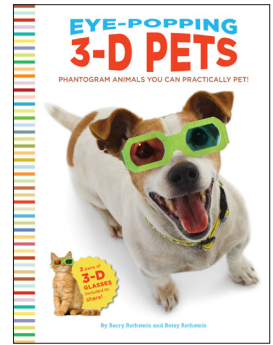


An interview with...  
**Barry Rothstein,**  
author of *Eye-Popping 3-D Pets*



*This is not your average book about pets. Amazing and adorable images of animals spring to life in Barry Rothstein's 3-D children's book. At first the images seem strange and blurry, but put on the super cool 3-D glasses, and the animals in *Eye-Popping 3-D Pets* practically leap (and flap) off the page. These images are called phantograms: more vertical than regular 3-D, phantogram images appear to stand on the page and can trick your mind into thinking they're real. This book is filled with 27 phantogram pets that are fun for kids and adults alike. Along with these pictures are fun facts about each pet, and information about their care, feeding, and history. We had a chance to speak with author and 3-D photographer Barry Rothstein about his work with animals and the fun and innovation of 3-D photography.*

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**When did you discover your love of phantograms and 3-D digital technology? What's so exciting about the format?**

My entry into 3-D began approximately 7 years ago, at 49 years old. Shortly after a back operation, my wife and I brought our kids up to the town of Big Bear so they could go snowboarding. Never much of a skier before, my choices spending the day were limited, and so I assented to looking through antique stores with my wife, Betsy, such browsing being one of my least favorite activities. Intent on making the best of it, at one store I looked through old photographs and came upon a stereoscope. I didn't know what it was, but quickly figured it out and was amazed. How was it that an amateur photographer since high school with a black and white darkroom didn't know such imagery existed? Clearly I'd heard of and seen 3-D, but never this style of it, never quite so good.

Shortly thereafter I used a medium format film camera and before long a newly purchased digital camera to make hundreds of images for the stereoscope, pestering friends and family into seeing them. I discovered that a 3-D convention (National Stereoscopic Association) was to be held in July 2004 in Portland, Oregon, and so I went. I met a lot of the national 3-D community there, and was most impressed by some digital slide shows by John Hart, and a small number of phantogram images exhibited by Steve Hughes and others by Terry Wilson. Steve Hughes presented a phantogram workshop. I can easily say that I got more out of that workshop than anyone else there, and after a few emails and practice, I was soon producing them.

**How would you describe phantograms to someone with no experience in how the eye works?**

Phantograms are analogous to photographic holograms. They present the illusion of something being there, available to reach out and touch. Their creation is the process of imitating normal vision, trying to provide each eye independently with what it would normally get when actually seeing the subject being photographed. As such they're wonderful, and a new visual experience for almost anyone seeing them.

**What inspired you to choose pets as the subject of this book? What is your favorite pet to photograph?**

The choice of a pets book was made largely through talking with editor Andrea Menotti. From early on I'd wanted to do a book with Chronicle, and to my delight Andrea took on the project with enthusiasm. We agreed we wanted to do a book, but were uncertain on exactly what the book would be. At that point in time I'd already photographed many animals, including dogs, cats, rabbits, ducks, geese, and a broad range of reptiles. Andrea suggested a book of pets, and I was happy to go along with it.

My favorite pet to photograph is hard to define. Dogs are usually fun and fairly easy subjects (to date I've photographed well over 100 dogs), while puppies are more difficult. By far the easiest pet to photograph is a bearded dragon—given a warm sunny spot, you can practically pose them and they'll hold still seemingly forever. Birds are interesting, but very challenging, and the tarantulas were a lot of fun to work with.

**What other subjects would you like to photograph and include in your next phantogram book? Do you have a favorite subject to capture in phantogram images?**

I find that I'm still photographing a lot of animals these days but have also turned to objects such as motorcycles. Motorcycle parts are beautiful and intricately designed pieces of functional art.

**How did you approach the creation of *Eye-Popping 3-D Pets*—did you create the phantograms first, followed by the text, or did you pull all of the elements together simultaneously?**

My wife, Betsy, did the vast majority of the book's writing, all but the sections on 3-D, and we worked somewhat independently given she knew what the subjects were to be.

There was a significant adjustment period in the nature of the images. Andrea sent me a couple of very pretty dog and cat books, all photographed with ivory white backdrops. Beautiful images. She wanted all the animals in this book to be similarly presented. Unfortunately using backdrops that contrast greatly with their subjects is a formula for disaster in anaglyph (colored glasses) 3-D. Such imagery comes with a great deal of "ghosting" which is unpleasant and distracting from the imagery. I tried to produce some images this way, but also explained that highly complex natural backdrops would add a lot to the images and work much better in anaglyph 3-D. Another early challenge was the wish that the animals be presented life-size, which is truly a great thing to do, but would have restricted the range of animals we could shoot, so that restriction was dropped before long.

## **How did you find the pets you photographed for the book? Did you photograph your own pets?**

We came up with a list of pets we wanted to include, and so I looked wherever I could for ways to photograph them. Early on I contacted Petco and obtained permission to do some shooting in one of their local stores. Walking into two other local pet shops (Reptiles Unlimited & Paw Shoppe Pet Center) in Long Beach and showing them what I was doing got me their cooperation. However not all places I approached offered cooperation.

As I heard of friends or friends of friends with new litters of puppies or kittens, I was able to photograph them. I looked up newspaper ads for puppies and kittens, and some of the images (and some new friends) resulted from these calls. I have a friend, Thoresen Pape, the brother-in-law of my brother-in-law, who's a professional reptile and exotic animal handler, and he was more than glad to work with me in photographing his animals. The most difficult to locate were shots of pot-bellied pigs and ferrets, but I was able to find these with the help of rescue organizations of such animals.

## **Which animals were the most difficult to photograph?**

Hardest to photograph were the fast animals, including ferrets and hamsters. The pot-bellied pigs I worked with were young and for the most part untrained, so getting them to look up toward the camera was nearly impossible. The zebra finches were extremely challenging as well—trying to get a good angle on their activity. Despite this, I'd say that some of my favorite shots came from these.

## **Did the creation of this book cause you to acquire pets (or add to your current)?**

We have two dogs, and neither was included in this book. The only pets I acquired in the process were the goldfish and beta fish.

## **What do you think about the current popularity of 3-D technology—for example, kids' movies reissued in 3-D?**

It's an exciting time in 3-D imagery now, lots of activity, especially in the movie sector, and it appears to be here to stay so long as we continue to produce great 3-D content. More than anything else we're finding that the wonderful new 3-D movies coming out aren't about 3-D. 3-D merely becomes part of the storytelling. Early on, movies were silent and in black and white. When sound came to movies it was revolutionary, but most movies weren't about sound, it just added to the storytelling. The same was true when color was added to movies, and I believe the same will be true for 3-D.

## **Do you think 3-D imagery will become the future norm for photography and film?**

I expect we will see an increasingly greater percentage of films available in 3-D, and of course a greater number of cinemas capable of projecting in 3-D. I don't believe that the majority of films will be shot that way, at least not for quite a while. As an active 3-D guy, and in my position of president of the Stereo Club of Southern California (Los Angeles 3-D Club, LA3DCLUB.COM), I have been meeting a lot of young film school students and filmmakers who are interested in learning more about shooting in 3-D. Film schools, including UCLA and USC and no doubt others, are just now getting on board to include 3-D filming considerations in their curriculum.

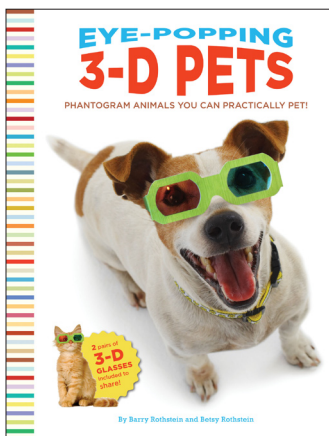
In terms of still photography, 3-D still has a longer way to go. Until the 1960s standard 2-D still photography wasn't considered much of an art form for showing in museums and galleries. Most stereographers will tell you it's difficult to get curators and art jurists to take stereo photography seriously. I do a lot of art fairs, but many of the more prestigious ones will turn me down, despite the fact that other artists almost uniformly love my imagery. A friend and world-renowned stereographer Ray Zone sometimes jokes about the "oppression of the flat" in describing the lack of respect that many photographers and photography venues have for 3-D photography. Nonetheless in the short time I've been doing stereo photography, I've certainly seen positive changes in the right direction.

### **Do you have advice for people who want to create phantograms or are curious about the subject in general?**

Getting into 3-D photography is extremely fun and has never been easier. With a single digital camera and a PC (or a Mac in PC emulation mode) anyone can make great 3-D photos of still life subjects. This is largely due to a wonderful free program called StereoPhoto Maker (SPM) created by Masuji Suto of Japan. Given a stereo pair of images, the program will output 3-D images in a broad range of ways. On my website, there's a very basic tutorial for downloading and using SPM at [3DDIGITALPHOTO.COM/MAKE3D.ASP](http://3DDIGITALPHOTO.COM/MAKE3D.ASP). There's also an older tutorial for doing them with Photoshop at [3DDIGITALPHOTO.COM/HOWTOMAKE.ASP](http://3DDIGITALPHOTO.COM/HOWTOMAKE.ASP).

Phantograms are more difficult, mainly in conceptualizing and setting up the shots, so I'd recommend you first produce some traditional images in SPM. Once again, on my website I've put up a free tutorial on shooting and processing phantograms at [3DDIGITALPHOTO.COM/HOWTOMAKE.ASP](http://3DDIGITALPHOTO.COM/HOWTOMAKE.ASP).

Also note the world's first stereo digital camera, the newly released Fuji W1. It shoots 3-D stills and movies, and includes a lenticular backing so you can see your 3-D images or films immediately without 3-D glasses.



### *Eye-Popping 3-D Pets*

By Barry Rothstein and Betsy Rothstein

\$19.99 • ISBN: 978-0-8118-6257-8

10 x 13 in; 64 pp; full-color throughout, with 2 pairs of 3-D glasses in pocket  
Hardcover • Ages 7-14

**BARRY ROTHSTEIN** is the owner of 3-D Digital Photography and the author of *Pop Up 3-D* and *Phantograms from Nature*. He lives in Los Angeles.

**BETSY ROTHSTEIN** is a writer and graphic designer. She lives in Los Angeles.