WORDPRESS

meet

RESPONSIVE DESIGN

WORDPRESS PROS ON THE WHAT, HOW & WHY OF RESPONSIVE DESIGN
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Right now you quite possibly have sites out there in the wild that look like death on one screen or another. And while your trainwreck site turns site visitors away, devices are proliferating faster than anyone can remember what to call them, making your trainwreck site a trainwreck pile up.

Gone are the days of the fixed layout tailored to some imaginary, cramped CRT. And the half way house of fluid layouts are no longer enough when you’re presenting content to people looking at your site through smartphones, tablets, various sized laptops or arrays of gigantic monitors with resolutions of titanic proportions.

That’s where Responsive Web Design (RWD) comes in.

Since Ethan Marcotte coined the term back in 2010 more and more designers and developers have been building projects responsively; sites that actually bother to query the viewport they’re being experienced through, and adapt to make the experience as good as can possibly be.

So what’s that to you as a WordPress-powered designer or developer? Code Poet asked the people most likely to know. In this short book Chris Coyier, Ian Stewart and Sara Cannon give you the lowdown on their real world uses and strategies for designing WordPress responsively.
Chris Coyier runs CSS-Tricks.com, a site all about learning, inspiration and all things design and development.

He co-authored the book *Digging into WordPress* and collects bits of design wisdom at *QuotesOnDesign.com*. 
What is responsive design, and what’s all the fuss about?

I agree with Ethan Marcotte, the developer who coined the term “responsive design,” who says that we should be specific about what the term means. It makes discussion easier. Responsive design is specifically:

1. Fluid layout / grids (in other words, use percentage widths for structural elements)

2. Media that fits into the fluid layout

3. Breakpoints (media queries) that adjust layout based on browser window size

People are viewing the websites we build in a wider variety of browser window sizes than ever before, and the trend is accelerating. We need to start admitting we don’t know the exact conditions in which people view our websites so we can accommodate those unknowns. We need to get on it and quick, as the future is now.

Why do you design responsively?

One big reason is that it’s awfully fun. Of course there is that whole thing where (hopefully) it gives users a better experience regardless of the browser/device they are using, but that’s just a nice side benefit.
How do you explain to clients why responsive design is important?

I don’t do direct client work, but I think the “sell” would be pretty easy. I’d have the client pull their unbelievably amazing phone out of their pocket and navigate to their current website so they can see how probably-sucky it is.

I live in the world of web application design. Everybody is pretty much on board with the idea that accommodating as many devices as possible is ideal. It’s just a matter of fitting it into development schedules, finding the right talent, deciding what’s most important, etc. Responsive design isn’t the answer for most “apps.” Ground-up development focusing on smaller screens is important.

How often do you use responsive design in your client-based design and development? What are the benefits for you as the designer/developer?

I use responsive design techniques 100% of the time. I’d never build a fixed-width site again, when starting a project from scratch. The benefit is that more people can view the content and you get a more future-proof website.

Responsive design isn’t easier than fixed-width design—it’s harder—but just by a little. The hard part about design is design. I read an awesome quote on Twitter the other day from @canarymason:

“Of course responsive design is hard, it’s design.”

Are there any cases where you think that responsive web design is an inappropriate approach? Why?

We (Dave Rupert and I) recently interviewed Ethan on ShopTalk (our weekly podcast) and I liked his answer to this question. He said a responsive approach might not be appropriate if you have a super-established desktop-size version of
I think it’s more likely that responsive design will cost you money up front as it does take more time to do right. I believe that in the end you’ll make more money as the site will serve a wider audience. If I did direct client work I’d try to sell clients on a responsive approach with that logic.

What are your favorite examples of responsive WordPress designs? What do you like best about them?

The current iterations of websignerwall.com and smashingmagazine.com are splendid and they both run on WordPress.

I think it’s more likely that responsive design will cost you money up front.

And how different the mobile apps are from the web app.

Can you think of a time where using responsive design has saved you or your client time and/or money?

I’d add that web apps aren’t always a good match for responsive design. The interactions on mobile devices are so different that apps often warrant a totally different approach. For example, look at WordPress

One of the impressive things about the Smashing Magazine responsive design is the breadth of it.

There are five major breakpoints that I count, that happen at widths that feel very natural. The design works well on absolutely enormous screens as well as tiny phone-size screens. That’s the whole point of responsive design of course, but really nailing it for every width from 2000+px to 320px is pretty impressive.
“The current iterations of webdesignerwall.com and smashingmagazine.com are splendid and both run on WordPress”
“One of the impressive things about the Smashing Magazine responsive design is the breadth of it.”
Do you start your responsive designs from scratch, or build on top of a parent theme or theme framework?

Definitely from scratch. I once created a “framework” as a joke. The things that I work on are so varied that I haven’t found the need for a “real” framework.

I think the point of frameworks is to save you time if you work on a lot of similar projects.

Can you share your responsive design workflow?

I’m a bit afraid to admit it, but I still start with a desktop layout. It’s hip these days to go “mobile first” and I love that idea, but for now it’s served me well to start with a design for desktop/laptop-size screens and then adjust things with media queries as needed for smaller screens. That desktop layout is likely built from large, floated elements with widths set in percentages.

That gives me a fluid environment, which automatically suites a large range of browser window sizes. Then I write a few (usually simple) media queries to shuffle things for mobile. These days, that shuffling is often simple things like collapsing several columns into one column that’s no wider than the device’s default width. In the future, things will get more complicated. We need to get more clever with the x-axis as well, instead of just keeping to one column as the go-to mobile layout.
And when CSS features such as grids and regions gain greater support, we’re going to be able to use those things to our advantage and be more specific about which content we want to place where as the browser window size shrinks or grows. I feel experienced enough as a designer to know what’s important in a design, so what I end up with is probably pretty similar to what I would have done should I have went mobile first.

Tell us about the responsive sites you’ve created.

I’m doing the BarCamp Tour again this year with Wufoo. I worked on that website, and it’s responsive. We’ve recently redesigned Wufoo to add some responsiveness as well.

My blog about front-end web design css-tricks.com is responsive. I went from 1) doing nothing to 2) maintaining a mobile-specific site to 3) the current responsive design.
The mobile-specific site was nice in that it was super light-weight, which meant it was faster on often-lower-bandwidth mobile devices. Ultimately, I just couldn’t deal with the code-fork. Maintaing two sites with the same content sucked for me as a one-man team. I love how responsive design allows us to design for a lot of screen sizes with one code base. But the current mobile design is quite a bit heavier than the old mobile specific site was. We’re still in a weird spot in the evolution of responsive design, in that regard.

**What would it take to move beyond this weird spot in RWD’s evolution?**

What we need to move beyond this point in RWD’s evolution are tools to help us adjust the weight of our web pages depending on the circumstances in which they’re loaded. For instance, in a browser with a very small screen and slow network connection, we’d like to be able to serve up a lower resolution image than we would on a browser with a large screen and a fast network connection. Those tools are hacky at best or nonexistent at worst today. Bandwidth media queries might help. Exact specifications
WHEN DESIGNING RESPONSIVELY, IT MAKES EVERYTHING YOU DO “INTERACTION DESIGN” WHICH IS A NEW CONCEPT TO SOME DESIGNERS

What are the biggest pain points in designing and developing responsive-ly?

Imagination is one of them, surprisingly. To design responsively you need to picture in your brain how you’d like all the elements on the page to react on different devices. I’ve found that is a mental block for some folks (which is of course, something we can overcome with practice). When designing responsively, it makes everything you do “interaction design” which is a new concept to some designers who are used to working in fixed/flat environments.

How did you overcome these pain points? What resources did you turn to?

I’m not naturally good at it, but I’ve just practiced responsive design enough that now when I approach a new design my brain just starts thinking about a responsive approach automatically. It’s similar to learning HTML and CSS for the first time. Eventually even when designing with a graphic layout tool like Photoshop, your brain is thinking about which elements will be used where and how it’s all going to fit together in code.

I started tinkering with responsive design before there were a whole lot of resources so I can’t give you a specific resource that was vital for me. Ex-
I’d definitely recommend that anyone interested in responsive web design take time to experiment. There are so many responsive designs out there today, I’d recommend getting in the habit of resizing your browser window a lot more often to spot what works and what doesn’t.

Can you recommend any responsive design resources that you’ve found useful, such as books, websites, theme frameworks, code snippets in blog posts etc.?)

Starting with Ethan Marcotte’s book is a good idea so you can understand the “why” and the fundamentals. You can visit mediaqueri.es and follow @rwd for inspiration on how other people have built designs. I think I’d avoid frameworks when starting out. Responsive design isn't such a complicated concept that you need abstraction. If later, after you get it, you want to explore some pre-built stuff to save time, go for it. Perhaps the Golden Grid System would be useful.
Any other thoughts on responsive design for WordPress sites

I wrote a post called Will This Work With WordPress?! in which I tried to dispel a weird belief people sometimes develop, in that WordPress is this strange universe where certain web technologies will or won't work, or need to be done in some special way to work.

WORDPRESS DOESN'T CARE WHAT YOU DO TO THE FRONT END OF YOUR THEMES.

I said that, essentially, WordPress doesn’t care what you do on the front end of your themes. You can use any JavaScript framework you want. You can use any CSS trick you find on the web. That said, WordPress is particularly good at content-driven sites.

So to answer the question more directly, you certainly can design responsive WordPress themes. When you do, make sure you think about media. For instance, fluid images and fluid video.
Ian Stewart is a Theme Wrangler for Automattic, the folks behind WordPress.com, and has had a hand in creating some of the most popular WordPress themes around. He’s super-passionate about beautiful design, semantic HTML, and making the web better with WordPress.

You can find him at themeshaper.com, the Automattic Theme Team’s home on the web, his personal site, iandanielstewart.com, and on Twitter at @iandstewart.
What is responsive design, and what’s all the fuss about?

For me responsive design means web design that responds and adapts to the current size of the browser viewport. It’s a simple idea but the design possibilities it opens up are enormous.

Your design is no longer a static image-like thing that just sits there in the browser but a living breathing thing that—when it’s done right—can make visiting a site a pleasure regardless of the device used. Tiny little smartphone browsers all the way up to browsers full-screened on a 27” monitor; each can have a design that beautifully responds to the canvas provided.

Why do you design responsively?

Working toward a responsive design feels really natural. It’s hard to do things just because you know they’re good for you. In the end responsive design fits in really well with the way I like to work and what I like to work with: clean, ready-to-repurpose, fluid CSS, layered over top of semantic HTML.

I also have the added benefit of knowing that it really is good for me, the people that use the themes we work on, and their readers. It’s becoming hard not to design responsively.
How do you explain to clients why responsive design is important?

I find it easy to explain responsive design to clients but that’s because my clients are bloggers desperately looking for WordPress themes that look the “same” everywhere.

That is, they want their beautiful website to effortlessly transition from one device to another with their carefully chosen look and—most importantly—all their content intact and where it ought to be. It takes some effort on the theme designer to make that happen but when implemented correctly it’s responsive design that provides that effortless experience to them.

How often do you use responsive design in your client-based design and development? What are the benefits for you as the designer/developer?

We try and create responsive WordPress themes as often as possible. And even when we don’t create responsive WordPress themes I find that it still informs our work. When even a fixed-width design is built on a fluid, percentage-based structure (the foundation of responsive design) it makes it immensely easier to add new design elements and WordPress features into an existing theme down the road. Everything should just flow into place.

Are there any cases where you think that responsive design is inappropriate? Why?

I still think there are cases where a responsive WordPress theme isn’t needed. Sometimes the design is no better or worse if it responded to different viewport sizes. When responsive design is used to create a “mobile” site and the content needs to be different in that context then a separate mobile theme is probably better.
What are your favorite examples of responsive WordPress designs?

My current favorite responsive WordPress theme is by German designers Elmastudio. It’s called Piha. It looks absolutely beautiful at every size and nothing ever feels like it’s missing.

Can you recommend any responsive design resources that you’ve found useful, such as books, websites, theme frameworks, code snippets in blog posts etc.?

Ethan Marcotte’s book and his blog posts are the gold standard for me but nothing beats experimentation and testing. Followed by more testing. And then some more testing after that. :)

Do you start your responsive designs from scratch, or build on top of a parent theme or theme framework?

A bit of both. At Automattic we’ve started using a theme called _s (publicly available on GitHub) to help us build new themes from scratch. In one sense it’s design-process agnostic but it’s easy to see it as a framework for creating new responsive WordPress themes. It comes with a JavaScript solution for handling large navigation menus on small screens and sample percentage-based layouts. If we find we need any more generic support for building responsive themes quickly (starter breakpoints in a media query for example) those will likely be added as well.

Describe your responsive design workflow

I like to write my CSS in layers. In every project I have a reset that normalizes rendering across browsers and a rebuild that sets sensible typographic defaults.

Following that is a basic fluid structure for the most common shape of the design—or desktop view. This structure is essentially all the major horizontal widths along with the margins and floats that control the placement of sidebars and content. Keeping the structure separated this way makes it very easy to experiment with layout and, of course, alter the design with media queries later in the cascade. And then there’s testing. Did I mention testing? Lots of testing.

What are the biggest pain points in designing and developing responsively? How did you overcome these pain points? What resources did you turn to?

Fluid images are the foundation of responsive design but they can be a little tricky with WordPress.
Working with images in WordPress that have hardcoded widths means you run into some inconsistencies in how browsers handle them. You can see our response to this in our starter theme _s.

We carefully selected all possible images your WordPress theme needs to handle in three declaration blocks. We have standard fluid image CSS for all of our images, followed by auto height for our images that have been added to the WordPress media library. Those have hard-coded height and width attributes. We also have a patch for really large WordPress images in IE8.

Tell us about the responsive sites you’ve created.

I’m most proud of the work I did for the 2011 default WordPress theme, Twenty Eleven. My hope was that it would help make responsive design techniques easier to understand by acting as a working example of them in action.

Thousands of developers were able to dig in to Twenty Eleven and use it to build their first responsive WordPress theme. It was exciting to be a part of that.
“Thousands of developers were able to dig in to Twenty Eleven and use it to build their first responsive WordPress theme.”
Sara Cannon has a passion for art, design, and typography. She designs and develops websites out of Birmingham, Alabama, is a WordPress core contributor working with the UI group, organizes WordCamp Birmingham, loves open source, her dogs, and a good beer.

You can find her tee-heeing on twitter @saracannon or writing on her blog sara-cannon.com.
Why do you design responsively?

Our content should always be the focus. We have the ability to control how the content is displayed on various devices, and it’s our duty to acknowledge it and make the content shine without device hindrance.

YOUR WEBSITE IS ALL ABOUT YOUR CONTENT. YOUR CONTENT IS YOUR MESSAGE AND YOUR SPOKEN BRANDING

Native apps are costly. You’ll end up maintaining multiple code bases written in multiple programming languages. The model is unsustainable—the sheer amount of resources you need to be successful in the native app model is huge. Responsive design can give you an equally great content experience (minus a few native hardware benefits, which browsers are going to figure out in the future. (Think about how Google can locate your current location now, or how you can tap into your native camera function.)

The interconnectivity of a browser is also a benefit. Native apps don’t talk to each other like web apps do. For example: if you click on an a Facebook email link on your phone—it goes to the browser not the native app. There is a disconnect that browser-sites solve, and it’s cross-platform, on one codebase. I really believe the future of mobile is in the web app.

How do you explain to clients why responsive design is important?

Your website is all about your content. Your content is your message and your spoken branding. Typically, when someone hears about a company or a product or a brand, what do they do? They Google it. Their first impression of your brand and your content is online.
Currently people access your content in so many ways on various devices. Everything from a tablet, to a gaming console, to a feed reader. Because we have so many different points of access, we shouldn’t let the device hinder the message and the brand.

Everyone needs their site to adapt to its given environment, seamlessly, no matter what it is. This way people can focus on what matters. Mobile should never be an afterthought.

There are 101.3 million Smartphone subscribers now according to comScore, which doesn’t even begin to include tablet use. Accounting for this in your designs and mockups is extremely important. Establishing consistent break points where your user base doesn’t have to struggle to read anymore is important—because your content is key to your identity. Don’t make it hard on people to have a smooth interaction with your brand.

I use responsive design on every site I work on. I truly believe that mobile should no longer be an afterthought but a given. I think we’re beyond delivering a site that only works properly on a desktop.

Society today demands to be mobile. It’s not a new thing anymore and should be addressed.

How often do you use responsive design in your client-based design and development? What are the benefits for you as the designer/developer?
Are there any cases where you think that responsive design is inappropriate? Why?

There’s no case where addressing mobile is inappropriate. However, in some instances, traditional responsive techniques might reduce the site’s speed. If you’re looking for something tailored to be fast and slick like an app, eliminating unneeded social JavaScript calls will contribute greatly to success, which can be achieved through tapping into a separate template file. I’m not sure if I would say that these certain techniques are “not responsive design” but I would say that it definitely goes beyond the traditional use cases.

Can you think of a time where using responsive design has saved you or your client time and/or money?

One time a sketchy company contacted a client, offering them a costly “service” to make their site “mobile-friendly.” To their surprise, I told them to look at their site on their phone, so that they could see that it was already mobile-friendly and that they had no need for another service. They were thrilled.

What are your favorite examples of responsive WordPress designs?

I love foodsense.is and morehazards.com. I love how foodsense.is isn’t scared to modify the entirety of their layout to make sure that their content shines. I love how morehazards.com isn’t afraid to get rid of excess when they go down to mobile.
“I love how foodsense.is isn’t scared to modify the entirety of their layout to make sure that their content shines.”
“I love how morehazards.com isn’t afraid to get rid of excess when they go down to mobile.”
Can you recommend any responsive design resources that you've found useful, such as books, websites, theme frameworks, code snippets in blog posts etc.?

- Responsive Web Design (book) by Ethan Marcotte
- Responsive Web Design (article) by Ethan Marcotte
- Fluid Grids
- Fluid Images
- CSS Media Queries & Using Available Space
- Create Fluid Width Videos
- How To Use CSS3 Media Queries To Create a Mobile Version of Your Website
- Responsive Web Design: What it is and how to use it
- Responsive Web Design Techniques, Tools and Design Strategies
- TwentyEleven WordPress theme
- FitVid.js a jQuery plugin for fluid width video embeds
- 1140 CSS Grid The 1140 px CSS grid system
- Less Framework 4 an adaptive CSS grid system
- css3-mediaqueries-js (css3-mediaqueries.js is a JavaScript library to makes IE5+, Firefox1+, and Safari2 transparently parse, test, and apply CSS3 Media Queries)
- Media Queries The W3C candidate recommendation
- mediaqueri.es
*Do you start your responsive designs from scratch, or build on top of a parent theme or theme framework?*

I often build off of Twenty Eleven. But sometimes, I need to incorporate more than just what Twenty Eleven has in store. More media queries, fitvid, or other techniques for more complicated sites.

I am sure that one day I will come across a more mobile ui-involved design where I would need to take the mobile first approach.

So far the sites I’ve been working on have been more about content-publishing and reading rather than based on tasks or interactivity.

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**I TRULY BELIEVE THAT MOBILE SHOULD NO LONGER BE AN AFTERTHOUGHT BUT A GIVEN**

*Describe your responsive design workflow*

Typically I start with a design, then I comp it out into a few different breakpoints. Typically large screen (max break point), laptop, iPad, and iPhone.

When I find the balance for what looks best for the content, I make a plan for development. Some people come at it with the “mobile first” approach, but I’ve found that in development, coding from laptop up and laptop down has been just fine for my purposes.

To define my workflow simply:

1. flexible grid
2. flexible images and video
3. media queries
4. finagling & crying – test test test test
5. launch
6. PROFIT
What are the biggest pain points in designing and developing responsively?

I would say that one main pain point is developing features after a site has launched. You always have to go back and re-test responsively every time you add a new template or a new functionality. The testing process becomes way longer than typical browser and OS testing.

How did you overcome these pain points? What resources did you turn to?

I own a lot of devices and use them for testing. But it also helps to have a few more testing protocol in place. In Chrome dev tools you can switch user agents for easy, quick testing. There are also bookmarklets you can install on your iPad and iPhone for viewing source, as well as firebug tools. Also, getting a Kindle Fire was a good move...that user base is growing quickly!

Tell us about the responsive sites you’ve created.

I built PandoDaily.com as a child theme to Twenty Eleven actually.

It was really neat to build on the shoulders of the Automattic Theme Team/ Lance (Willett), Ian (Stewart), etc. knowing that the theme will always be in tip-top shape for updates.
“I built PandoDaily.com as a child theme to Twenty Eleven”
RWD RESOURCES

FURTHER READING

- Responsive Web Design (book) by Ethan Marcotte
- Responsive Web Design (article) by Ethan Marcotte
- Fluid Grids (article) by Ethan Marcotte
- Fluid Images (article) by Ethan Marcotte
- CSS Media Queries & Using Available Space (article) by Chris Coyier
- Create Fluid Width Videos (article) by Chris Coyier
- Responsive Web Design: What it is and how to use it
- Responsive Web Design Techniques, Tools and Design Strategies
- Media Queries The W3C candidate recommendation
- 50 Fantastic Tools For Responsive Web Design
FURTHER LISTENING

- ShopTalk 009 Chris Coyier and Dave Rupert chat with Ethan Marcotte
- Responsive Web Design with Jeremy Keith (SitePoint podcast)
- The Big Web Show: Responsive Web Design
- The Web Ahead: Ethan Marcotte on Responsive Web
- Ethan Marcotte: The How and Why of Responsive Web Design
RWD RESOURCES

FURTHER EXPERIMENTATION

- _s a starter theme from Automattic
- TwentyEleven WordPress theme
- FitVid.js a jQuery plugin for fluid width video embeds
- 1140 CSS Grid The 1140 px CSS grid system
- Less Framework 4 an adaptive CSS grid system
- css3-mediaqueries-js (css3-mediaqueries.js is a JavaScript library to makes IE5+, Firefox1+, and Safari2 transparently parse, test, and apply CSS3 Media Queries)
- The Golden Grid System

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*WordPress, Meet Responsive Design* is the first in a series of free books geared toward, and focused on, the needs, strategies and field tactics of people who work with WordPress in the real world to build sites for clients, friends, and family.

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