat, the release lead decided on the release's key features, created teams, and assigned feature leads. Feature leads ran their teams. The release leads coordinated with the teams and made the final decision on what made the release.

Carrying out major user interface changes in just a few months is challenging, at best. WordPress 3.5 demonstrated that to meet the deadline, the release leads needed to put in heroic coding efforts.

The 3.6 release encountered problems; features were dropped as contributors discovered they'd overcommitted themselves. The biggest issue was around

the post formats user interface, inspired by Alex King's Post Format Admin UI. Much thought and study went into the post formats UI. Which UI would offer users a logical, intuitive workflow, without adding needless complexity to the UI or the experience?

The problem was that despite time spent on wireframes and development, the team ended up unimpressed. They created specifications, built to the specifications, and were unhappy with the result. "It's like ordering something from the restaurant that sounds great," says Aaron Campbell, "but as soon as it sits in front of you and you smell it, it's like, 'Ahh, definitely not what I was in the mood for.'" Even during WordPress 3.6's beta period, community members experimented with better approaches to the problem.



The post formats user interface.

April 29 was WordPress 3.6's target release date. On April 23, Jen — who had by that point stepped back from her involvement in development — said that post formats weren't ready. She said that the user interface was confusing, underscoring WordPress' deadlines are not arbitrary philosophy. The thread, in addition to highlighting the post formats UI flaws, showed that not everyone supported deadlines are not arbitrary. Ryan Boren wrote:

The four month deadline is so fanciful as to be arbitrary. It always has been. Historically, we just can't do a major release with a marquee UI feature in that time, certainly not without heroic efforts of the 3.5 sort.

So we end up facing decisions like this. Every single release we wonder if we have to punt the marquee feature. Punting often requires major surgery that can be as much work as finishing the feature. Punting is demoralizing. Four month releases are empty promises that bring us here.

In the end, Mark and Aaron pulled post formats. A lot of work had to go in to removing it from core; the release was heavily delayed, finally appearing on August 1, 2013 — three months after the intended release date. The team promised to turn the post formats feature into a plugin, but the plugin never materialized.

Again, a user-facing feature held up a WordPress release. Because features were tied to the development cycle, it meant that the release cycle's duration restricted and compromised UI features and/or major architectural changes. Just like tagging before it, post formats was a problem too complex to solve in a few short months. It isn't always easy to make interface decisions. It's harder to iterate on design than on code.

When the release deadline approaches and a feature isn't ready, the development team rushes to try to get it finished. The release is delayed by a week, and then by another week, and in some extreme cases, as was the case with WordPress 3.6, the release is delayed by months. By that point, it becomes impossible to give a firm date for when a release will happen. And the process becomes more complicated as the release lead oscillates between trying to improve a feature and deciding to pull it. Up until 3.6, there was no contingency plan built into the development process that allowed for these challenges in designing a user-facing UI.

The solution to this problem was available, and always had been available, within WordPress' infrastructure. Twice before, core user features had been pulled from plugins into core — widgets and menus. Widgets had been built for the WordPress.com audience, turned into a plugin, and brought in to core.

Menus had stumped the core development team and they solved that problem with a plugin. In both these cases, feature design and testing happened long before approaching core. And as the WordPress 3.6 cycle dragged on, a small group of designers worked on a new WordPress feature in a plugin: it was a project called MP6. The project would be the flagship for a new approach to development that had a lasting influence on how WordPress features were developed.

MP6

By 2013, WordPress' admin had seen little change since the Crazyhorse redesign in 2008. Change happened in 2013, though it didn't only result in a new look for WordPress. WordPress feature development changed, introducing a new approach in which feature design, feedback, and iteration used a plugin that was eventually merged with core.

In January 2013, Ben Dunkle proposed new, flat icons. The WordPress admin was outdated, particularly on retina displays where the icons pixelated. Flat icons would scale properly and also allow designers to color icons using CSS. Andrew Ozz checked in the changes.

The changes kicked off huge discussions about icons, a new trac ticket, and a long discussion on the UI P2. People were divided on the icons. Some liked them, but felt that they didn't fit WordPress' admin design; modern icons only emphasized how dated the rest of the admin had become. Consensus didn't materialize. Mark, who was release lead at the time, decided not to put the changes in WordPress 3.6. Instead, designers interested in redesigning the admin could iterate on the design in a plugin called MP6.

Matt Miklic (MT), the designer who had put the original coat of paint on Crazyhorse, helmed MP6. Via Skype, Matt asked MT and Ben Dunkle to reimagine WordPress' admin, consider how a redesign could work, and set parameters. MT believed that they ought to respect the research that informed Crazyhorse's UI. Instead of iterating the layout and functionality, they focused on an aesthetic refresh.

Both Matt and MT were keenly aware of the issues and challenges in each major WordPress admin redesign. They wanted MP6 to be different.

Shuttle, for example, had been cut off from the rest of the community, designed by a cloistered group of designers trading comps and slowly losing touch with "the client." No one person was responsible for Shuttle's overall vision; there was no accountability.

By contrast, the Happy Cog team looked at WordPress with a fresh set of eyes. Their distance allowed them to treat WordPress as a piece of software, not as an object of devotion. They stayed in touch with their client — Matt — but were removed from the community's thoughts and opinions. MP6 solicited feedback from all of the people with a stake in the project. That brought its own challenges — whose feedback was the most legitimate? What should be integrated? When was someone just complaining for the sake of it?

Crazyhorse emphasized the importance of in-depth user testing. With all the testing on Crazyhorse, MT knew that he didn't want to carry out a structural overhaul, conduct extensive tests, and gather the data needed to prove improvement.

The MP6 project took a different approach. Like Shuttle, a group of designers worked alongside the free software project. Instead of a mailing list, they had a Skype channel so that they could talk in private, but anyone was allowed to join in. "Even though the group worked in private," says MT, "the door into the group we were working on was open, so if anyone said they were interested they could just walk in." This allowed people less comfortable with WordPress' chaotic bazaar to participate. Designers traded ideas and feedback — without the danger of someone coming out of nowhere and tearing an idea down before it was even fully formed.

The MP6 project took advantage of WordPress' plugin architecture; work took place on a plugin hosted on the WordPress plugin directory. Anyone could install the plugin and see the changes in their admin. Every week, the group shared a release and a report open to public feedback. This open process meant that community members could be involved on different levels. It also meant that the group could never steer too far off course. The core team was always aware of what was going on with MP6 and could provide

feedback. More designers were involved than with Shuttle: the group grew to fifteen members. With MT as lead, they avoided the "too many cooks" problem. The designers and the community accepted that MT had the final say on the design.

The MP6 project was announced in March 2013. The design process began with MT playing around with the CSS. He started out with a unified, black, L-shaped bar around the top and the side of the admin screen: "the idea," he said, "was that the black would feel like a background and the white would feel like the sheet of paper lying on top of it, so it would unify these disparate things." Once MT assembled the basic visual, the contributors refined the design. These changes happened iteratively. The community saw a report and a new plugin release each week, on which they gave feedback.

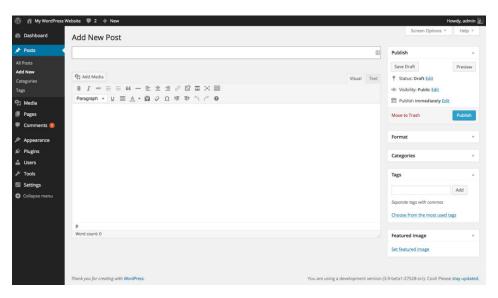
Challenges arose. Google web fonts caused heated discussion. Web fonts are designed specifically for the web. They're often hosted in a font repository. A designer uses a CSS declaration to connect to the repository and the font is delivered to a website or app. MP6 uses the Open Sans font, which means that the font in WordPress' admin screens is hosted on Google's servers. Whenever a user logs into their admin, Google serves the fonts. Some don't want to connect to Google from their website; this also causes problems for people in countries where Google is blocked. Bundling the fonts with WordPress, however, requires a huge amount of specialized work to ensure that they work across platforms, browsers, and in different languages. In the end, they decided to use Google web fonts. A plugin was created to allow users to shut them off.

Despite minor hitches, the MP6 project went smoothly. Joen Asmussen, who'd been a part of the Shuttle project eight years earlier said, "I would say that MP6 did everything right that Shuttle did wrong."

Over the eight years since the first attempt to redesign WordPress' admin, WordPress had matured. When things are done behind closed doors, people feel disenfranchised, and yet the bazaar style model doesn't suit every, single

aspect of software development. It's within this tension that a balance must be struck, with space for ideas to flourish.

The MP6 plugin merged with WordPress 3.8, released in December 2013, demonstrating that, while it may take a while to get there, harmonious design in a free software project is possible.



The Write screen in the WordPress 3.8 admin.

All of this happened as 3.6 rumbled on. Development continued on the core product, MP6 development happened separately; it wasn't constrained by WordPress' release timeline. MT and the designers iterated quickly; users installed the plugin to test it and offer feedback. This was a new process that hadn't been possible before. To test new features in the past, a user would have to run trunk. By developing the feature as a plugin, a community member could focus by helping with the sole plugin that they were interested in.

MP6 was proving to be a success, and in the summer of 2013, it was decided, for the first time, to develop two versions of WordPress simultaneously — 3.7 and 3.8. WordPress 3.7 was a two-month, platform-focused, stability and security release lead by Andrew Nacin and John Cave. New features in 3.8 were developed as a plugin.

Nacin wrote:

This "features as plugins" method* will allow teams to conceptualize, design, and fully develop features before landing them in core. This removes a lot of the risk of a particular feature introducing uncertainty into a release (see also 3.6, 3.5, 3.4 ...) and provides ample room for experimentation, testing, and failure. As we've seen with MP6, the autonomy given to a feature team can also allow for more rapid development. And in a way, 3.7 provides a bit of a buffer while we get this new process off the ground.

While the project prepared to merge MP6 as a plugin in WordPress 3.8, an opportunity arose to do automatic updates — something that had been talked of within the project for years. Automatic updates had long been a goal, previously unachievable. Automatic updates needed the proper code structure to be in place on WordPress.org, as well as community trust. Community members needed to be okay with WordPress changing their site automatically.

WordPress has collected data since WordPress 2.3 that allows WordPress.org to create personalized automatic updates. WordPress uses the data to make sure that a site receives an update compatible with its PHP version and site settings. In the few failure cases, the user gets an error message with an email address that they can use to email the core developers who will fix their website. As of late 2014, automatic updates are for point releases only. So while major releases of WordPress are not automatic (3.7, 3.8, etc.) point releases are (3.7.1, 3.8.1, for example). This means that security updates and bug fixes can easily be pushed out to all WordPress users.

Within the space of just two short releases -3.7 and 3.8 - big changes transformed the software and the development process. Automatic updates mean that WordPress users are safer than ever. WordPress 3.8 saw the first release in which a feature developed as a plugin merged with core. This finally decoupled core development from feature development. So many past delays

and setbacks happened because a feature held up a release. It gave developers more scope for experimentation and created safe spaces for contributors to get involved with core development. While the MP6 admin redesign was the first plugin integrated under this model, since then, feature-plugins have brought in a widget customizer, a new theme experience, and widget functionality changes. Experiments are ongoing in image editing, front-end editing, user session management, and menus.