



Summary of Contents

Preface	. xiii
1. Layout and Composition	1
2. Color	53
3. Texture	. 89
4. Typography	123
5. Imagery	159



THE PRINCIPLES OF BEAUTIFUL WEB DESIGN

BY JASON BEAIRD & JAMES GEORGE

The Principles of Beautiful Web Design

by Jason Beaird and James George

Copyright © 2014 SitePoint Pty. Ltd.

Product Manager: Simon Mackie Cover Design: Alex Walker

Technical Editor: Giovanni DiFeterici

Editor: Paul Fitzpatrick

Printing History:

First Edition: January 2007 Second Edition: November 2010

Third Edition: June 2014

Notice of Rights

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the prior written permission of the copyright holder, except in the case of brief quotations embedded in critical articles or reviews.

Notice of Liability

The author and publisher have made every effort to ensure the accuracy of the information herein. However, the information contained in this book is sold without warranty, either express or implied. Neither the authors and SitePoint Pty Ltd, nor its dealers or distributors, will be held liable for any damages to be caused either directly or indirectly by the instructions contained in this book, or by the software or hardware products described herein.

Trademark Notice

Rather than indicating every occurrence of a trademarked name as such, this book uses the names only in an editorial fashion and to the benefit of the trademark owner, with no intention of infringement of the trademark.



Published by SitePoint Pty Ltd Web: www.sitepoint.com Email: business@sitepoint.com

ISBN 978-0-9922794-4-8 Printed and bound in the United States of America

About the Authors

Jason Beaird is a designer and front-end developer with over ten years of experience working on a wide range of award-winning web projects. With a background in graphic design and a passion for web standards, he's always looking for accessible ways to make the Web a more beautiful place. When he's not pushing pixels in Photoshop or tinkering with markup, Jason loves sharing his passion for the Web with others. He writes about his ideas, adventures, and random projects on his personal site, http://jasongraphix.com.

James George is a professional web designer from the United States, who is passionate about the field of design. He loves connecting with other designers and developers. James enjoys working closely with clients and businesses to create powerful, beautiful web design solutions. You can find him on Twitter¹, Google+², and LinkedIn³.

About the Technical Editor

Giovanni DiFeterici is the Creative Director for the UnmatchedStyle brand and for Period-Three, a web design studio in Columbia, SC. He is the author of *The Web Designer's Roadmap* and an organizer for the ConvergeSE and BDConf web design conference series'. Recently, he cofounded SOCO⁴, a relaxed coworking space for creatives, also in Columbia, SC. His goal is to make the web a more engaging and rewarding place to work and play. When he's not tinkering with code, you'll find him painting, running, and spending time with his lovely wife Amanda and their new son Roman.

About SitePoint

SitePoint specializes in publishing fun, practical, and easy-to-understand content for web professionals. Visit http://www.sitepoint.com/ to access our blogs, books, newsletters, articles, and community forums.

¹ https://twitter.com/creativebeacon/

² https://plus.google.com/u/0/+JamesGeorgeWebDesigner

³ http://www.linkedin.com/in/creativepro

⁴ http://soco-work.com/

Table of Contents

Preface		xiii
Who Shou	uld Read This Book	xiv
What's in	This Book	xiv
Conventio	ons Used in This Book	xv
Code	e Samples	xv
Tips,	Notes, and Warnings	xvi
Supplemer	entary Materials	xvi
Want to Ta	Take Your Learning Further?	xvi
Chapter 1	Layout and Composition	1
The Design	yn Process	2
Disco	overy	2
Explo	oration	4
Imple	ementation	4
Defining (Good Design	5
Web Page	e Anatomy	8
Grid Theo	ory	10
The R	Rule of Thirds	11
960 (Grid System	13
Balance		
Symn	metrical Balance	16
Asym	nmetrical Balance	18
Unity		21
Proxi	imity	22
Repet	etition	23
Emphasis .		24
Place	ement	24
Conti	tinuance	25
Isolat	rtion	26
Contr	trast	26
Propo	ortion	27

	Bread-and-butter Layouts	29
	Left-column Navigation	30
	Right-column Navigation	30
	Three-column Navigation	31
	Finding Inspiration	32
	Using a Morgue File	32
	Trends: Popular Favorites	34
	Fresh Trends	36
	Resizing: Fixed, Fluid, or Responsive Layouts	40
	Fixed Width Layouts	40
	Fluid Layouts	40
	Responsive Design	41
	Screen Resolution	43
	Frameworks	45
	Application: Knoxville Reflexology Group	47
	Getting Started	48
Cł	napter 2 Color	53
	The Psychology of Color	53
	Color Associations	54
	Color Temperature	60
	Chromatic Value	61
	Saturation	61
	Color Theory 101	62
	Red, Yellow, and Blue, or CMYK	63
	The Scheme of Things	
	A Monochromatic Color Scheme	66
	An Analogous Color Scheme	69
	A Complementary Color Scheme	72
	Split-complementary, Triadic, and Tetradic	77
	Other Variants	79
	Creating a Palette	80
	Hexadecimal Notation	80

Color	r Scheme Designer 3	82
Adob	pe Kuler	82
COLO	OURlovers	83
Picta	culous	84
Colou	ur Contrast Check	85
Application	on: Choosing a Color Scheme	86
Chapter 3	Texture	89
Point		90
Line		91
Shape		92
Roun	nded Corners	95
Rotat	tion	97
Shape	es and Layout	98
Volume an	nd Depth	
Persp	pective	100
Propo	ortion	101
Light	and Shadow	
Pattern		
Building To	「exture	
Aged,	l, Weathered, Worn, and Nostalgic Style	109
Clean	n and Grainy	
Hand	Icrafted Scrapbook	114
Whim	nsical Cartoon Style	116
Minin	mal Texture	
Starti	ing Your Own Textural Trends	
Application	n: Logo and Content	120
Chapter 4	Typography	123
Taking Typ	be to the Web	
	s with @font-face	
Self-ł	hosted Web Fonts	127
	Font Services	
Text Image	e Replacement	129

	Anatomy of a Letterform
	Text Spacing
	Horizontal Spacing
	Vertical Spacing
	Text Alignment
	Typeface Distinctions
	Serif Fonts
	Sans-serif Fonts
	Handwritten Fonts
	Fixed-width Fonts
	Novelty Fonts
	Dingbat Fonts
	Finding Fonts
	Free Font Galleries
	Commercial Font Galleries
	Individual Artists and Foundries
	Choosing the Right Fonts
	Setting Font Size and Line Height
	Using Punctuation and Special Characters
	Application: The Fine Print
Ch	apter 5 Imagery
	What to Look For
	Legitimate Image Sources
	Take It or Make It
	Stock Photography
	Getting Professional Help
	How Not to Impress
	Google Ganking
	Hotlinking
	Clipart
	Creative Cropping
	Photoshop Adjustments
	File Formats and Resolutions

Creative Image Treatments	186
Using Images to Enhance Images	186
Using Pure CSS to Enhance Images	188
Application: The Finishing Touches	191
Onward and Upward	194

Preface

When my wife and I moved into our house, one of our first major projects was to update the bathroom. The horribly gaudy floral wallpaper pattern, along with the gold sink fixtures, obnoxious
mirrors, and tacky lighting, made us feel like we'd stepped into a previous decade every time we
entered the master bathroom. Removing wallpaper is a tough job, but it's even more difficult when
there are multiple layers of the stuff. This was the case with our bathroom. Apparently the previous
homeowners' taste in wallpaper changed every few years, and rather than stripping off the wallpaper
and starting over, they just covered ugly with more ugly. Ah, the joys of home ownership!

If there's one thing our renovation adventures have taught me, it's that there are strong parallels between designing a room's decor and designing a good website.

Good design is about the relationships between the elements involved, and creating a balance between them.

Whether we're talking about a website or bathroom makeover, throwing up a new layer of wallpaper or changing the background color isn't a design solution in itself—it's just part of a solution. While we removed the wallpaper and rollered some paint onto our bathroom, we also had to change the light fixtures, remove the gold-trimmed shower doors, replace the mirrors, upgrade the lighting, paint the cabinets, change the switches and plugs, and scrape off the popcorn ceilings. If we'd just removed the tacky wallpaper and left all the other stuff, we'd still have an outdated bathroom. Website design is similar: you can only do so many minor updates before the time comes to scrap what you have and start over.

Fads come and go, but good design is timeless.

Conforming to the latest design trends is a good way to ensure temporary public appeal, but how long will those trends last? As far as I know, there was hardly ever a time when marquee and blink tags were accepted as professional web design markup ... but scrolling JavaScript news tickers, "high readability" hit-counters, and chunky table borders have graced the home pages of many high-profile sites in the past. These are the shag carpets, sparkly acoustic ceilings, and faux wood paneling of the web design world. Take a trip in the Internet Wayback Machine, and look for late-nineties versions of some of the top Fortune 500 and pre-dot-com boom-era websites. Try to find examples of good and bad design. In the midst of some of the most outdated, laughable websites, you're likely to find some pages that still look surprisingly relevant. Most likely, these designs aren't dependent on flashy Photoshop filters or trendy image treatments. As you read this book, keep in mind that good design transcends technology.

The finishing touches make a big impression.

I've heard it argued recently that deep down, people really love "anti-marketing design." The idea is that we trust sites that have an unpolished appearance and feel amateurish. I think this argument misses the point. No matter what type of website you're developing, the design should be as intentional as the functionality. My wife and I didn't change the functionality of our

bathroom with the work that we did. We just fine-tuned the details, but it made a world of difference. Some people might have been able to live with the bathroom the way it was, but I doubt you'd find anyone who would say it was exactly what they wanted. Similarly, if you're spending time developing a website, you should take time to design it. Under no circumstances should the design feel unpolished or haphazard. If you want to come off as edgy, anti-marketing, and non-corporate, then do it, and do it well—but there's no reason to be ignorant about, or feel intimidated by, design.

My goal with this book is simple: to present what I know about designing for the Web in a way that anyone can understand and apply. Why? Because the basics of website design should be common knowledge. We all live in and work on an internet that has been blindly covering up ugly with more ugly since its inception. It's time to break that chain and make bold moves toward better design.

Who Should Read This Book

If you're squeamish about choosing colors, feel uninspired by a blank browser window, or get lost trying to choose the right font, this book is for you. I take a methodical approach to presenting traditional graphic design theory as it applies to today's website development industry. While the content is directed towards web programmers and developers, it provides a design primer and relevant examples that will benefit readers at any level.

What's in This Book

This book comprises the following five chapters. You can read them from beginning to end to gain a complete understanding of the subject, or skip around if you only need a refresher on a particular topic.

Chapter 1: Layout and Composition

An awareness of design relies heavily on understanding the spatial relationships that exist between the individual components of a design. The layout chapter kicks off the design process by investigating possible page components. With these blocks defined, we discuss some tools and examples that will help you start your own designs on a solid foundation. To wrap up this discussion, we'll examine Knoxville Reflexology, a real client project that we'll be following as an example through each chapter.

Chapter 2: Color

Perhaps the most mysterious aspect of design is the topic of color selection. Chapter 2 sheds light on this as we delve into both the aesthetic and scientific aspects of color theory. Armed with these simple guidelines, and some tips for creating harmonious color combinations, you'll see how anyone can choose a set of colors that work well together to complement the overall message of a website. Finally, we'll learn how the palette for Knoxville Reflexology was chosen.

Chapter 3: Texture

An aspect of web design that's often overlooked, texture is the key to creating designs that stand out. By understanding how the individual elements of texture function, you'll learn how to use points, lines, and shapes to communicate and support your site's message on a number of levels. We'll then get to see firsthand how subtle textures helped shape the identity and character of our example website.

Chapter 4: Typography

The importance of typography is undeniable. Type is everywhere, and understanding the mechanics of written language is essential for any visual designer. In this chapter, we'll dive beneath the surface of this rich topic, exploring the basics of the letterform, and investigating various typeface distinctions.

Chapter 5: Imagery

The necessary companions to any well-designed site are the images and illustrations that grace its pages. In the final chapter, we'll discuss what we should look for in the visual elements that we use on our pages, and locate sources of legitimate supporting imagery. Of course, finding the right image is often just the beginning. We'll also learn some image-editing basics before we see the final steps in our example project.

Conventions Used in This Book

You'll notice that we've used certain typographic and layout styles throughout the book to signify different types of information. Look out for the following items.

Code Samples

Code in this book will be displayed using a fixed-width font, like so:

```
<h1>A Perfect Summer's Day</h1>
It was a lovely day for a walk in the park. The birds were singing and the kids were all back at school.
```

Some lines of code are intended to be entered on one line, but we've had to wrap them because of page constraints. A \Rightarrow indicates a line break that exists for formatting purposes only, and should be ignored:

Tips, Notes, and Warnings



Hey, You!

Tips will give you helpful little pointers.



Ahem, Excuse Me ...

Notes are useful asides that are related—but not critical—to the topic at hand. Think of them as extra tidbits of information.



Make Sure You Always ...

... pay attention to these important points.



Watch Out!

Warnings will highlight any gotchas that are likely to trip you up along the way.

Supplementary Materials

http://www.learnable.com/books/the-principles-of-beautiful-web-design/

The book's website, containing links, updates, resources, and more.

http://www.sitepoint.com/forums/forumdisplay.php?53-CSS-amp-Page-Layout

SitePoint's forums, for help on any tricky web problems.

books@sitepoint.com

Our email address, should you need to contact us for support, to report a problem, or for any other reason.

Want to Take Your Learning Further?

Thanks for buying this book. We appreciate your support. Do you want to continue learning? You can now get unlimited access to courses and ALL SitePoint books at Learnable for one low price. Enroll now and start learning today! Join Learnable and you'll stay ahead of the newest technology trends: http://www.learnable.com.

Chapter

Layout and Composition

For many web developers, myself included, the most intimidating part of the design process is getting started. Imagine for a moment that you're sitting at your desk with nothing other than a cup of coffee and the business card of a potential client who needs a basic corporate website. Usually, a business card speaks volumes about a company's identity, and can be used as design inspiration.

Unfortunately, that's not the case with the card for Smith's Services in Figure 1.1. It's black and white, all text, no character—blah. Talk about a blank canvas! So, where do you go from here? You need a plan... and you need to contact Mr. Smith. With some critical input from the client about what his company actually does, and by gathering information about the content you have to work with, you'll be able to come up with a successful design.



Figure 1.1. A bland client business card

Anyone, no matter what level of artistic talent, can come up with a design that works well and looks good—all it takes is a little experience and a working knowledge of some basic layout principles. So let's start with the basics, and before long you'll have the foundation necessary to design galleryquality websites.

The Design Process

Designing a website can be a double-edged sword. The process falls somewhere between art, science, and problem solving. Yes, we want to create an individual site that's aesthetically pleasing, but our highest priority should be to meet the needs of our client. These needs may be lofty and elaborate, or they might just be about making information available. If we fail to listen carefully, though, the entire project will come falling down, along with our reputation. The technical details of developing, hosting, and maintaining a website or application can be, well, technical. The process of creating a design comp, however, can be boiled down to just three key tasks: discovery, exploration, and implementation.



What's a Comp?

The word **comp** is an abbreviation of the phrase "comprehensive dummy"—a term that comes from the print design world. It's a complete simulation of a printed layout that's created before the layout goes to press. In translating this term to web design, a comp is an image of a layout that's created before we begin to prototype the design in HTML.

Discovery

The discovery component of the design process is about meeting the clients and learning what they do. This may feel a little counter-intuitive, but gathering information about who your clients are and how they run their business is vital in coming up with an appropriate and effective design.

Before you schedule your first meeting with a client, spend some time researching their business. If they've asked you to design a website, they may currently be without one, but google them anyway. If you're unable to find any information about their business specifically, try to learn as much as you can about their industry before the first meeting. Whenever possible, the first meeting with a client should be conducted in person. Sometimes, distance will dictate that the meeting has to occur over the phone; but if the client is in town, schedule a time to meet face-to-face.

Keep in mind that this meeting is less about impressing the client, selling yourself, or selling a website than it is about communication and establishing just what it is the client wants. Try to listen more than you speak, and bring a pad of paper on which you can make notes. If you bring a laptop or tablet with you to talk about website examples, limit the time spent using it. Computers have screens, and people tend to stare at them; and so, if the client isn't staring at the screen the whole time, you're likely to be as you write your notes. If you must drag some technology into the meeting, use a voice recording app to record the conversation—with the client's permission, of

course. In my experience, though, a pad of paper is less threatening and far less distracting to the often not-so-tech-savvy client.



Client Meetings Don't Have to Take Place in an Office

Even when I worked for a company in a big office, I had some of my most productive client meetings at a café or over lunch. The feasibility of this approach depends on the client. If your contact seems to be more the formal business type, don't suggest it; in many cases, though, it's a good way to make a business meeting more personal.

Here are a few of the questions I like to ask in initial client meetings, even if I've already established the answer myself via a search engine:

- What does the company do?
- What is your role in the company?¹
- Does the company have an existing logo or brand? What is your goal in developing a website?
- What information do you wish to provide online?
- Who comprises your target audience? Do its members share any common demographics, like age, sex, or a physical location?
- Who are your competitors and do they have websites?
- Do you have examples of websites you like or dislike?
- What kind of timeline do you have for the project and what is the budget?

If the project is to redesign an existing website, I also like to ask:

- What are your visitors usually looking for when they come to your site?
- What are the problems with your current design?
- What do you hope to achieve with a redesign?
- Are there any elements of the current site that you want to keep?
- How do you think your visitors will react to a new site design?

Sometimes I start off with more questions than those listed here. Use your imagination and try to come up with some creative queries that will really give you more insight into the client's organization. If you're a programmer, avoid the tech jargon. If you're a designer, avoid talking specifically about design. Sure, that may be all you're thinking about, but semantic markup, responsive layouts, and so on will likely mean very little to the client. Worse still, these types of conversations can bring misguided design opinions your way before you have a chance to start thinking about the design yourself.

¹ This question is especially important if this person is going to be your main point of contact.

Exploration

The next stage of the design process is to take the information you've learned from the client back to your laboratory for analysis, dissection, and experimentation. You want to develop a firm grasp on all the information, products, and services they have to offer, and play around with how these could be arranged. Put yourself in the shoes of the website visitors and ask yourself what these people are looking for. If you're thinking about buying a product, what do you need to know before you buy? If you're signing up for a service, where would you learn about the different offerings and which level of service you need? What is the clearest title possible for page x, and how many steps does it take to reach page y?

In the world of web design, this is the beginning of a process known as **information architecture**, or IA for short. For expansive websites and complex web applications, information architecture is a career in itself, but the guiding principles of this field can provide a solid foundation for even the smallest websites. For the exploration stage of our process, we want to focus on organizing the content and flow of the website into a structure we can design around.

Two of the most essential tools for this task are scrap paper (or a whiteboard if you have one) and a big pad of sticky notes. Make a list of all the bits and pieces of the website and start arranging them into groups and subgroups. These are likely to move around quite a bit, and that's where the sticky notes come in handy. If you make a note for every section, subsection, and page of the site, you can arrange them on a wall in the order they'll appear in your site's navigation. You'll want to avoid overwhelming the visitors with too many options, but you also don't want to bury information too deeply within the site; that is, too many clicks away from the home page. There are no hard-and-fast rules for this activity; just make the information as obvious and as easy to reach as possible.

Implementation

Now that we've thought through how we want to organize the information we're working with, the implementation step of our design process begins with creating a layout. Regardless of the project, try to avoid being caught up in the technology associated with building websites—at least at first. At this point, it's unimportant whether the site is going to comprise straight HTML, a template for a content management system, or a Ruby on Rails application; the bottom line is that we have an interface to design and a blank sheet of paper. "Paper?" That's right, paper. Did you really think I was going to let you go back to your precious computer already? No way. Here's why: it's easy to lose focus on the design if you start thinking about the layout in front of a computer. If you start out on paper, you can ignore the technical limitations of browsers and CSS, and focus on how you want the final product to look. Now you might think that all good designers carry around fancy hard-bound sketch books in which they flourish expensive markers and paintbrushes to design Da Vinci-esque renderings of potential web page layouts. For my part, I use a 79-cent spiral-bound notebook and any writing instrument I can find on my desk that still works.

I start out by sketching a few possible layouts. After I've produced a few, I decide on one I like, jump into Photoshop, and use the rectangle tool to block out the areas I've marked down on my paper. Once I've defined my layout, I experiment with foreground and background colors until I have a solid color scheme. I continue twiddling the Photoshop knobs and pushing around pixels until, finally, magically, I have a comp to show the client.

Simple, right? Okay, perhaps I skipped a few steps in that brief description. Honestly, though, when people ask me how I do what I do, they usually receive a similar explanation. The truth is that there are reams of now-subconscious information from my past experience and those old college design and art classes that have helped me to define my own design process.

Learning how to design is like learning how to program. Some people have a bit of a knack for it, but anyone can learn. Just as there's good code and ugly code, there is good design and ugly design. Learning some of the principles and conventions associated with design will help you to understand the difference between the good, the bad, and the ugly, moving you towards establishing your own design process.

Defining Good Design

There are two main standpoints from which most people determine whether a website design is "good" or "bad." There's a strict usability angle, which focuses on functionality, the effective presentation of information, and efficiency. Then there's the purely aesthetic perspective, which is all about the artistic value and visual appeal of the design. Some people become caught up in the aesthetics and graphics, and forget about the user, while some usability gurus get lost in their user testing and forget about visual appeal. In order to reach people and retain their interest, it's essential to maximize both.

The most important point to keep in mind is that design is about communication. If you create a website that works and presents information well, but looks ugly or fails to fit with the client's brand, no one will want to use it. Similarly, if you make a beautiful website that is hard to use or inaccessible, people will leave. Indeed, the elements and functionality of a finished website design should work as a single cohesive unit, so that:

Users are pleased by the design but drawn to the content

One of the biggest concerns among usability professionals is the time it takes users to scan the page for the information they want, be it a piece of content, a link to another page, or a form field. The design should not be a hindrance; it should act as a conduit between the user and the information.

Harmony Republic² (pictured in Figure 1.2) is a great example of a design that's both beautiful and usable. The richly textured, colorful illustrations flow around the structure of the page, which is embellished with hand-drawn navigation and a simple layout. The abundance of

² http://www.harmonyrepublic.com/