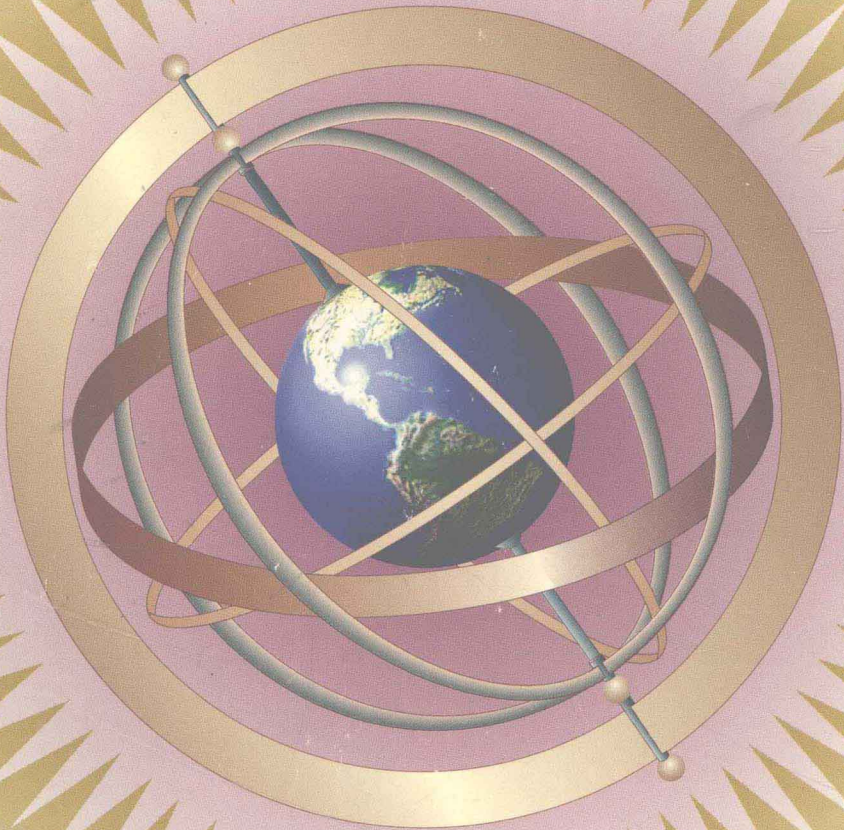


REAL WORLD



FREEHAND

5.0 | 5.5

OLAV MARTIN KVERN
Edited by Stephen F. Roth



Real World FreeHand 5.0|5.5

by
Olav Martin Kvern



AN OPEN HOUSE BOOK



PEACHPIT PRESS



*for Neil Selmer Kvern, Craig Stanley Kvern,
& Laurie Ann McNutt,
my siblings*

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Olav Martin Kvern

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PEACHPIT PRESS
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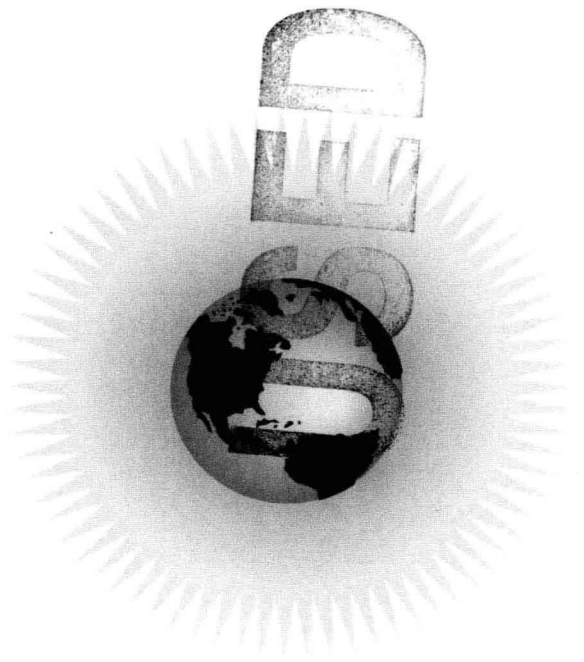
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REAL WORLD FREEHAND 5.0|5.5

If I weren't one of the authors of FreeHand, I'd want this book to teach me how to use it. Actually, I'd want Ole to teach me, but he lives two thousand miles away. And he probably would get pretty tired of showing me the tricky parts over and over and over again. With *Real World FreeHand*, I have his advice and insight any time I need them.

When we started working on FreeHand, we had a vision of an easy-to-use, yet extraordinarily powerful graphics program. We wanted it to be usable by both novices and professional designers, and give results limited only by a person's artistic ability. It should be as intuitive as a pencil, but as powerful as a mind link to a hallucination machine. We've come a long way in those years. Of course, we aren't quite up to the level of our vision yet. But it wouldn't have been much of a vision if we could achieve it in just a few years of programming.

We had another vision too—one of talented artists working with computers, multiplying their abilities a hundredfold, and avoiding the dull, routine work of aligning things that simply refused to align; of specifying type, then setting the job aside while waiting for the galleys to come back from the typesetting house; of doing what our first ad agency did—cutting that type apart letter by letter and hand setting it with just the right spacing; of hearing the client ask to change a word in the middle of one of those blocks when the final deadline is tomorrow morning. With FreeHand, everything is malleable until the moment when a scanning laser beam starts to reveal the billions of pixels that make up your page on the drum of a laser printer or to the film of an imagesetter.

We also thought everybody ought to have a chance to undo their mistakes. Any mistakes. A bunch of mistakes. Imagine how

much bolder you could be in real life if you had a chance to undo some of your blunders. Call your broker and tell him to undo that stock you sold last week. Go back two years and change your mind about marrying that bum who just passed out on the couch. You can't do that in real life, but you sure can with FreeHand. It is an underappreciated fact that FreeHand lets you undo more than just the easy things. FreeHand is the only program I have ever seen that lets you undo *every* editing operation, as many as 99 operations back.

I am really happy with what we finally achieved in FreeHand 5 and 5.5 (née Spork). Our Spork development team worked for months fixing bugs that companies who don't care as much about perfection as Macromedia would have shipped with. They kept improving it even after it was good enough, kept working on it until they were sick of it, in fact. I think there are three factors in our success: we really care about doing the best job we know how, we have several very smart software engineers working on it, and we have some awesomely talented users who continue to tell us how to make it even better.

Reading the drafts of this book is a lot like reading a biography of your own daughter. The writer talks about her accomplishments. Her beauty. Her charm. Her high-pitched whiny voice. Well, no writer is perfect. Fortunately, Ole laughs with us on those few occasions where the reality differs from the vision. And he goes on to explain those hard parts step by step in a way that almost anybody can understand.

I've reconsidered my first sentence. I do want this book, even though I did write a lot of FreeHand. *Real World FreeHand* is a great study guide: we'll continue to improve the parts of FreeHand Ole finds great, and we'll rework the parts Ole finds need lots of explaining. Reader, you've made two good choices. Crank up FreeHand and get started with *Real World FreeHand*. I think you'll have fun with both.

Jim Von Ehr
Vice President and General Manager,
Digital Arts Group
Macromedia, Inc.

Introduction



I don't read Finnish. But there it was, in the mail: a review of my book in a Finnish magazine. Did they like it? Hate it? I couldn't tell.

I wasn't thinking about it, much, right at that moment—I was busy throwing things into a bag to take to the hospital. Leslie, my wife, was in labor, and it was time to go.

The next night, as I was rocking my newborn son to sleep, our anesthetist, a friendly, interesting woman (who had, only a few hours before, been poking a big needle into Leslie's back), stopped by to see how we were doing. Business was slow at Ballard Hospital's birthing center—we were the only “customers,” and it was the middle of the night. I rocked, we talked.

In the course of our conversation, she mentioned that she'd emigrated to the United States from Finland.

What could I do? I pulled the crumpled review out of my coat pocket and asked if she'd glance at it and tell me whether the reviewer liked the book or not. She insisted on doing a full translation of the text—in trade for a copy of the book for her son, a FreeHand user.

And the review? It was a rave*.

So here we are again. If you're a new reader, welcome. If you read the previous edition of this book, welcome back!

*“Vaikka FreeHandin tuntisi miten hyvin tahansa, löytyy tästä kirjasta silti uutta tietoa,” which we quoted on the back of the book, means, more or less (according to my translator), “Even if you think you know everything about FreeHand, you'll learn something from this book.”

The Wild Ride

“Adobe’s just acquired Aldus.”

The news made my head spin. First, it was good news for a product I love. PageMaker, as an entity, would probably benefit. Second, it was very bad news for another product I love. FreeHand. There was no way that FreeHand would benefit from having its marketer (Aldus) acquired from the maker of its chief competitor (Adobe, and Adobe Illustrator, respectively). I thought, and it seemed likely, that Adobe would do everything they could to hang on to the marketing rights to FreeHand, while, simultaneously, doing very little to sell it. FreeHand would wither and die.

I wasn’t the only person thinking this way—Altsys, the software development company that’s always written FreeHand, sued immediately to get FreeHand back. And then—to make a long and involved legal story short—something unexpected happened.

They won.

FreeHand went back to Altsys, and Altsys merged with Macromedia, becoming Macromedia’s Graphics Products Division. I was hoping that Altsys would try marketing FreeHand on their own, but, so far, it looks like they’ve made a good deal—Macromedia seems inclined to leave them alone. Which means they can go on doing what they do best: making FreeHand the best illustration tool on the market; pushing it farther into new fields, like page layout.

I think we’re in for a wonderful ride.

Where I’m Coming From

Why should you listen to what I have to say about working with FreeHand? I’ve worked as a technical, medical, archaeological, and veterinary illustrator, as well as a general-purpose book and magazine illustrator. I’ve also worked as a designer, typesetter, paste-up slave, and art director.

More importantly, I bring my experience as a FreeHand user. I really have been through the long shifts (some of them longer than 40 hours) trying to get FreeHand files to print. On most of those late nights and early mornings, I could have been home in bed if

I'd known just one key piece of information. But I didn't. There was no one to tell me.

I'm here to tell you.

If some piece of information in this book saves you one late night, one early morning, or gets your file to print on the first pass through the imagesetter instead of the second or third, I will have succeeded in my purpose.

Once, a janitor found me pounding on a Linotronic film processor (an ML-314, for you hardware tweaks) with a wastebasket. At 4:00 AM. I'd been up for more than 36 hours, and it'd just eaten a job that'd taken six hours to run on an imagesetter. I wrote this book in the hope that I could save others from repeating this scene.

Organization

This book's pretty simple: first, I'll show you how to get things into FreeHand; next, I'll talk about how to work with elements in FreeHand; and, finally, I'll tell you how to get your work out of FreeHand. Then, in Chapter 8, "PostScript," I'll show you how to extend FreeHand and make it do more than it could when it came out of the box.

What's New in FreeHand 5.5. This is for people who've been using FreeHand 3, 4, or 5 and want to know what's changed since then. The section works like an expanded table of contents: there's an overview of each new feature, followed by a page number where you can find further information.

Chapter 1: FreeHand Basics. This chapter is your orientation to the world of FreeHand. In it, I describe the publication window, selecting objects, moving objects, working with FreeHand's toolbox, and an overview of the way that you create and import elements into FreeHand (including basic path drawing).

Chapter 2: Drawing. This is all about using FreeHand's drawing tools—from creating and joining paths to applying lines and fills, creating styles, working with blends, creating charts and graphs, and drawing using perspective.

Chapter 3: Text and Type. This chapter deals with working with text in FreeHand—how to enter, edit, and format text. It covers wrapping text around graphics, specifying type, FreeHand’s type effects, joining text to a path, and converting text into paths.

Chapter 4: Importing and Exporting. FreeHand doesn’t exist in a vacuum. You need to be able to import images from scanners and color image-editing programs, or to be able to import EPS graphics from other PostScript drawing programs. You need to be able to import text from your word processor. This chapter shows you how, and where, FreeHand fits in with your other applications. Topics include working with TIFFs, importing PICTs, importing formatted and unformatted text, opening and importing EPS files created in other programs, and converting old FreeHand 3 EPS files to Illustrator 1.1 EPS format so that you can open them.

Chapter 5: Transforming. This chapter shows you how to manipulate FreeHand elements you’ve drawn, typed, or imported, and describes how to use the transformation (skewing, scaling, rotation, and reflection) tools.

Chapter 6: Color. In this chapter, I cover creating and applying colors in FreeHand. I also discuss color models, the history of color printing, creating duotones, and controlling the conditions under which you view and create color publications.

Chapter 7: Printing. It don’t mean a thing if you can’t get it on paper or film. Here’s how to do that, plus a bunch of tips that’ll save you money at your imagesetting service bureau and your commercial printer. In this chapter, I also talk about the various options contained in FreeHand’s Print and Print Options dialog boxes and how they affect your publications.

Chapter 8: PostScript. How to use PostScript when working with FreeHand, and how to add features to FreeHand. I wrote this chapter because I want to demythologize the process of adding PostScript strokes and fills to FreeHand. You don’t have to have an engineering degree, or be a rocket scientist, to add unique touches to FreeHand that’ll make it truly your own program.

Disclaimer

Some of the techniques in this book involve modifying either FreeHand's subsidiary files (like PPDs) or modifying FreeHand itself. While I've tried to make the procedures (in these cases, anyway) as complete and accurate as possible, you need to be aware that you're proceeding entirely at your own risk. Given that, there are a few things you can do to make everything less risky.

Work on copies of files. If you don't keep your original files in their original state, how can you ever go back to where you started? Always back up your files before you try altering them.

Remember that not everyone will have your system. You can't expect your friends and your imagesetting service bureau to be absolutely up-to-date with your current modifications if you don't give them to them. Therefore, if your publication requires a custom page size you've written into a PPD, make sure that your imagesetting service bureau has the PPD.

Clean up after yourself. If you change any of FreeHand's PostScript printing routines in a printer's RAM, make sure that you change them back to their original state before anyone else sends a job to that printer or imagesetter. Nothing is more embarrassing for you or as much of a bother to everyone else as having your name and "DRAFT" print across all of the jobs printed on a particular printer because you forgot to change *showpage* back to its original definition. This, in fact, is a great way to provoke the villagers to come after you with torches and pitchforks.

Don't call Macromedia technical support if something you read in this book doesn't work. They didn't write this book and shouldn't be expected to support it. This book is not a Macromedia product, and they have no control over its content. I'm not kidding. Write to me, instead. My mail addresses are listed in Appendix C, "Resources."

Acknowledgments

Thanks to the FreeHand engineering team (and related folks, in no particular order): Samantha Seals-Mason and Pete Mason (did anyone here mention red wine?), Steven Johnson (without his clues, I wouldn't have been able to start—let alone finish—Chapter 8, “PostScript”), Katharine Green, the incomparable Brian Schmidt, John Ahlquist, Mark Zartler, Kevin Bottner, Doug Benson, Anna Sturdivant, Robert Hurst, Delores Highsmith, Cassandra Rose, Lorin Rivers, Kevin Crowder, Rusty Williams, and, especially, to Jim Von Ehr for his inspiring foreword.

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Finally, thanks to my wonderful wife, Leslie Renée Simons, and to my son, Max Olav Kvern, for their encouragement, understanding, and support.

Olav Martin Kvern
Republic of Fremont
Seattle, 1995

The background is a dense, intricate pattern of overlapping black lines forming various polygons and star-like shapes. In the upper right, a satellite dish is shown in profile, pointing towards the left. Below it, a globe of the Earth is visible, partially obscured by a large, dark, curved shape that resembles a satellite component or a stylized letter 'C'. The overall aesthetic is technical and futuristic.

What's New in
FreeHand?

Do you wish that software companies would just stop updating their products for a bit? Not long—just long enough for us to figure out how to use the current version. Wouldn't that be great?

I'm not holding my breath.

FreeHand 5 wasn't as different from FreeHand 4 as FreeHand 4 was from FreeHand 3, but the stretch of time between the two versions was very short: *Aldus* FreeHand 4 had just appeared, it seemed, when *Macromedia* started shipping FreeHand 5 (for more on the corporate hurly-burly surrounding FreeHand, see "The Wild Ride" in the Introduction).

Because of this rapid change, lots of you have gone from FreeHand 3 straight to FreeHand 5.5, skipping FreeHand 4 and 5 altogether. And lots of you didn't have time to get used to FreeHand 4 before FreeHand 5 arrived. So, in this section, I'll include new things in FreeHand 4, as well as the things that changed between FreeHand 4, FreeHand 5, and FreeHand 5.5.

What's New Since FreeHand 5?

FreeHand 5.5 adds the following features.

Photoshop Plug-Ins. You can run Photoshop plug-ins in FreeHand 5.5. Most of the time, this means you can apply special effects to

images in FreeHand, but some Photoshop file format and image acquisition plug-ins work, as well. See page 368.

Rasterizing FreeHand Objects. Using the Create PICT Image Xtra, FreeHand can convert objects in a FreeHand publication into bitmap images. Once you've saved the images, you can take them into Photoshop, or another image editing program, and manipulate them as you would any other image. See page 412.

Inline Graphics. FreeHand 5.5 can embed graphics in text blocks. This can come in very handy when you need to attach a graphic to a piece of text. See page 337.

PDF Import. Adobe Acrobat's PDF files are becoming a standard method of interchanging documents between different publishing programs. FreeHand 5.5 can read PDFs, converting the objects in the PDF into editable FreeHand objects. If you want to bring a publication you've produced in QuarkXPress or Adobe PageMaker into FreeHand, PDF is your ticket. See page 420.

Auto-Expanding Text Blocks. FreeHand 5 introduced the concept of text blocks that grow as you add text to them—but imposed some limitations (mainly that the text in an auto-expanding text block was always formatted as left aligned). FreeHand 5.5 takes auto-expanding text blocks a step further, making them handle paragraphs of any alignment. See page 232.

Cropping. FreeHand 5.5's new path operation, "Crop," gives you yet another way to work with the area of overlap between two paths. See page 167.

Extract. Because a variety of FreeHand's operations embed images in your publication, you've got to have some way to get them out again. That's where "Extract" comes in. Use this feature to save embedded TIFFs and EPS files as to disk. See page 380.

Photoshop EPS Export. I often want to take my FreeHand artwork into Photoshop. Photoshop can't open FreeHand files or EPSes, and saving files in Illustrator format loses too much information (placed images and styles, for example, disappear). When you want to rasterize FreeHand paths in Photoshop, you can save the file in

the new Photoshop EPS format—Photoshop will be able to open and process the EPS. See page 414.

What's New Since FreeHand 4?

Altsys had 120 days from the date they knew they'd be getting the product back to the first day that they could ship it (see “The Wild Ride” in the Introduction). Many companies would have done nothing more than change the product's packaging, but those crazy Texans decided to update the entire product.

Interface

First, FreeHand 4 users will note the nifty gray 3D interface (which you can change back to the FreeHand 4 “look,” if you want; see page 87). In addition, many of the user interface ideas used in FreeHand 4 have been improved and polished.

Expanded Preferences. FreeHand 4 kept lots of its preferences hidden in a text file. FreeHand 5 took those preferences, added a few more, and put them in a beautiful and intimidating series of dialog boxes. See page 71.

Increased Magnification. It's true—you can edit bacteria at actual size in FreeHand's 256,000% magnification. See page 34.

FreeHand Xtras. To software developers, FreeHand's support for add-on products (called “Xtras”) make it the most advanced piece of software in shrink-wrap. FreeHand comes with a variety of Xtras (including some useful ones), and more are available from third-party developers. See page 126.

Illustrator Plug-Ins. FreeHand can run most of the plug-ins that work with Adobe Illustrator—including most of the plug-ins that come in the Illustrator package. Some of them are useful. See page 657.

Hiding All Palettes. The palettes are handy, but they can get in the way. You can quickly hide them all by pressing Command-Shift-H. See page 22.