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# Multimedia Publishing FOR Netscape

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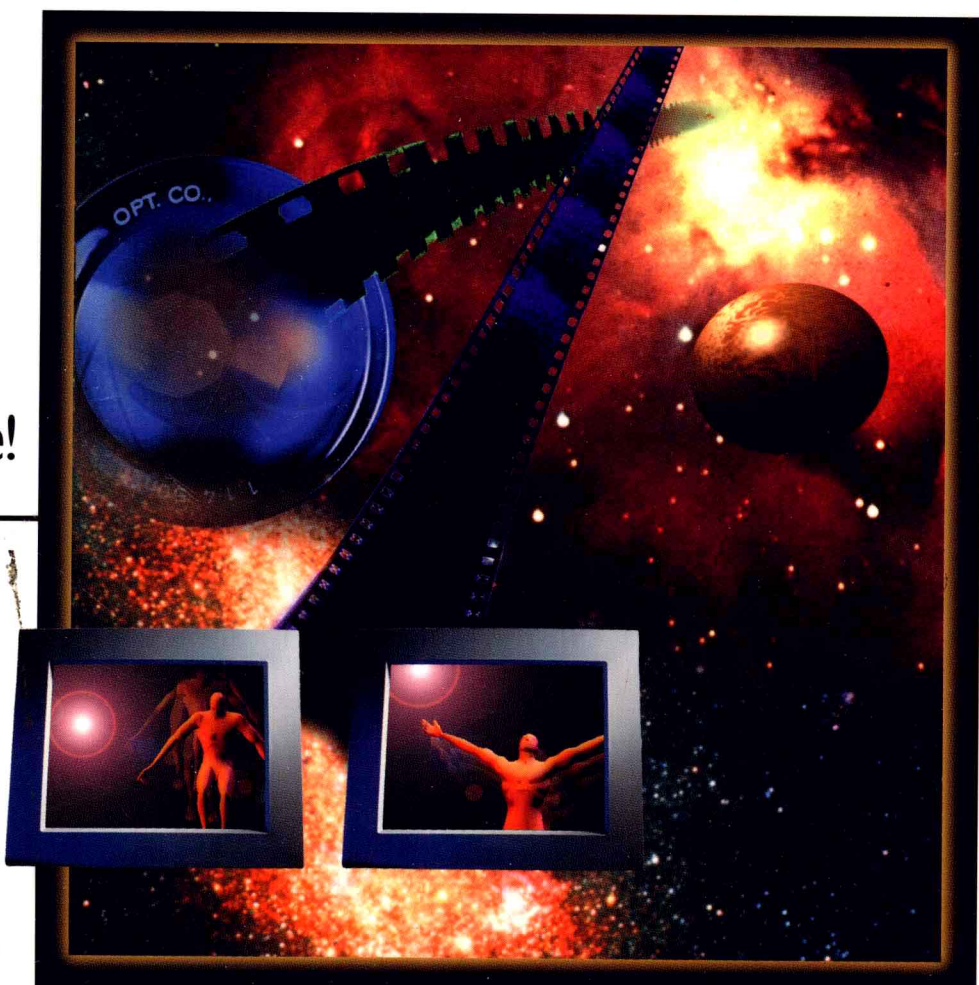


Make your Web  
pages come alive!

GARY DAVID BOUTON



COMPLETE WEB-DESIGN  
TOOLKIT ON CD-ROM!



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# Multimedia Publishing FOR Netscape

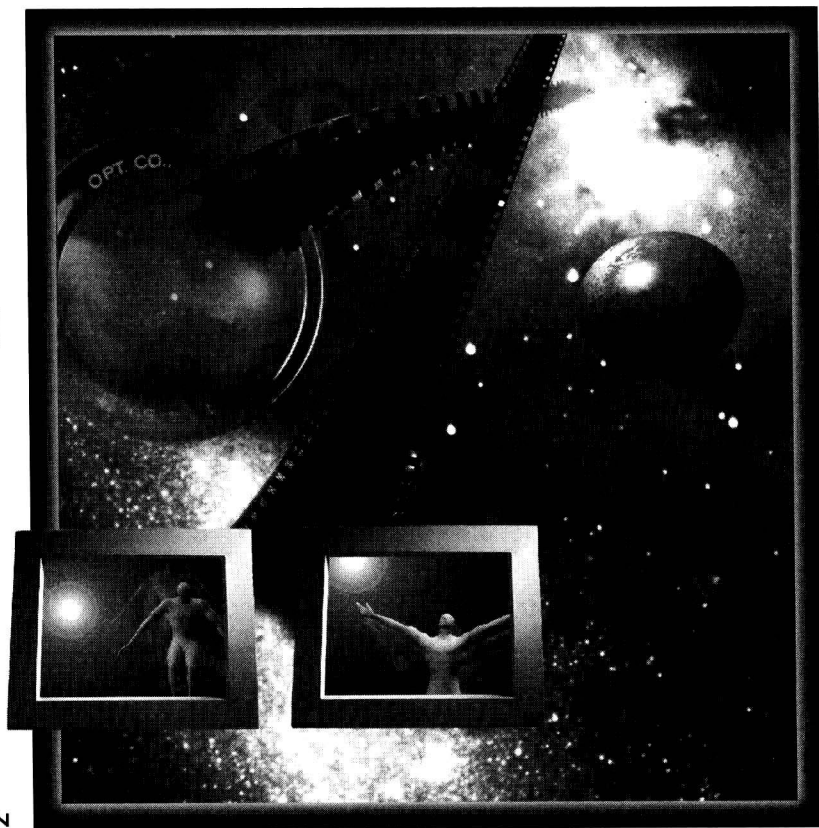
WINDOWS & MACINTOSH

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pages come alive!



An imprint of  
Ventana Communications  
Group

GARY DAVID BOUTON



## **Official Multimedia Publishing for Netscape: Make Your Web Pages Come Alive**

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# Multimedia Publishing FOR Netscape

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## ABOUT THE AUTHOR

Gary David Bouton is an author and illustrator whose books share a common theme: that of visualization solutions, a future buzzword meant to encompass digital graphics, imaging, page layout, animation . . . anything that helps to accurately convey a thought through the use of one or more computer art forms.

Gary, with his wife and frequent coauthor, Barbara, are owners of *Exclamat!ons*, a firm that “polishes rough ideas” for Fortune 500 companies. Gary has received international awards in publishing and design from Corel Corporation, Macromedia, and the Intergalactic Newsletter Competition, sponsored by NYPC and InfoWorld.

He comes from a traditional background in art and advertising and believes that designers with similar backgrounds can benefit from books like *Official Multimedia Publishing for Netscape*. For traditional artists, the creative process of turning a concept into a finished multimedia product is accomplished through means that can sometimes be less than obvious, and the author’s approach is to begin with the familiar, then integrate experience with new technological discoveries.

Among the author’s credits are *Inside Adobe Photoshop* and *CorelDRAW Experts Edition*. Gary is the current moderator of the CorelXARA discussion group on CorelNet, and is an active member of the HTML Writer’s Guild. The author can be reached through CompuServe at 74512,230, or on the Internet at [bbouton@dreamscape.com](mailto:bbouton@dreamscape.com).

## ACKNOWLEDGMENTS

The best books you'll find in the genre occasionally referred to as "after market," "third-party," or simply "computer" books, presume that the author knows what he or she is writing about. In this ever-changing field of application software, a good author, then, needs to take one of two routes to writing accurate, timely documentation.

The first route is to spend what seems like 95 percent of one's waking hours researching, and then *updating* the research as manufacturers upgrade a product right from underneath you! This approach, unfortunately, leads to a never-ending tome, and the accompanying stress can result in domestic cacophony.

I was lucky enough to be offered an alternative when writing *Official Multimedia Publishing for Netscape*. To bring the book you hold before you to completion, Ventana surrounded me with the best professionals in their respective fields and allowed me to invite professional friends of my own. I'd like to thank the following kind souls who took the time and care to "navigate" this text to a safe harbor, to steer me clear of dangling participles, and to check the pantry for provisions throughout the voyage:

- Cheri Robinson, Product Manager, who is also the person who gave me my first break authoring what now seems like a CorelDRAW version negative 2 book. Cheri, thanks for the opportunity that *this* book has provided for me to continue the "art lessons" and occasional silliness. Continuity is as important as personal growth, and you've given me the chance to practice both.
- Beth Snowberger, Project Editor, for her work above and beyond the call of publishing. Beth helped keep this tome a focused one—I was actually planning on writing a chapter on "Fun With Alpha Channels" before she gently suggested that I was getting a little off-topic. She also encouraged me to express an idea or technique in user-friendly terms . . . something that is fairly hard to accomplish without making a book pander, stoop, or otherwise condescend to the reader. Thanks for the personal attention, Beth, and I hope I did you proud.



- Development Editor Jim Deegan, for his fine insights, organizational prowess, and spirit of forgiving when the manuscript occasionally disintegrated into

```
<floundering>  
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time????!" Height=10 feet, give or take a square acre>  
</floundering>
```

Jim, I appreciate the time and effort you've contributed to make this book easy to read for users of all skill levels.

- JJ Hohn, who did the fishing for the many, many great shareware and special editions of commercial software you'll find on the Companion CD-ROM. All of us involved with the *Official Multimedia Publishing for Netscape Companion CD-ROM* feel it's the right product for independent Web authoring, as well as being a superb resource collection of files for following the examples in the chapters. Thanks, JJ; your work allowed me to keep with the writing throughout the development of this book.
- Allen Wyke, who collated, sorted, and tested the contents of the Companion CD-ROM to ensure that a GIF file is actually a GIF file, and that Windows and Macintosh users can access native file formats. Allen, you took a lot of the pressure off of me through your fine work indexing an extremely complex directory structure.
- Brad King, for his efforts in contacting the many shareware and commercial software creators, whose permission made much of the Companion CD-ROM a reality.
- Amy Moyers and Diane Lennox, for allowing me to edit page proofs and for accepting contributions for cover copy and art. This is *not* Standard Operating Procedure (SOP) in my experience as an author, and I deeply appreciate the courtesy.



- Technical Reviewer and fellow Corellian Steve Bain, a gifted author in his own right, who accepted the responsibility of authenticating Macintosh and Windows techniques shown in this book. Steve, I hope I have the privilege in the near future to pick apart one of *your* books (*onnnly*, kidding, Steve!), and let's go ring the doorbell again real soon, eh?
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- At Macromedia, Rix Kramlich, Brian Perkins, and John Dowdell for the technical support and the early copy of Extreme 3D for Windows and the Macintosh. Much of the artwork shown on the Companion CD-ROM and on the following pages would have been impossible to create without your kind assistance.

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- Ashley Sharp at Virtus Corp., for the use of Virtus WalkThrough Pro.
- Many, many thanks to Scott Brennan, President of Dreamscape On-Line, Inc., our Internet Service Provider and friend who has demonstrated to the Boutons that personal service is alive and well in the 1990s world of communications.
- Gordon J. Robinson, my childhood chum, who has shared with me over the years everything from brass trio sonatas performed on a loading dock to allowing me to use his name, and quite conceivably his professional reputation, within examples found in books like these. Thanks, Gord! Remember when we shipped Benny to Cortland?

## **DEDICATION**

This book is dedicated to Cheri Robinson, who has always been her best with me, in times that occasionally were less than ideal. Her belief in me as an author has far outstripped my own belief, with regularity, through the writing of seven books. If you benefit from this book, they're my thoughts, but it's Cheri's effort that brings this information to you.

# Introduction

**F**orget everything you know about traditional publishing! For more than six months now, discussion groups, newsgroups, and mailing lists formerly dedicated to design applications, image-setter problems, and hardware workarounds on the Internet have shifted in topic. If you subscribe to desktop publishing or graphics lists, you've probably seen 20 "How do I create an animated GIF?" questions for every one message asking, "How do I get extended characters, like a copyright symbol, into PageMaker?" Everyone today is passionately interested in publishing to an immediate, global audience—the World Wide Web—and also wants to push the limit of the types of graphically-rich contents contained in Web documents.

*Official Multimedia Publishing for Netscape* takes a comprehensive, in-depth look at new techniques for creating Web-ready objects such as VRML worlds, animation, and sound, as well as at the keys to porting the skills you may already have with your existing applications to create exciting, attention-getting Web sites. Through step-by-step examples using Windows and Macintosh applications and utilities, *Official Multimedia Publishing for Netscape* also shows you the ins and outs of integrating text, graphics, and media objects to create a professional site with definite commercial possibilities.

If you're coming to the Internet from a background of computer graphics or desktop publishing, this book is designed to help you rethink traditional publishing limitations. Color space and resolution, for instance, are measured differently when graphics are displayed in HTML format, as are font styles. Throughout this book, you'll discover new possibilities for your existing talents when you apply them to the new media of the Web. If you're a newcomer to computer graphics, but you have a firm grasp of HTML and its formatting, *Official Multimedia Publishing for Netscape* will turn you on to the best graphics programs and utilities for both Windows and the Macintosh, to round out your education in Web authoring tools. And even if you just picked up your machine yesterday and want to get into the Web action, *Official Multimedia Publishing for Netscape* can be your guide to basic and advanced techniques for composing documents that can be visited by users of every computer platform.

This book was written from an artist's perspective by an author who has spent many years relearning techniques for new media, as well as discovering the fastest, most effective artistic techniques for visual communications. There are two fundamental tenets for solving communications problems, regardless of the artistic medium a creator uses:

- If the artistic problem cannot be solved with the current set of rules and limitations, it's best to take a holistic approach, to step outside of the "system"—the materials and approach—with which you're working on a solution. Get yourself a larger scope. And frequently a larger, more generalized, productive set of tools!
- Self-definition leads to self-limitation. If you say to yourself, "I can't fathom this HTML stuff. I'm a designer, darn it, not a programmer!" or some such declaration, then you'll be less successful at communicating through the multimedia capabilities of Netscape Navigator and the Web. Don't allow your occupation to become a *preoccupation* when approaching this new avenue of personal and commercial expression. We're all new to this Web stuff, and if you regard yourself as a professional in terms no more specific than a "visualization solution expert," you can then

more easily cast off the shackles of past techniques, tools, and experience, free yourself to discover new tools and repurpose existing tools, and get on with the adventure of composing multimedia for the Web.

## THE NONLINEAR MULTIMEDIA PUBLISHING GUIDE

To better serve the specific needs you might have regarding Web object creation and integration techniques, *Official Multimedia Publishing for Netscape* is not written in a “page one is for novices, page 500 is for accomplished users” fashion. Instead, each chapter in this book addresses an area of Web authoring. You might choose to plunge into the VRML chapter if this area is of the most immediate interest to you, or you might decide to take the procedural approach, and investigate each chapter’s contents in sequential order. *Official Multimedia Publishing for Netscape* is sort of like a subway system; you can indeed get to one area from another, but it’s up to you to decide where you want to begin, how many points you pass through, and where you want to wind up. In digital multimedia authoring, you similarly might begin with one art form that leads you to another, and this book contains numerous cross-references to neighboring chapters, so if you don’t find a specific solution in Chapter 3, for example, we’ll tell you where you can find more comprehensive information about a related topic in Chapter 5.

## COMPLETE WORKING EXAMPLES THAT SHOW A PRINCIPLE

Although *Official Multimedia Publishing for Netscape* was written in a modular style as described in the preceding section, you’ll notice that the example files referenced in this book are highly structured, complete in their execution, and awaiting your perusal on the Companion CD-ROM. The author has found in his continuing education that there’s nothing quite as useless as an example that demonstrates a principle within a vacuum. *Official Multimedia Publishing for Netscape* contextualizes a technique—we show you, for example,

not simply how to create an animated GIF, but how the file is embedded in a document, how to resize it and reduce its color capability for optimized display, and we'll even suggest such a file's appropriateness for specific themes of Web sites. All the example sites on the Companion CD-ROM can be copied to your hard disk and played within Navigator, and the files can be modified using NavGold, an image editor, and a text editor so you can better see how something works. Our belief in creating this book is that text can reach a point in communicating an idea at which it's best to *show an example*. And the example sites show how a specific technique can be integrated with a *related* technique, to construct a synergy that Web audiences have come to appreciate and demand.

## CONVENTIONS USED IN THIS BOOK

Because the Internet is accessible to all users who have a connection, it follows that *Official Multimedia Publishing for Netscape* was written for users of different operating platforms. The example sites on the Companion CD-ROM were created using a Pentium 133 MHz running Windows 95, and a PowerPC Macintosh 8500 running System 7.5.3. The Companion CD-ROM was mastered to accommodate a few unique file types for each platform, but the real problem in making *Official Multimedia Publishing for Netscape* accessible to the different versions of the Windows and Macintosh operating systems had to do with unique conventions. This book attempts to ford any gaps in documenting techniques by implementing the following conventions and specifications:

- *Biplatform applications use similar, but not identical commands.* *Official Multimedia Publishing for Netscape* spotlights no fewer than 12 full-featured commercial applications; in every chapter, you'll see how specific programs can produce media elements for Web use. Most of these applications are biplatform, and there is little or no difference in key commands or menu items used to produce an effect. However, we've adopted the convention in this book that if

a program, such as Adobe Photoshop, uses key commands that are different in Windows than on the Macintosh, the key commands are given for Windows first, then in Macintosh format. For example, to load the dialog box for the last-used filter in Photoshop, we'd advise users to follow a step written like this:

Press Ctrl+Alt+F (Macintosh: Cmd+Opt+F) to load the dialog box for the filter you used in Step x.

...which means that holding the three keys mentioned in the step produces the intended result in Photoshop.

When there is a significant difference in steps used in an application that's available in both Windows and Macintosh formats, we fully explain both sets of steps. Additionally, Windows supports the use of a secondary mouse button. In Navigator, the secondary mouse button is used to display a context-sensitive shortcut menu. On the Macintosh, there is no secondary mouse button support, so Netscape offers a click-and-hold technique to call the shortcut menu. In instances like this one, where it's necessary, we give explicit instructions for both operating platforms in this book.

- *Nicknames for well-known products are used.* We'd have a larger book here, and needlessly so, if we mentioned the full brand manufacturer, product name, and version number when referring to specific applications. For this reason, you'll occasionally see Adobe Photoshop 3.0.5 referred to as simply "Photoshop" in the text of this book. Similarly, CorelDRAW!, CorelPHOTO-PAINT!, and other Corel Corporation products are mentioned sans the exclamation mark. Ventana Communications Group acknowledges the names mentioned in this book are trademarked or copyrighted by their respective manufacturers, and our use of nicknames for various products is in no way connected with trademark names for these products. When we refer to an application, it is usually the most current version of the application, unless otherwise noted.



- *The CD-ROM icon refers to a file on the Companion CD-ROM. Because we wanted *Official Multimedia Publishing for Netscape* to be a hands-on book, there are many areas in chapters where you'll be asked to copy a file from the Companion CD-ROM to your hard disk to complete an example assignment. The icon next to an example step indicates that you should copy the file(s) and use them within the step. Because CD-ROMs are Read-Only Media, you'll need to save completed assignments to your hard disk, and you might occasionally need to remove the write-protection from a CD file, even though you've copied it to your read/write-capable hard disk. Certain applications do not acknowledge a file copied from CD-ROM as editable.*

In Windows 95, to remove write-protection from a file, right-click on the file as it is displayed in a folder window. Choose Properties from the shortcut menu, then uncheck the Read-only Attributes check box if it's checked.

In Windows 3.1x, click on a file in File Manager's window, then choose File | Properties, and uncheck the Read Only check box if necessary.

On the Macintosh, click on a file in a folder window or on the Desktop, then choose File | Get Info from the Apple menu. Uncheck the Locked check box if a checkmark is displayed.

*Official Multimedia Publishing for Netscape* presumes that you're comfortable with the operating system on your machine, that you know how to copy, move, and delete files, and that your system has a few megabytes of hard disk space free to work with the example files.

## A QUICK LOOK AT WHAT'S IN STORE

Earlier in this Introduction, the analogy was made between a subway system and this book's organization. What's the second thing you look for on public transportation (the first being a seat)? The following is a *map* of the adventures to come in *Official Multimedia Publishing for Netscape* chapters:

The first two chapters are intended to form a foundation for the advanced HTML and graphics composition that follow in subsequent chapters. If you're experienced with page layout, but can't get a handle on HTML, these chapters are for you. We also take a look at how any design application can be used to produce a graphic that's Web-ready.

Chapter 1, "Composing in HTML & NavGold," discusses how the HyperText Markup Language (HTML) works and how special tags and attributes can be used to define Web page elements. We also show you some of the power of Navigator Gold's WYSIWYG Editor for quickly composing and linking HTML pages while insulating the user from tedious and complex HTML formatting. The example site in Chapter 1 shows how a traditional desktop publishing document can be made Web-ready through rethinking and reworking layout elements to better suit the electronic presentation format.

Chapter 2, "Vector-to-Bitmap Conversions," takes you through the relationship between the format of digital graphics most people can create, and the reserved types of graphics types used in HTML documents. If you use CorelDRAW or Illustrator, there are a number of techniques you can use to convert these vector formats of images to bitmap GIF and JPEG file types. Learn how to make every pixel count in your image, and arrive at the best looking image possible from bitmap or vector applications.

The next four chapters show how different types of applications can be used to create Web objects beyond the humble GIF89a image. Learn how modeling applications can make your site a more dimensional one, learn how to create animation, and explore the virtual worlds of the VRML file format.

Chapter 3, "Bitmap Graphics & Special Effects," gets into the time-honored crafts of Web button making and seamless background texture construction, and takes a look at how other graphics can be integrated into Web sites. Learn the ins and outs of frame-based documents and see how image maps can provide the navigation elements that visitors to your site will want to access.

Chapter 4, "Working With Models," explores the world of 3D applications. You might already own a full-featured modeling and rendering program included when you purchased a software