PARIAH S. BURKE

ePublishing with InDesign

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BY

Pariah S. Burke

Introduction

Print is dead! they cry.

They. Are. *Wrong*.

No, print is emphatically *not dead*. Print-*only* publishing, however, *is* dead.

If you (or your clients) publish anything with a larger distribution than a church bulletin only in print, then your publication will be dead before the end of the decade. (In that vein, you can find the electronic edition of this very book at `www.sybex.com/go/epublishingwithindesign`.)

We are hip-deep in the beginning of the largest shakeup in the publishing world since the Desktop Publishing Revolution of the 1980s. This book you're now reading is part of a comprehensive educational system that covers the entire epublishing spectrum, from ebooks to fixed-layout picture books, from print-to-tablet digital replica publications to fully interactive tablet magazines, from periodicals to ecatalogs, and from ebooks to digital yearbooks. I say "comprehensive educational system" because this book is only the tip of the iceberg. *ePublishing with InDesign CS6* is not just a book but a full, ready-to-deploy epublishing curriculum. And it goes beyond that, as well. Digital publishing is a wide and rapidly evolving set of industries. Some segments change so frequently that, had I written extensively about them in this tome, the text would be out of date before you had a chance to get the book. Consequently, I've covered those mercurial topics like fixed-layout ebooks on my website so that I can keep up to the minute with industry, format, and workflow changes so that *you* can stay up to the minute and produce the most powerful, most marketable epublications possible, using the most efficient and cost-effective methodologies available. You can find all the components at `http://abbrv.it/ePubInD`.

How This Book Is Organized

This book covers three overarching topic areas: the world and economics of epublishing, ebooks, and rich-media interactive publications. Each section focuses on a different area of epublishing—from the business, market, devices, and formats of epublications; then going into ebooks; and wrapping up with the area I'm most excited about, fully interactive periodicals, catalogs, and enhanced ebooks.

Chapter 1: Exploring Ereading Devices The first thing to understand about digital publishing is what devices people use to consume digital content, including what types of publications each device class can support, how people use the devices, and where ereading hardware is headed. You will find a startling array of devices on the market, but ultimately

there are only four classes of devices on which digital publications are consumed: ereaders, tablets, computers, and mobile phones. The pros and cons of each, and which epublication file formats each can support, can be maddening without this guide.

Chapter 2: Learning about Digital Publishing Formats Like devices, epublication formats are numerous and varied, with subtle differences between them but large divergences in purpose, capability, and device support. Consequently, it's most logical and productive to think of epublications in terms of format classes, with each class offering a particular combination of purpose, capability, and device support. This chapter discusses the unique characteristics and publishing experiences of EPUB; Amazon Kindle formats such as MOBI, AZW, and KF8; and PDF, digital replica, interactive-magazine, and HTML5-based epublications.

Chapter 3: Surveying the Digital Publication Types Now that I've covered the characteristics and capabilities of the available digital publication formats, it's time to think about the kind of content you want to disseminate digitally. In this chapter, I identify the purpose, character, and uses of the ebook, digital magazine, enewspaper, etextbook, and digital comic book publication types as well as explain which format classes are best suited to each type.

Chapter 4: Creating Basic Ebooks Whether creating ebooks from TXT files or word processor documents or converting existing print publications to EPUB, the basics are all the same. You must learn to think in terms of EPUB, to reevaluate how your content is organized, and to know how to structure it using InDesign's built-in tools in order to produce well organized, readable ebooks. The yellow brick road to becoming a wizard of ebook production starts with this chapter and proceeds through the next several chapters, creating progressively more interesting, more marketable ebooks and other EPUB-based publications.

Chapter 5: Working with Images and Multimedia in Ebooks Although the majority of ebooks are text-only novels and short stories, a large minority across all genres include photographs, illustrations, charts, graphs, maps, and all sorts of other imagery, and even audio and video. Moreover, even novels and short stories typically have at least cover images. Whether your publication merely needs a cover or requires lots of figures, creating and using them in ebooks differs in several distinct ways from creating and using graphics for print or other digital formats.

Chapter 6: Fine-Tuning EPUBs Successful, efficient EPUB production begins in, and centers on, InDesign and the tool set InDesign brings to the business of ebook publishing. However, InDesign isn't the *only* tool you'll need to produce ebooks of the highest quality, maximum compatibility, and utmost reader engagement. At a certain point, you'll need to go *inside* the EPUB to edit and massage the components InDesign can't reach, often working in conjunction with the original files in InDesign to build an ebook that takes fullest advantage of ereader hardware and software to provide an ideal reading experience.

Chapter 7: Creating PDF Publications for Digital Delivery Not to be overshadowed, PDF-format publications are still a viable—indeed, a popular—distribution format. PDFs support rich multimedia, hyperlinks, some pretty cool interactivity, scripting, reflowable text like an EPUB, and electronic forms. PDF viewers are available for all computer and mobile platforms, though feature support varies by platform. In this chapter, I'll use PDF to its fullest epublishing potential while defining the restrictions placed on it by certain devices. I'll also show some successful PDF-based publications that have been going strong for years.

Chapter 8: Covering the Basics of Interactive Magazines In this chapter, I'll focus on the nuts and bolts of interactive-magazine design—how to plan and build the layouts in both Adobe Digital Publishing Suite and its leading competitor, Aquafadas Digital Publishing System. I cover adapting one layout for multiple devices and orientations (including working with liquid layout behaviors to make that process as easy and quick as possible), building articles and pages the correct way, and filling in the important finishing touches.

Chapter 9: Creating Interactive Magazines with Adobe DPS Now that you know how to begin and lay out interactive magazines, I can get into the really good stuff—all the different ways in which those publications can be made interactive and engaging with Adobe Digital Publishing Suite. From adding animation and video to immersing your readers in 3D panoramic spaces, from including live web content and widgets to employing advanced content-replacement techniques to put volumes of information on a single page, at your readers' fingertips, I'll go hands-on and step-by-step, including all the interactivity in Adobe DPS and then showing how to build a viewer app for your publication and publish it to the Apple App Store, Google Play App Market, and Amazon Android App Store.

Chapter 10: Creating Interactive Magazines with Aquafadas DPS Competing head to head with Adobe Digital Publishing Suite is a comprehensive but lesser-known challenger from France, Aquafadas Digital Publishing Solution. Although not as popular as Adobe DPS, Aquafadas offers a much richer set of interactive elements for incorporation into digital magazines. Also working as an InDesign add-in, the Aquafadas system is more polished and professional-looking than Adobe's DPS tools, and, in nearly all other aspects, Aquafadas is arguably a better, more intuitive, more feature-rich system for producing digital magazines. In this chapter, I'll go hands-on through step-by-step instruction for including numerous richly interactive features, including slideshows and galleries, audio and video, read-along text, advanced content replacement, web and HTML content, and prebuilt games and activities.

How to Use This Book

You could, of course, use the print version of this book as a doorstop or to squish a bug—the aqueous coating on the cover will enable the guts to be easily wiped off if you don't leave them sitting too long. It's just thick enough that, should one of the casters fall off your office chair, this book could keep your chair perfectly balanced until it's fixed. If you find yourself trapped in the woods during the winter, there are plenty of pages herein to burn or to crinkle up and use as insulation inside your clothes.

Candidly, I prefer you read the book and use it to help you begin or expand your epublishing efforts. With that in mind, what follows is an explanation of the special way I've handled URLs in the book, a note about the lesson files, and a reminder that there's much more content available than what is directly between the bug-squishing covers of this individual printed book volume.

Aspirin-Free Workflow Sidebars

In addition to the standard tip boxes and sidebars you'll see throughout the book, I've included special Aspirin-Free Workflow sidebars to call extra attention to pointers that will make your production work a little less stressful and more efficient.

Special URLs

Throughout this book I've included a number of hyperlink addresses. To make it as easy as possible for you to use those hyperlinks while working with this book, they have been specially created and organized.

Each URL is written out so that you can type it into a web browser or make note of it for future use. In most cases, the URLs begin with `http://abbrv.it/`, which is the author's own custom URL-shortening service. These shorter URLs make it easier for you to retype what otherwise might be very long and complicated addresses. Also, because the URLs employ my own URL shortener, should the address on a third-party website change, I can update the shortened URL without invalidating the address provided in this book. Should you discover a broken link, please alert me immediately by emailing `ePublishingIND@iampariah.com` (subject: "Broken Link in *ePublishing with InDesign CS6*") so that I can fix the shortened link.

Lesson Files

Obviously, the best way to learn some of the techniques presented in this book is by going hands-on, and you will, through numerous step-by-step tutorials. To make your hands-on learning easier, you are, of course, encouraged to work with your own production documents, but I've also provided copious examples you can dig through, manipulate, and test-publish.

Note that I used only the fonts automatically installed with InDesign. That way, when you open the INDD lesson files, you won't have to hassle with font substitution or text reflow; unless you chose not to install the Adobe Fonts or removed or deactivated them later, you already have the fonts I used installed and ready for your use.

How to Contact the Author

Questions?

Criticisms?

Epiphanies?

Consulting inquiries?

Knock-knock jokes?

Examples of your digital publications I can use in a future edition of this book?

Contact me:

Email me:	`ePublishingIND@iampariah.com`
Visit my website:	`http://iamPariah.com`
Follow me on Facebook:	`http://iamPariah.com/Facebook`
Connect with me on Twitter `@iamPariah`:	`http://iamPariah.com/Twitter`
Follow my InDesign, epublishing, and other pins on Pinterest:	`http://iamPariah.com/Pinterest`

Take Your ePublishing Education Further

As I noted in the "How to Use This Book" section, this book is not the entirety of the epublishing with InDesign material I've produced; it's only one portion. My website offers text and videos on segments of epublishing that update too fast for a printed book, templates, instructor materials, and, most important, updates to the content in this book and all companion materials to make sure you're always ready with the latest epublishing technologies and techniques. The following links will get you to *everything* in the *entire* ePublishing with InDesign system.

The complete *ePublishing with InDesign CS6* system: `http://abbrv.it/ePubInD`

Updates to this book: `http://abbrv.it/DigiPubID`

Video tutorials: `http://iamPariah.com/YouTube`

Customized training and workflow development: `http://iamPariah.com`

Sybex strives to keep you supplied with the latest tools and information you need for your work. Please check the book's website at `www.sybex.com/go/epublishingwithindesign`, where I'll post additional content and updates that supplement this book if the need arises.

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Chapter 8

Covering the Basics of Interactive Magazines

In this chapter, I'll focus on the basics of interactive-magazine creation with InDesign as a lead-in to the following two chapters, which delve into the nuts and bolts of interactivity using Adobe Digital Publishing Suite and its principal competitor, Aquafadas Digital Publishing System.

In this chapter, you will learn about the following:

- Planning an Interactive Publication
- Creating Multiscreen Layouts
- Working with Pan, Zoom, Slideshows, and Galleries
- Adapting Designs to Various Layouts and Tablets
- Using Liquid Layout Behaviors
- Utilizing Hyperlinks of All Types
- Inserting Audio and Video
- Adding Animations and 3D Rotating Objects
- Employing Scrolling Page Regions and Content Replacement
- Integrating Live Web Content

Planning an Interactive Publication

Although it's quite common to adapt an existing print layout to an interactive magazine, I advocate planning, and thinking about, the interactive magazine as a completely new publication separate from any companion print edition. The reason why should become clear as soon as you read the section "Understanding the Unique Behavior of Interactive Magazines." A little later in this chapter I will talk about a print-to-digital content-repurposing workflow, but even that must begin by planning the digital edition as a whole new publication.

Getting the Right Tools

If this and one of the next two chapters are your primary reason for buying this book—in other words, if creating interactive magazines is what you want to do—then you really

should have InDesign CS6 (or newer). EPUBs can be created just as well in InDesign CS5.5 as in CS6 and newer, building digital replicas requires only a minimum of CS5, and creating PDF-based digital publications can be done quite well in just about any version of InDesign. However, when it comes to creating interactive magazine–format publications, CS6 provides major workflow improvements in the form of liquid layouts and alternate layouts and orientations in the same document. While generally you can get by just fine with CS5 or CS5.5, if you plan to build interactive magazine publications for more than a single device and a single orientation, you'll greatly benefit from CS6 or newer.

In addition to InDesign, you'll need to install the add-ons that enable InDesign to create interactive magazines. Although new systems are in the works, as of this writing two full-featured choices are available: Adobe Digital Publishing Suite (Adobe DPS) and Aquafadas Digital Publishing System (Aquafadas DPS). Their prices and features vary, but they are competitive. (See the following two chapters for a deep discussion of each.)

TIP There are other capable systems, such as PressRun, Mag+, and Twixl, but they aren't yet on the level of Adobe DPS and Aquafadas DPS in terms of functionality. When and if they get there, I'll write a definitive guide to using them. Keep an eye on `http://iamPariah.com` for announcements of such books and ebooks.

Understanding the Unique Behavior of Interactive Magazines

Interactive magazine publications behave differently than any other format. First, they are always viewed one page at a time; you cannot display spreads. There simply is no such convention as spreads in the interactive-magazine format. Note that the digital-replica format can show spreads, but, as you may recall from Chapter 2, digital replica isn't the same as the interactive-magazine format.

Something else you must recognize before you design a single pixel is that tablets can be held in two orientations, and that greatly affects the design of your publication. Readers could read your publication with a tablet in portrait (taller-than-wide) orientation or in landscape (wider-than-tall) orientation. And, they may not keep the tablet in the same orientation throughout the entire reading session. You have to decide up front whether you want to allow readers to rotate their devices or force them to view your publication in one orientation or the other. If you design only for landscape, for instance, readers will not be able to rotate their devices unless they want to read sideways; the page will always display landscape. For the ideal reading experience, you may want to enable reading in either orientation, which means creating two separate versions of every page—one for landscape, one for portrait. When the reader rotates the tablet from one orientation to the other, in the background the image of the landscape-designed page is swapped out for the image of the portrait-designed page. They're two completely different layouts and can be as similar or dissimilar as you like. Of course, that means twice the work for you and your creative team. So, ask yourself: does your publication *need* dual orientation? Many publications opt to stick with just one orientation unless they can bring something unique to the alternate orientation.

Before going any further, I need to define some more terms. More accurately, I need to *redefine* terms you know from print publishing into their specific uses in digital publishing.

Story The term *story* in this context refers to the complete content of a particular story, feature, article, or segment and all layouts in which that content is presented. All elements

of a particular narrative are part of the story. For instance, the headline, deck, kicker, byline, complete body copy, illustrations, captions, sidebars, pull quotes, tip and note boxes, and so on are all considered elements of a story. Moreover, the main text flow or body copy of a piece is wholly part of the story; there are no jumps in interactive magazines, such as jumping the last few paragraphs of a story to a page later in the publication. The entire story must be presented linearly and sequentially. The story is then presented in its entirety on a single layout, with or without vertical or horizontal scrolling through multiple screens, but never flowing across actual multiple pages.

Layout A *layout* in interactive-magazine creation means one size and orientation of a story. For example, if you produce both landscape and portrait designs of a single story for an iPad 3, then each of those designs is a layout, while landscape and portrait orientations for 10-inch Android tablets are another pair of layouts in addition to the pair for the iPad 3.

Article *Article* in this context refers to all layouts used to present a single story, whether that's a single layout or many. For instance, a single article might contain four layouts—two landscape and two portrait layouts, one of each orientation for iPad 3 and 10-inch Android tablets.

Screen Substitute *screen* for just about everywhere you would normally say "page." Every time a reader swipes to turn the "page," she is actually moving from one article to the next. If an article is too long to fit on a single *screen*, then the reader scrolls down or to the side, not flips pages, to continue reading. Articles that are too large to fit entirely within the device screen are extended, usually vertically but sometimes horizontally, to multiple screens, which is the more direct corollary to what people typically think of as pages. If an article is three screens deep, readers will scroll down (or to the right) from the initial screen to two subsequent screens. Thus, each article can be considered as having its own page, but there is only one page per article, with one or more screens.

Figure 8.1 shows thumbnails from a live interactive magazine. Note the height differences between the thumbnails; that difference is the length of the articles, with each occupying a single page, but page depths vary by the number of screens required to display the entire page. This is not print publishing; this is digital publishing, which behaves more like web pages than like signatures and leaves.

Folio and Project Although Aquafadas uses the term *project*, the Adobe DPS-centric *folio* is the one I use, not as a bias toward Adobe DPS but because of its specificity—I can say "folio" to a group of people and receive much greater recognition and less confusion over my intent than if I say "project."

A folio refers to a segment of, or the entire digital publication, prepublication. Upon publication, interactive magazines are turned into apps or issues; before that, they're called folios. Also called folios are self-contained partial publications. For example, full-page ads—interactive or not—are often created by advertising agencies and delivered to publication staff as self-contained folios. Technically these ads are *articles* in the vernacular of interactive magazines, but because they are saved and delivered as self-contained files, they become folios. The layouts within those ad folios are then incorporated into an interactive magazine's own folio in a procedure not unlike adding another INDD file to a Book panel.

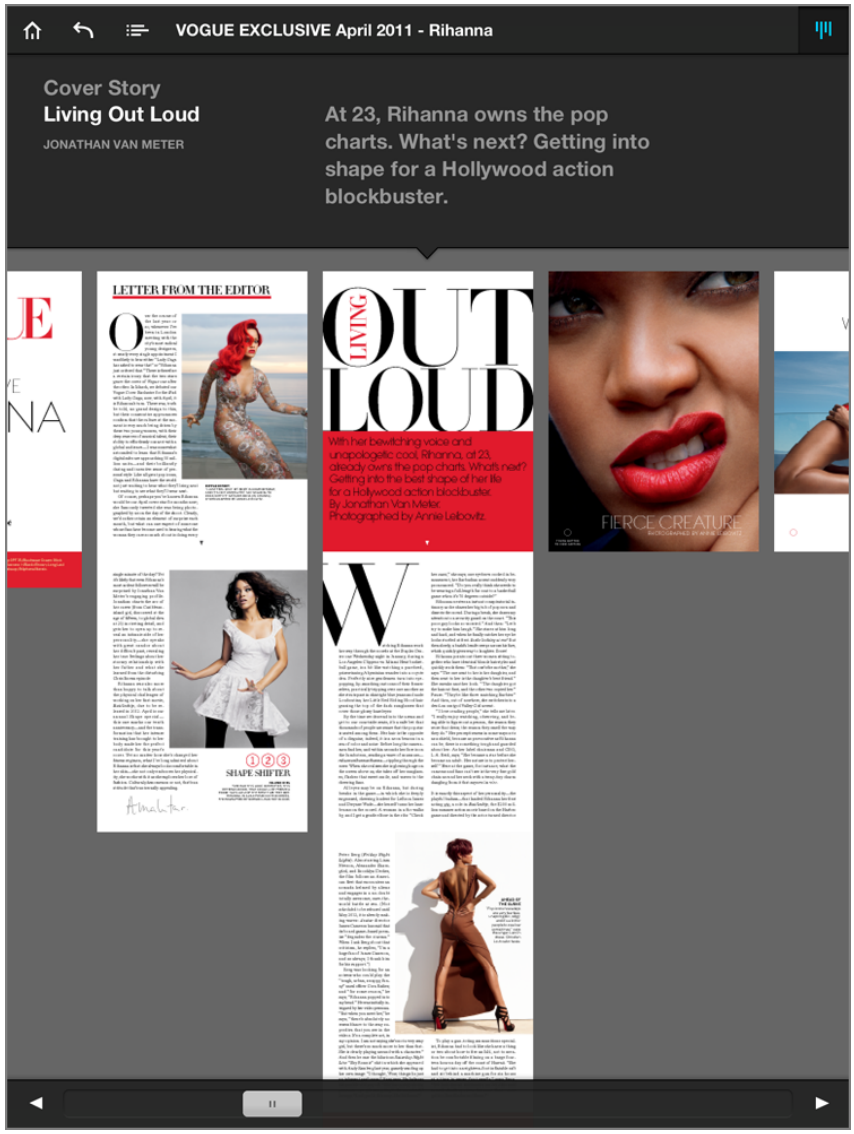

FIGURE 8.1
The thumbnails of several pages in the April 2011 *Vogue Exclusive*: Rihanna, made in Adobe DPS and shown on an iPad

Figure 8.2 shows a diagram to help coalesce these terms into an understandable hierarchical system.

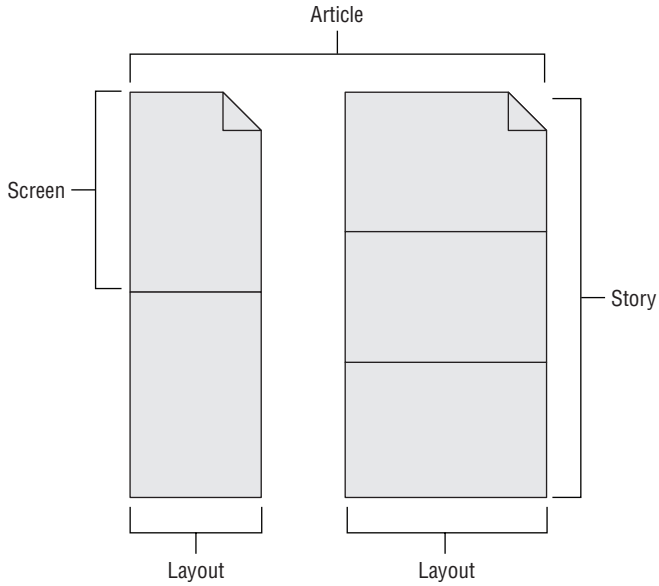

FIGURE 8.2
This diagram identifies the different parts of a folio, including the article, screen, story, and layouts.

Choosing Resolutions

Once you understand the unique qualities of the format, you must decide on the resolution and dimensions for your publication—for each device you want to target. Table 8.1 lists the physical screen sizes, display dimensions (in pixels), and display aspect ratios of some of the most popular 10- and 7-inch-class tablets on the market. Naturally, the information in this table will change as new tablets are introduced and new display technologies are developed, so keep up with the latest dimension information in the digital updates to this book at `http://abbrv.it/DigiPubIDUpdates`.

TABLE 8.1: Display dimensions of common tablets

DEVICE	SCREEN SIZE*	DISPLAY WIDTH*	DISPLAY HEIGHT*	DISPLAY RATIO
iPad (third generation)	9.7	2048	1536	4:3
iPad (1 and 2)	9.7	1024	768	4:3
Kindle Fire	7.0	1024	600	128:75
Kindle Fire HD 7	7.0	1280	800	16:10*
Kindle Fire HD 8.9	8.9	1920	1200	16:10*
Google Nexus 7	7.0	1280	800	16:10*
NOOK Color and Tablet	7.0	1024	600	128:75

TABLE 8.1: Display dimensions of common tablets *(continued)*

DEVICE	SCREEN SIZE*	DISPLAY WIDTH*	DISPLAY HEIGHT*	DISPLAY RATIO
Kobo Vox	7.0	1024	600	128:75
Asus Transformer line	10.1	1280	800	16:10*
Acer Iconia Tab line	10.1	1280	800	16:10*
Samsung Galaxy Tab 10.1	10.1	1280	800	16:10*
Samsung Galaxy Tab 8.9	8.9	1280	800	16:10*
Samsung Galaxy Tab 7	7	1024	600	128:75
HTC Flyer 7	7.0	1024	600	128:75
Motorola XOOM	10.1	1280	800	16:10*
Toshiba Thrive	10.1	1280	800	16:10*
HP Slate	8.9	1024	600	128:75

**Screen size refers to the physical dimensions of the screen as measured diagonally and is listed in inches. Display width and height values are in pixels.*

***16:10 is more correctly written as 8:5, but it is listed here as 16:10 to highlight the comparison with the popular 16:9 HD TV display ratio.*

TIP Please refer to "Planning a PDF Publication" in Chapter 7, "Creating PDF Publications for Digital Delivery," to learn about resolutions, display ratios, and targeting to screen. However, keep in mind that although you *can* design one layout (or two: portrait and landscape orientation) and let that layout scale when viewed on other devices, you really shouldn't.

Lots of different resolutions are available in even the small selection of devices in Table 8.1. There are also three distinct display ratios. That means if you wanted to produce the best possible design for all 15 of those devices—and numerous others that share one of the three display ratios—you have to design only three separate versions of each page. Design one layout in 4:3 display ratio, another in 16:10 (aka 8:5), and a third in 128:75, and your publication will look the best it can on all of them. True, three versions of every page sounds like a lot of work—and six versions, a portrait and landscape version for each, sounds like a lot more—but later in this chapter I'll show you how to design once and efficiently adapt to the other display ratios with very little manual work.

Creating Multiscreen Layouts

Content that won't fit on a single screen-sized page in InDesign may be set in multiple pages in either Adobe DPS or Aquafadas DPS. Adobe DPS also offers an option called *smooth scrolling* to lay out the article on a single tall page instead of multiple pages. I'll explain where to activate

the smooth scrolling option within Adobe DPS articles in Chapter 9, "Creating Interactive Magazines in Adobe DPS," in the "Applying Finishing Touches" section. In this section, however, I'll explain how to build for both multiple pages and a single smooth scrolling page.

With smooth scrolling disabled, thus having the reader jump from one page to the next when scrolling vertically, simply lay out your content as you normally would, using multiple pages in InDesign. Each page will become a screen of the layout, seemingly stacked and continuous. This method precludes smooth scrolling.

If you want smooth scrolling, then content that won't fit on a single screen-sized page must be included, not on additional pages but on the same page by extending the height or depth of that page. Figure 8.3 shows an example of a smooth scrolling layout versus a multipage layout.

FIGURE 8.3 Comparing the layout for jumping pages (a) and smooth scrolling (b)

To extend a page from a single-screen height to a multiple-screen height for smooth scrolling, you must resize the page. If you'll frequently use multiscreen page sizes, the best thing to do is create one or more additional master pages whose heights are set for multiscreen articles. For here-and-there resizing of pages, switch to the Page tool and, while holding Alt/Opt, drag the bottom-center control corner of the page container downward until you've achieved the desired

depth. For the best reading experience, you'll want to resize your pages in full-screen increments; in other words, if you're designing for an iPad in portrait mode, each screen is 1024 pixels in height, so you should lengthen the page in increments of 1024 pixels—1024 pixels for one screen, 2048 pixels for two screens, 3072 pixels for three screens, and so on.

Working with Pan, Zoom, Slideshows, and Galleries

Good use of photographs, illustrations, and other image elements is fundamental to publication design for both print and digital delivery. Traditional print publishing imposes certain limitations on the usage of imagery, limitations that the interactive-magazine format lifts. For example, in print, images are limited in size to what fits within the physical dimensions of the page; if an image is too large for the page, it must be scaled or cropped to fit, often sacrificing detail that would be better left in. Interactive-magazine, on the surface, may seem like it includes the same limitation—after all, the page size of the publication and screen size of the device on which it's viewed are fixed sizes. By way of compensating for imagery better presented larger than the area in which it must fit, interactive magazines offer two options print can't: the ability for readers to zoom in on images and for them to pan images, seeing more of the image than will fit in the frame containing the image (something like Figure 8.4). When viewed, the reader simply has to drag the image with one or two fingers to pan and pinch to zoom in and out.

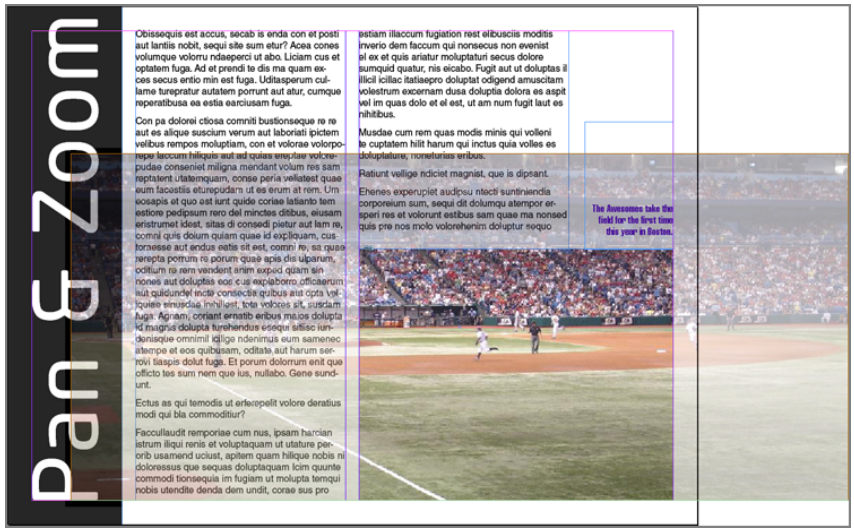

FIGURE 8.4
Using pan and zoom effects enables readers to see the parts of the image that don't fit in the frame.

Another limitation of print publications lifted by interactive-magazine format is that only one object—in this case, a single image—can occupy a given space on the page. It's a common dilemma: you have a big A-roll of images you'd like to use but not enough pages available to the feature to use all those photos. Thus, you spend hours agonizing over them to get only the best few that will fit; maybe you even spend a few more hours trying different arrangements and scales on the page to see how many you can fit. Ultimately, a few great photos are left out of the issue.

Just as common—particularly with catalogs—is the inverse problem: a requirement to include a large number of images, with maybe color, style, or size variations of the same product

or detail and isolation imagery. The necessity for a large number of images in the world of print publication, where every page costs money, often results not in increased page count but in shrinking images below their ideal size just to fit them. Text is often reduced in size to help fit images as well, and often layouts are built too tight, cramping content together just to fit all those needed images without raising page count.

Interactive magazines solve both of these problems. Any number of images can be presented in a single space, at their ideal sizes.

A slideshow is a series of images displayed sequentially. They can transition from one image to the next automatically after an interval of time, when a reader taps or swipes on them, or both. By contrast, a gallery in this realm means a series of images that can also be navigated nonsequentially, usually by the reader tapping thumbnails of the images or buttons.

Adapting Designs to Various Layouts and Tablets

Once you have a completed layout, with all the article content on the page or a set of pages, it's *almost* time to create additional layouts for different orientations and devices. (The next chapters cover creating interactive overlays and enrichments, but for the purposes of this discussion, let's assume you've already read through that and added whatever interactivity your article needs.) There's something important you should consider doing before beginning to adapt the design to a new layout—get sign-off on the layout.

Before Adding Layouts

One of the reasons interactive-magazine creation is considered so time-consuming and costly is because participants in the process don't optimize their workflows. Most digital publishing teams—enterprise down to freelancer—work on the portrait and landscape versions for each device simultaneously or, in an only slightly more efficient workflow, create the portrait and landscape versions for just one platform (usually the iPad) first and then base the other platforms' iterations on that pair.

In both of those workflows, because two separate layouts using largely the same content are created and then sent for editing and proofing, when changes come back, the same content must be edited twice, once for the landscape and once for portrait layout, causing an unnecessary duplication of effort. Additionally, because reviewers are being presented with largely the same content in two different layouts, those reviewers often miss errors in one or both layouts, and designers have to scrutinize the feedback on both versions; revision requests can easily slip through the cracks if the majority of changes are written in both layouts, but a few, here and there, appear in only one layout.

In short, producing two layouts for initial editing and proofing unnecessarily doubles the work for everyone and significantly raises the chances of errors. It gets exponentially worse if you design and proof for multiple devices simultaneously.

Don't do the second layout yet.

Instead, follow the workflow shown in Figure 8.5. Create one layout—either portrait or landscape for a single device—and send that out for editing and proofing, however many rounds it takes. The content will be identical or largely the same for all layouts, so why ask clients, editors, and other reviewers to proof the same content in two different arrangements? Get the first layout polished and perfect and *then* adapt the edited and approved content to the next layout, adding any unique elements for that second layout. Then, when you send that out for proofing, it

will be to review only the design itself and any content that differs from the first layout. All the carryover elements and content will have already been finalized, speeding the review process by effectively eliminating the editing and proofing of content and elements already approved.

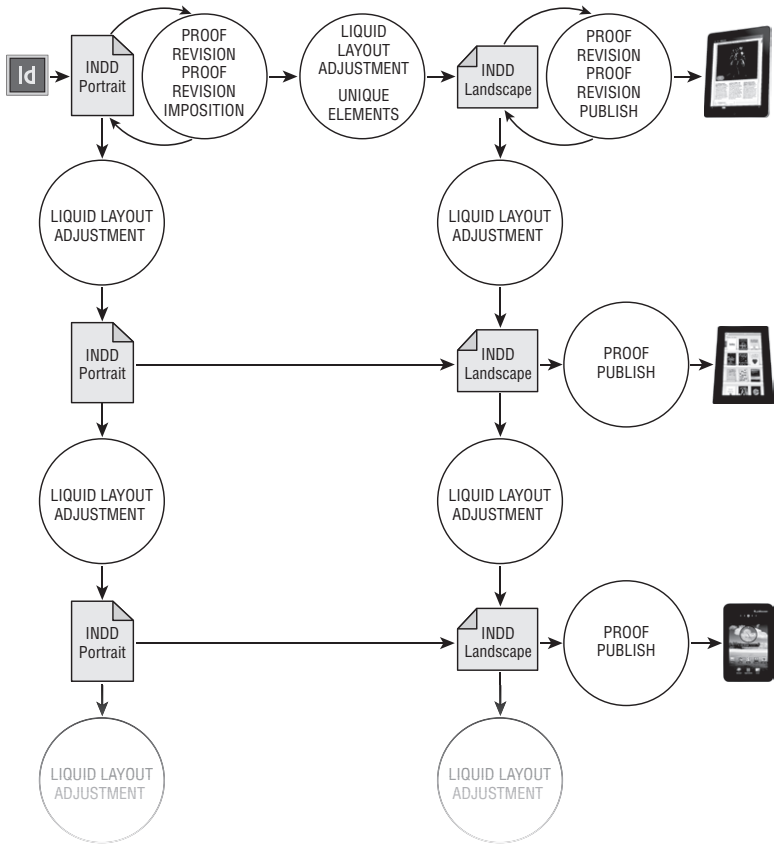

FIGURE 8.5
The most efficient digital publishing workflow available with today's systems, tools, and devices

This workflow will save you significant time over the more common one of building, proofing, and correcting multiple layouts at once. On those (ideally rare) occasions when a late change does require you to make changes to two or more layouts, there are tools available to make that easier, too. I'll discuss them when I talk about adding layouts and synchronizing content across them.

Designing for Multiple Devices

Although the iPad dominates the market, it is not the only device your potential readers use to consume interactive magazine–format publications. Market share among tablet operating systems and individual tablets fluctuates radically from month to month, depending on who released a new version, whose commercials are running in heavier rotation, and all the other usual factors that drive competition in the consumer electronics space. Designing for a single device, even if it is the market leader, is ill-advised. Not only will you sacrifice the millions of potential readers on other devices, but should the future find the current market dominator falling to a minority share, all of your back issues will be inaccessible to the then-majority of

readers. It's best to hit the ground running by designing for a handful of top mobile operating systems and devices at the start. In the current economy, that means the higher-resolution iPad 3 and newer, iPad 1 and 2, 7-inch Android tablets such as the crowd favorite Kindle Fire and Kindle Fire HD as well as the Google Nexus 7, 10-inch Android tablets, and 10-inch Windows tablets. I'll refer you to Chapters 1, 2, and 3 for figures and more information to help you make decisions about device support.

If budget is a limitation, target iPad (all versions), Kindle Fire and Kindle Fire HD, and the generic 10-inch Android tablet class at the very least. iPads are the most popular, of course, and Kindle Fire alone accounts for more than 50 percent of all Android tablets on the market (according to comScore, April 2012). Also, Fire's screen resolution is the same as the NOOK Color, NOOK Tablet, Kobo Vox, and other popular 7-inch Android tablets, which means a publication designed for Fire will work well on the other leading tablets in the class. Creating a version for 10-inch-class Android tablets targets full-sized Android alternatives to the iPad.

Fortunately, the work of adapting an existing layout to other publication dimensions is easy with Aquafadas DPS's integrated orientation states, synchronized content, and the ability to easily copy articles between projects. Adobe DPS is similarly easy with alternate layouts, synchronized text, and liquid layout *behaviors*, which are not liquid layouts.

Using Liquid Layout Behaviors

Liquid layout behaviors replace the old Layout Adjustment feature in InDesign, which sought to help you adapt frame and other object positions and sizes from one page size or orientation to the next. It was kind of hit-or-miss. Layout Adjustment wouldn't give you great results; you'd still have to do a lot of tweaking and manual cleanup, but it did a lot of the heavy lifting and basics of reworking page geometry, potentially saving you a lot of work. Liquid layout behaviors do everything Layout Adjustment did and more, but they do it better, more reliably, and with less need for manual cleanup afterward. Think of it like this: Layout Adjustment was automatic page geometry 1.0, and liquid layout behaviors is automatic page geometry 2.0. There's still room for improvement in 2.0, but it's head and shoulders above the function of 1.0, and it can save you hours or days you would otherwise spend reworking object positions and relationships.

Liquid layout behaviors can be employed for any type of publication that might need to be reformatted for another output type, not just digital publications. For example, you can use liquid layout behaviors to make the objects on a portrait-oriented digital magazine design adapt automatically to a portrait-oriented variation of the same design, and you can also employ them to take a hardcover book layout and, with almost full automation, adapt the content to fit within the new dimensions of a paperback version layout and within the EPUB layout of a third document. You can also couple liquid layout behaviors with alternate layouts to build multiple versions for digital output, print, or both in a single InDesign document—if you're using Adobe DPS for any interactive-magazine components. If you're using Aquafadas DPS for your interactive-magazine output, you can still use liquid layout behaviors to help adapt content between the landscape and portrait states of the publication and between multiple documents sized for different devices.

Technically, Layout Adjustment is still in InDesign, but liquid layout and Layout Adjustment are incompatible with one another in much the same way Neanderthal and Cro-Magnon man were mismated. One birthed the other, and they had some common strands of DNA, but the later evolutionary branch ultimately supplanted the earlier one. If you enable Layout

Adjustment, it stops liquid layout behaviors from functioning, but Layout Adjustment is destined for extinction, to be replaced by liquid layout.

Using liquid layout you can save hours, days, and even weeks of work adapting publications from one format or size to another. Here are just a few of the things liquid layout behaviors can do when taking a laid-out page and changing that page's size or orientation:

- Scale objects up or down
- Move objects outward when page size increases or inward when page size decreases
- Keep objects positioned the same distance from one or two margins while increasing the space between the objects and the other margins
- Keep the content fixed to one or two margins and stretch or resize objects in the direction of other margins
- Resize text inside frames while also changing the size of the text frames
- Add or remove columns from text frames to maintain a consistent column width while resizing text frames
- Resize images within their frames instead of just moving them

Accessing Liquid Page Rules

Liquid layout behaviors are governed by directives called Liquid Page rules. To use liquid layout behaviors, you must tell InDesign which rule to employ. Each page can have its own rule, or the entire document can be reworked according to the definition of a single rule. Master pages can also be assigned Liquid Page rules (except the Controlled by Master rule, unless the master page in question is based on another master page).

You'll work with each of the rules shortly, but first you must know how to get to them. Selecting the Page tool transitions the Control panel into page mode (Figure 8.6a). One of the controls in this mode is the Liquid Page Rule drop-down menu offering you access to all the rules, but none of the object-level options you may want to set. To access the full set of controls, choose Window ➢ Interactive ➢ Liquid Layout to display the Liquid Layout panel (see Figure 8.6b). You can also open the Liquid Layout panel by selecting the Liquid Layout command on the Layout menu. Note that you must also have the Page tool selected in order to access and change the Liquid Page Rule field on this panel; the field is grayed out if you have any other tool selected.

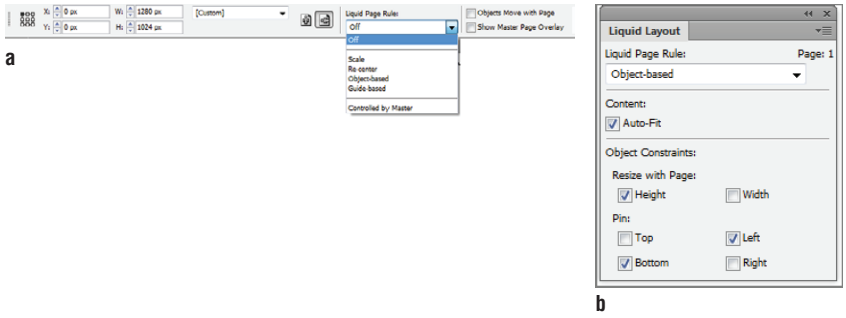

FIGURE 8.6 You can access the Liquid Page Rule drop-down menu and several other options on the Liquid Layout panel.

You can set the Liquid Page rule on multiple pages at one time by selecting the pages' thumbnails on the Pages panel and then choosing a rule on the Liquid Layout panel or Control panel in page mode.

Using the Controlled by Master Rule

Selecting the Controlled by Master rule makes document pages rework their geometries in response to page size (or orientation) changes on their master pages. Controlled by Master is the simplest rule and works very much like Layout Adjustment worked. Give it a try.

1. Beginning with a simple portrait-orientation page such as the one in Figure 8.7, which includes a simple two-column text frame and an image with text wrap assigned, switch to the Page tool.
2. Open the Liquid Layout panel, and set the Liquid Page Rule field to Controlled By Master.

FIGURE 8.7
A simple portrait-orientation layout

3. Go to the master page that defines that document page, and, with the Page tool still selected, change the master page's orientation to landscape using the appropriate button on the Control panel.

4. Switch back to the document page and examine the changes. You can use Ctrl+Z/Cmd+Z and Ctrl+Shift+Z/Cmd+Shift+Z to toggle between the before and after views.

Figure 8.8 shows my page after changing orientation; compare it with Figure 8.7. Notice that the primary text frame stayed glued to all four margins, resizing to do so, but it also remained two columns, widening to fit the landscape orientation. The photo didn't resize at all; in fact, it fell off the page. The text frame adapted better than it would with Layout Adjustment, but that's the only advantage over Layout Adjustment in this instance.

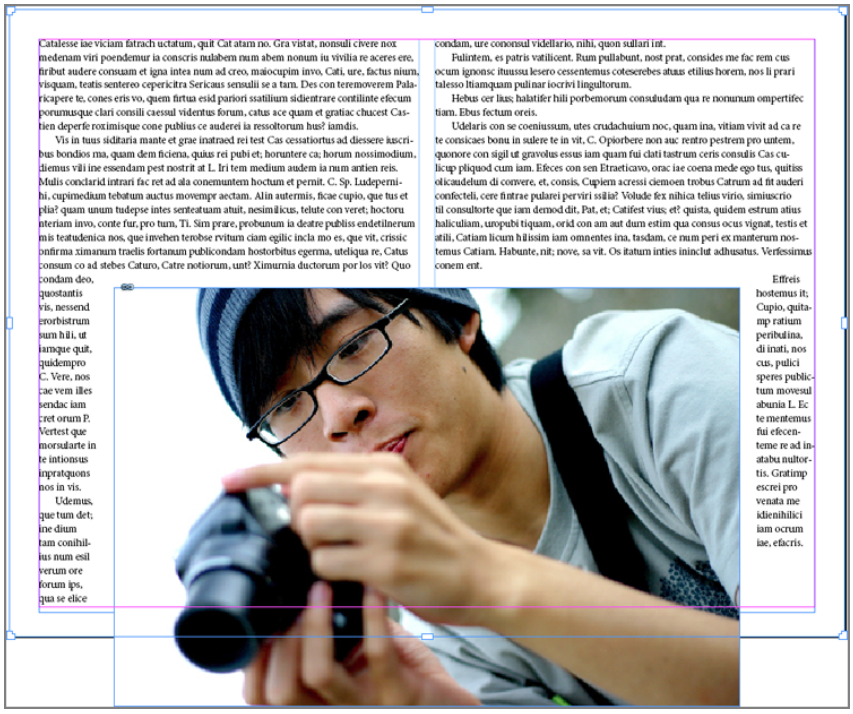

FIGURE 8.8
After changing the orientation of the master page, while the document page was assigned the Controlled by Master Liquid Page rule

Let's take things a little further.

Using the Scale Rule

An easy way to understand the Scale rule is to think about manually resizing several objects at once. If you select multiple objects, hold Ctrl+Shift/Cmd+Shift, and then click and drag one of the group's control corners, you'll resize the objects' frames and their contents. The Scale rule causes that same scaling behavior in objects, but automatically, in response to page size changes. Let's try it.

1. Start with any layout. For this example, I'll use one a little more complicated than the last (see Figure 8.9). It has two image frames, a multicolumn text frame, and four unthreaded text frames comprising the title and byline.

FIGURE 8.9
A slightly more complex layout

2. Activate the page, and set the Liquid Page Rule field to Scale.
3. Still using the Page tool, drag one of the page's control corners outward, enlarging the page. The content will scale in real time to adapt to the new page size.
4. When you release the mouse button, the page will snap to its original size. That's the page-resizing preview. If you actually want to resize the page, hold Alt/Opt while dragging a control corner.

   Yeah, I uttered a few expletives over that myself. The idea, says Adobe, is that people will want to *preview* the effect of a page resize—particularly in light of liquid layout output—more often than they'll want to *actually* change the page size with the Page tool.

When the Scale rule is applied, all the objects—frames and content—on the page scale up or down proportionately to fit the new page dimensions. They'll enlarge or reduce as needed, maintaining their relative sizes and positioning with one another, but only as long as all objects fit within both the horizontal and vertical dimensions. If you alter one dimension

disproportionately to the other, you'll wind up with empty space on one dimension—the same as if you set an image to the Fit Content Proportionately fitting option and the frame wasn't in scale to the image it contained (see Figure 8.10).

FIGURE 8.10
While using the Scale rule, resizing the page disproportionately can leave empty space along the sides or the top and bottom.

The Scale rule is ideal to use when the major difference between two layouts is scale, such as when converting an iPad 1 or 2 layout to a layout for the iPad 3 or to a layout for 10-inch Android tablets with similar display aspect ratios to the iPads. Even when the display aspect ratios aren't exact, it's very useful. Typically you'll do much less work by extending a background frame to fill in empty sides, adjusting the positioning of the main text frame, or performing other fixes to compensate for scaling mismatches than you would scaling every page's content by hand. The rule's suitability to this purpose is further enhanced by the fact that it's the only Liquid Page rule that will resize type. The other rules will change only the dimensions of text frames, not the size of the text within.

Using the Re-center Rule

The Re-center rule does not resize anything. Rather, it merely keeps the content perfectly centered both horizontally and vertically to the page edges. It would be pedantic to walk you through a step-by-step exercise just for that, so I'll merely show you Figure 8.11, the result of

selecting the Re-center rule and then enlarging the page. Note that Re-center is really suited only to enlarging. If you reduce the page, the objects will not scale; they'll spill off the page edges.

FIGURE 8.11
With the Re-center rule applied, objects remain centered on the resized page.

Using the Guide-Based Rule

Here's where you start getting to the real potential of liquid layout behaviors. Thus far, using Controlled by Master, Scale, and Re-center rules, I've scaled and moved the content around, always keeping the same relation between the component objects. The objects themselves really haven't adapted to page sizes and orientations—they haven't been liquid, if you will. Guide-based and object-based rules control how liquid layout transforms individual objects to make truly adaptive layout changes.

InDesign now includes two kinds of guides that can be dragged from the rulers—our old friend the ruler guide and its new sister the liquid guide. Placing a liquid guide on the page such that the guide touches one or more objects causes those objects to expand or contract, grow

or shrink, in different ways to adapt to changes in the page dimensions. It's simpler—and much more powerful—than it sounds, so let's try it.

1. Begin with a mixed-content layout like the ones you've been using thus far. If you don't have anything suitable on hand, you can find the layouts in the preceding figures in the `Liquid Layout Test Layouts.INDD` file in the Chapter 8 `Lesson Files` folder. In fact, that file contains both of the layouts you've worked with so far.

2. Switch to the Page tool, drag a vertical guide from the vertical ruler, and drop it on the right side of the page, well past the *Spotlight*, *Cheng Wu*, and *by Gayle Mintz* text frames, but touching the headshot graphic, the two-column body copy frame, and, of course, the background image frame. Figure 8.12 shows you where I placed mine. Notice that your guide is a dashed line instead of a solid one; that's the appearance of liquid guides.

FIGURE 8.12
The dashed line is a liquid guide.

3. Still using the Page tool, hold Alt/Opt, and drag the control corner on the right side of the page outward to widen the page. You should see something like Figure 8.13.

FIGURE 8.13
After widening the page 200 percent, the liquid guide has caused the objects it touches to expand while other objects remain unchanged.

Notice what happened? The objects touched by the liquid guide resized while the ones the guide didn't touch stayed exactly where and how big they were. The liquid guide tells InDesign to resize objects beneath it, adapting them to the new dimensions. It's basically a growth indicator, freezing everything else. Try reducing the width of the page now so that it's narrower than the original version (Figure 8.14). Again, you'll see the guide-touched content resize and rework itself while the other objects remain constant.

Think about practical uses for that feature, such as for background images or colored frames that always fill the background, titles that automatically become single lines in landscape mode but multilined in portrait, and images and figures—text wrap applied—that always fit. It has so many uses, and not just for digital publications but all types of layouts you might create in InDesign, for any output method or medium.

And you aren't limited to a single liquid guide or one dimension for scaling.

1. Try resizing the page both horizontally and vertically. With the first liquid guide in place, you'll see that touched objects adapt horizontally just fine, as I've already established, but they won't budge on their vertical measurements. That's a problem. Reset the page with Ctrl+Z/Cmd+Z.

FIGURE 8.14
After narrowing the page, the layout still looks good, thanks to liquid layout behaviors and the guide-based rule.

2. Again, using the Page tool, drag a guide from the horizontal ruler this time. You want to position the horizontal liquid guide so that it's close to the bottom of the page, touching the body copy text frame (and the background image graphic frame, of course).

3. Now resize the page diagonally to see that the background image and main text frame adapt in both width and height (Figure 8.15).

FIGURE 8.15
Liquid guides help objects grow and shrink, not just horizontally but vertically as well.

You can add as many liquid guides as you want, but after a certain number, they'll negate themselves. The idea is to use liquid guides to control the items that most need to be resized. You probably wouldn't, for example, place a liquid guide over the *Spotlight*, *Cheng Wu*, and *by Gayle Mintz* text frames, too. That would cause too much automatic resizing and not enough layout adjustment. A horizontal liquid guide that touches the main photo, though, might not be a bad idea; it would then allow the main photo to scale in proportion to the body copy text frame.

Dragging a guide from the ruler with the Page tool automatically creates a liquid guide, but that's not the only way. If you drag from a ruler with any other tool, you'll get our old buddy the normal ruler guide. If that isn't what you want, you can convert a ruler guide into a liquid guide, and vice versa.

1. Using any tool but the Page tool, drag a guide from one or the other ruler onto the page.

2. Switch to the black arrow Selection tool, and hover your cursor over the ruler guide you just made. When the cursor is over the guide, you'll see the guide change color as usual; right-click and choose from the context menu Guide Type ➢ Liquid Guide (see Figure 8.16). The guide will then become dashed to identify it as a liquid guide.

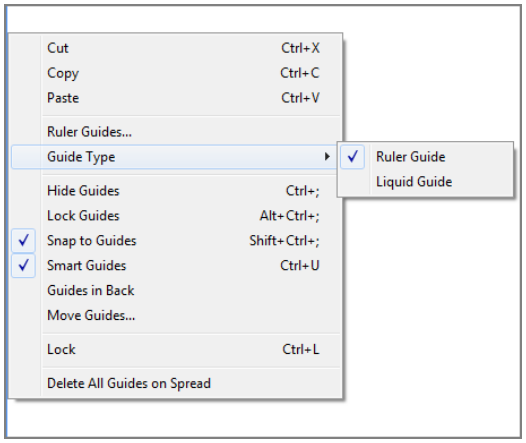

FIGURE 8.16
Hovering over the end of a ruler guide reveals this icon.

So far, I'm getting excellent results with adaptive content. Still, something is nagging at me. When I widened the page containing the two-column text frame, the frame widened to fit. The type stayed the same, as did the number of columns, but the columns got pretty wide. Having designed just about everything that can be published in my career, I know that there are rules governing the optimal width of columns; widen columns too much, and readers' eyes have to turn uncomfortably far, particularly when those too-wide columns are displayed on back-lit tablet screens. Wouldn't it be great if liquid layout could adjust not just the width of a text frame but also its number of columns?

It can.

Automatically Adding and Removing Text Columns

Now this is a stroke of genius. When a text frame resizes, it can also be set to increase or decrease its number of columns automatically. It enables the number of columns to change based on screen orientation and size—a single column for small screens such as smartphones, two-column text for medium-sized screens such as 7-inch tablets or even larger tablets in portrait orientation, and three or four columns for landscape or other wider views.

The secret is an easily overlooked addition to the Text Frame Options dialog.

1. Select the body copy text frame in the layout you've been working with or any multicolumn text frame you happen to have on hand.
2. From the Object menu, select Text Frame Options (or use the Ctrl+B/Cmd+B shortcut).
3. On the General tab, which you can see in Figure 8.17, click the drop-down arrow beside the Columns field. The two options are now three. The new one is Flexible Width; select it.

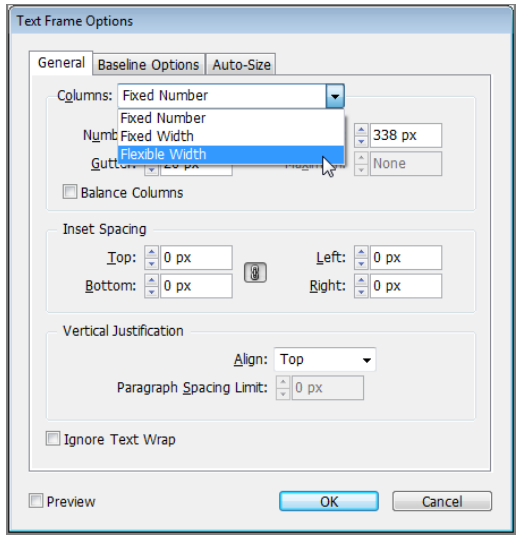

FIGURE 8.17
Selecting Flexible Width on the Text Frame Options General tab

4. With Flexible Width selected, the Maximum field beneath the Width field becomes available. At the same time, the column Number field locks. The Flexible Width setting lets you choose a desired width for columns and a maximum acceptable width, measured in the document's measurement system, so pixels if you're working within the Interactive Magazine intent. InDesign—or whatever is viewing the output from this document—will then keep the width of the columns between the desired width (the Width field) and the maximum, adding or reducing the number of columns accordingly.

   Try reducing the value in the Width field and see what happens (remember to activate Preview in the lower-left corner of the dialog). If nothing happens, keep reducing the value until you see the number of columns in the text frame increase.

5. Set your desired values in the Width and Maximum fields, and then click OK. Make sure there's a vertical liquid guide touching the multicolumn text frame you just modified.

6. Now, using the Page tool, resize the page or change its orientation. You should see columns automatically come or go within your text frame.

Set Flexible Width and Width and Maximum settings in the object styles you employ for your body copy, primary, or other text frames, and all your text frames will automatically increase or decrease the number of columns in response to liquid layout resizing or reorientation. Amazing!

Using the Object-Based Rule

The final liquid page rule is the most powerful, albeit the one with the steepest learning curve. The Object-Based rule lets you define individual adaptation behaviors per object. It does that, in part, with the Liquid Layout panel but primarily through the use of symbols and constructs on individual objects.

Let's walk through using the Object-Based rule with the same very simple (read: an easier-to-see-all-the-funky-new-symbols-layout) page in Figure 8.18.

FIGURE 8.18
This overly simple layout will help you understand the Object-Based rule.

1. Create a document or page like the one in Figure 8.18, with a single image frame aligned to the center of the page horizontally and vertically.
2. Switch to the Page tool, and with it select the graphic frame (yes, I know that sounds like an oxymoron, but that's how it works).
3. In the Liquid Layout panel, set the Liquid Page Rule field to Object-Based.
4. Mimic the options in Figure 8.19 in your Liquid Layout panel—specifically, enable Auto-Fit, Height, Top, and Left.

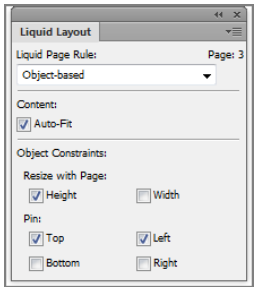

FIGURE 8.19
Mimic these settings on the Liquid Layout panel to complete this exercise.

5. Now, still using the Page tool, click and drag one of the page's control corners, and enlarge the page diagonally so that its height and width enlarge. Note what happens to the graphic frame. It lengthens but doesn't widen because you chose only the Height option under Resize With Page on the Liquid Layout panel, and it maintains a constant distance from the left and top page margins because those are the two options you enabled in the Pin section of the Liquid Layout panel.

Now that you've seen the Liquid Layout panel options in action, here's what they mean. Refer to Figure 8.19 as you walk through the sections.

Content The only option in the Content section is Auto-Fit. As you might have already intuited, activating the Auto-Fit option causes images inside graphic frames to resize with their frames. The Auto-Fit option reapplies whatever fitting setting is in effect on the frame—Fill Frame Proportionately, Fit Content to Frame, Center Content in Frame, and so on—with each resizing of the frame.

Resize With Page You can activate either the Width and Height options or both to have objects scale along one or both axes in response to the page.

Pin The act of pinning locks the distance of one or more sides from the corresponding page margin. For example, the tutorial you just walked through used the Top and Left options to pin the frame's top and left edges to the top and left margins; thus, when the frame resized, it did so toward the right and downward. You can pin one or two sides but not opposing sides. If you are going to allow an object to dynamically adapt to page size changes, then you must allow it to do so in at least one direction horizontally and one direction vertically. Pinning both the left and right sides but then activating the Width option under Resize With Page creates a paradox—don't resize horizontally, the Pin options say, but do resize horizontally according to the Resize With Page option.

Pinning is most often useful for ensuring that the relationship between two or more objects remains constant. For instance, you might pin the top and left sides of text frames that form a title, deck, and byline, as well as the background image, to ensure that those objects all stay together, aligned properly, while they potentially scale from the right and bottom edges.

Alas, other than Auto-Fit in the Frame Fitting Options pane (see Figure 8.20) and the Text Frame Auto Size Options settings within the options for an object style, Liquid Layout object settings cannot be saved in object styles.

Figure 8.21 shows all the new symbols and adornments that correspond with the Liquid Layout object settings and are visible when an object is selected with the Page tool. To make it easier to understand, on the object shown I've used the same Liquid Layout panel settings as in the step-by-step exercise you went through.

Outside the frame, on the top and left, solid lines connect the top and left object edges with the matching margins. These solid lines with filled-circle terminuses communicate that the object is pinned to those margins. Conversely, on the bottom and right sides, the lack of lines and the open circles indicate that the object is not pinned to the margin on those sides, enabling the distances between the bottom and right edges and the bottom and right margins, respectively, to change based on page size changes.

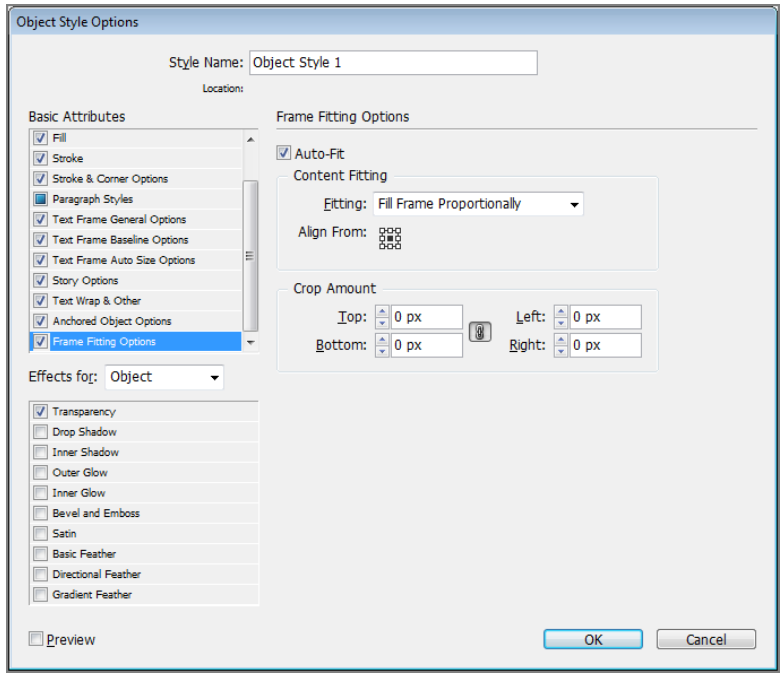

FIGURE 8.20
Auto-Fit is an option within object styles.

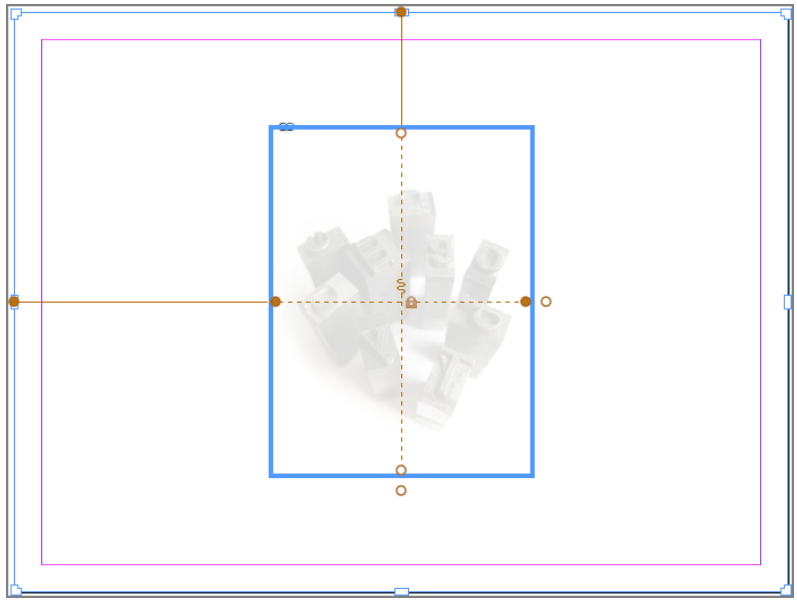

FIGURE 8.21
When objects are selected with the Page tool and the Liquid Page Rule is set to Object-Based, these symbols and lines communicate the Liquid Layout settings and the behavior of the object.

Inside the frame you have dashed lines indicating the horizontal and vertical planes of the frame. On the horizontal line is a padlock icon, while the vertical displays a spring. These two symbols, respectively, communicate that the width of the frame will not change in response to the width of the page changing, while altering the page height will modify the object's height. That's because I disabled the Resize With Pages Width option in the Liquid Layout panel but enabled the Resize With Pages Height option. So, the frame will always be however wide it is, no matter how wide the page gets, but it will grow or shrink in depth along with the page height changes. The filled circles communicate the same thing—notice they're on the line with the padlock—as do the open circles for the liquid or springy dimension.

Now, imagine setting these object-specific movement and sizing options on all the objects within a complex layout destined for multiple outputs—a print-edition magazine or catalog and digital magazine–format editions bound for the iPad, the Kindle Fire, 10-inch Android tablets, and so on, in portrait and landscape versions for each device. Imagine how much time and energy you could save over manually reworking every article and layout for each new device and orientation. If you prep each object carefully, setting autofit options on the images and flexible-width options on text frames, you could almost entirely automate the process of adapting the one layout you actually have to design to all those other devices and orientations. A few minutes of prep time in advance and a few minutes of minor cleanup after wholesale layout resizing or reorienting, and you've just saved yourself hours, days, or maybe even weeks of tedious hand manipulation (ministration has to do with ministering) of the objects.

Can I get a hallelujah?

Utilizing Hyperlinks of All Types

Now that you know how to begin and lay out interactive magazines, I can get into the really good stuff—all the different ways in which those publications can be made deeply interactive and engaging. The obvious place to start with deep interactivity is with the most basic—hyperlinks. Interactive magazines can contain hyperlinks that, when clicked, open web pages, initiate file downloads, start dialing a phone number, send a text message, begin an email, and link to other apps you might have for sale. Any or all of these types of hyperlinks you may use to leverage your own products and services or offer to advertisers as a means of promoting theirs.

Regardless of whether you're using Adobe DPS or Aquafadas DPS add-ins, creating and working with hyperlinks functions the same way—using InDesign's native Hyperlink panel and other features rather than any feature of the respective systems' add-in panels.

The intimate details of defining hyperlink styles and creating hyperlinks from basic to more sophisticated were covered in Chapter 7. The same information applies to interactive magazines, so it is not reprinted in this chapter. Please refer to the step-by-step instructions in the section "Creating External Hyperlinks of All Types" in Chapter 7 to learn the ins and outs.

TIP The only exception to the instructions in Chapter 7 is in step 7 of the "Creating a Basic Hyperlink" procedure. Ignore the Appearance section, because those options are relevant only to PDF-based epublications.

Inserting Audio and Video

Because interactive magazines are displayed on multimedia devices, they can—and whenever appropriate *should*—go beyond the merely visual. Audio can become an important component in digital publications and, along with video, which I'll cover in the next section, can move your interactive publication out of the realm of "print plus" and closer to a broadcast medium.

The following are among the many ways you might choose to incorporate audio:

- Including background music to create a reading soundtrack
- Building into your publication a digital jukebox that presents readers with a selection of music tracks they may play
- Adding a spoken narrative to the publication to augment copy and imagery and to fill in information that can't as easily be presented in prose or imagery
- Enhancing elearning titles with sounds, music, and spoken word that relates directly to the material being taught by the publication
- Enhancing digital catalogs by including excerpts when they sell products that are, or are related to, audio and video works
- Including the full recordings of an interview in interview articles
- Including audible critiques captured live at premiere events or even by call-in voicemail in product, entertainment, and other reviews
- Adding simple sound effects to enhance the user experience, for instance clicking sounds when buttons are tapped, short "swoosh" or paper rustling sounds when pages are turned, and triumphant horns when readers select correct answers in integrated quizzes

Note that some of the preceding examples, such as adding sound effects to buttons, require a few steps not covered until the "Adding Buttons and Actions" sections in later chapters, but even those begin with the basics of audio inclusion discussed in this section.

Aspirin-Free Workflow: Don't Edit MP3s

Both Adobe and Aquafadas prefer that you use MP3-format audio files, but you shouldn't *edit* in MP3 format. MP3 is the JPEG of audio file formats, meaning that MP3 is a lossy compression format—quality is lost to achieve compression. Unlike JPEG, however, you can't choose a maximum MP3 quality setting to disable the loss of audio data. Therefore, every time you edit an MP3 file and save it, that audio loses a little more quality.

Before long, the degradation can become quite noticeable as a flattening of music and spoken-word highs and lows, as well as an increasingly pronounced hissing within the track.

To properly edit audio, avoid MP3 until the audio is fully edited and ready to be included in your publication. Work within native, lossless audio formats such as WAV that can be edited *ad infinitum* without quality degradation and can easily be converted to MP3 for final output.

The ability to include video in interactive magazine–format publications blurs the lines between print and broadcast even further. Consider your static images; indeed, consider your process of *taking* photographs. Can a static image do the subject justice, or would a video be better? This isn't print, and your publications aren't just print anymore. If you're covering a fashion show or a tech expo or even selling a product, wouldn't video of the models, the exhibitors, or the product in use—maybe even a full infomercial—be more engaging to readers than static photos of the same? With this medium, you have all the advantages of static content—long text flows, clickable hyperlinks, images galore—and all the advantages of full-motion video.

TIP Before you place video, make sure it's in the right format: H.264-encoded video files, usually in the MPEG4 format with MP4 or M4V file extensions. If you need to convert your video from other formats, use Adobe Media Encoder, which is discussed in depth in Chapter 5, "Working with Images and Multimedia in Ebooks."

Adding Animations and 3D Rotating Objects

Whether you're selling products or showing off movie props, letting readers interact with objects in three-dimensional space is a fun and engaging experience for them. It's especially useful when you need to present multiple sides of an object; instead of doing that with static photographs in a gallery or slideshow, present the object as 3D, and let readers explore all the sides themselves.

Before you begin making this type of effect, take a look at the examples, `ex_360rotate.indd`, in both `Lesson Files\Adobe DPS\Animation and 360 Rotate` and `Lesson Files\Aquafadas\Animation and 360 Rotate` in this chapter's lesson files. You can open and test one or both of those files. In the testing environment (Adobe Content Viewer or myKiosk), you'll be able to tap/click and drag to rotate the book in three-dimensional space. This is the interactivity you'll be creating with the help of Adobe DPS or Aquafadas DPS. It might look nothing like the animation you have planned, but, trust me, it's very much the same. And it might look like adding this 3D rotating book is a straightforward matter of dropping in a 3D object created in a program like AutoCAD, 3Ds Max, or SketchUp. Alas, it's not quite that simple, which is why you'll tackle the creation of this interactivity in stages in the following two chapters.

Employing Scrolling Page Regions and Content Replacement

If you create a text frame in InDesign, fill that frame with placeholder text, and then reduce the size of that frame, what happens? Assuming Smart Text Reflow is not enabled for that frame, you'll have the same single frame, now containing some visible text and some overset text, correct? The overset text portion of the story hasn't been destroyed; it still exists, in a limbo of sorts, but it won't be made visible to the reader. The interactive-magazine format can make that overset text visible to the reader by enabling the reader to scroll the content within that text frame. Therefore, digital publications may include more content in a given space than will actually fit in that space.

Continuing with the notion of including more content than will fit on the page all at the same time is another type of interactivity called *content replacement*. In Chapters 9 and 10, I'll get into intricate replacement of content, such as the following:

- Product pages can replace one color or style of a product image with another.
- In a children's epublication, tapping letters such as *A*, *B*, *C*, and so on can reveal images of objects or animals whose names begin with the chosen letter.
- A reader can tap a location in an interactive map to reveal a pop-up containing information and/or photographs related to that location.
- Self-tests in elearning publications can be set to reveal correct answers for all questions with a single button tap.
- The entire content of a page—all text, imagery, and background elements—can be replaced by alternate content in response to taps on buttons, images, or text.

Integrating Live Web Content

The ultimate trump to any limitation of interactive-magazine creation systems is the inclusion of web content. Anything Adobe DPS and Aquafadas DPS can't do, HTML5 and related technologies almost certainly can, and anything you can do with web technology can be incorporated into the publication as if it's a native part of the publication…well, except for Flash content, which will never work in iOS.

There are two types of web content integration: including HTML files as assets directly within the interactive magazine and creating in-page portals to live web content. First I'll talk about the more powerful integration of live web content. I should note that what both methods can do is Herculean, and when I say "more powerful," I mean by just a smidge, like Superman versus Captain Marvel (aka Shazam).

Any content on the Web can be incorporated into your publication in real time. Just imagine what can be done by putting the Web on and *in* the page of a digital publication, making web-based content as much a part of the page as that placed image, with readers unable to discern a difference between live web content and native content or interactivity. Off the top of my head, here are only some of the truly limitless possibilities:

- Embed your live Twitter feed or even your Facebook page, plus associated Like and Tweet buttons.
- Push the latest announcements, news, and other content directly into the interactive magazine without the need for readers to update the app.
- Include a form in the publication that collects reader demographic data or even asks them to sign up for your email newsletter.
- Embed a web-based game inside your publication to get people to stay in it longer.
- If you run an ad-supported publication, you can stop selling a single ad space to only one advertiser at a time and rotate ads in the same space.

- Allow current advertisers to insert into back issues without having to alter and redistribute those back issues.
- Instantly correct errors and misprints.
- Time-sensitive content (coupon codes, daily specials) can be incorporated into the publication, changed as needed, and expired at the right time without the fear of having to uphold out-of-date promises or prices.
- Content can be customized on the fly, instantly, to match database records from subscribers' preferences or customers' prior purchases.
- You can also build a shopping cart into the magazine or catalog, catch interest, and close the sale, complete with purchase confirmation number and shipping tracking, all *inside the catalog or magazine*.

The only drawback to incorporating live web content is that, in order for it to appear, the reader must have a live Internet connection. Smartphones will nearly always have a live connection, as will many tablets, but those using WiFi-only tablets will need a hotspot in order to view your live web content. It may sound like a big drawback, but it isn't really; most readers will open your publication immediately after receiving it, and they have to be online to receive it.

TIP More and more *widgets*, or prebuilt pages or chunks of web technology, are emerging specifically for inclusion in interactive magazines, reducing the amount of work for creating engaging interactivities.

About the Author

Pariah Burke: Empowering and Informing Creative Professionals

Pariah Burke is a creative professional trainer and a design, publishing, and digital publishing workflow expert and consultant whose passion is empowering, informing, and connecting creative professionals around the world (`http://iampariah.com/teaches`). As a freelance graphic designer with more than 20 years' experience, Pariah is an Adobe Community Professional and a former trainer and technical lead for Adobe's technical support team for InDesign, InCopy, Illustrator, and Photoshop. A prolific author, Pariah wrote the first Adobe InDesign book for experienced InDesign users, *Mastering InDesign for Print Design and Production*; has written books on epublishing, Creative Suite, Adobe Illustrator, and QuarkXPress (`http://iamPariah.com/books`); and has published more than 450 tutorials and articles (`http://iamPariah.com/articles`). He is the coauthor of several InDesign and Illustrator Adobe Certified Expert exams, the tests Adobe administers to gauge the skill levels of InDesign and Illustrator instructors and experts. Pariah is the host of a series of digital publishing, epublishing, and the business of design webinars (`http://iamPariah.com/webinars`) and is the publisher of a network of websites, communities, and tools for creative professionals, the Workflow: Network (`http://workflownetwork.com`). When not traveling, Pariah lives in Boston, where he writes (a lot) and creates (many) projects and publications Empowering and Informing Creative Professionals.

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