Introduction

Traditional color workflows became traditional because they were effective. If they are to be discarded it should not be because they are old, but because we have something that can do better in less time. This book proposes such an alternative—a modern one, because it would not have been technically possible until recently. It's the workflow I now recommend to just about anyone interested in image quality.

It may seem counterintuitive to suggest that someone processing a slew of photos from an iPhone should use the same procedure that a professional retoucher working on a full-page magazine advertisement would. To see why the concept holds requires understanding some history.

Speed and Quality

In the early days of digital color, computers were so slow and so expensive that the whole process was reserved for commercial advertising and other situations justifying a high price for color correction.

Today this is no longer true. People routinely correct pictures, often lots of them, that nobody would have bothered with in the past. Time becomes a major limitation.

I've taught and written about color correction for nearly twenty years. The techniques I've advocated have changed greatly, but until recently the basic approach has been based on yesterday's realities, dating from an era when the user's own time was unimportant in the context of the overall job.

I am not much of a photographer, and this is not a book about photography. I do understand that things have changed somewhat since the turn of the century, that cost of film is no longer a consideration, that cameras of superlative quality are available at low prices

and poorer ones are included free in cell phones, that the cost of file storage is now infinitesimal, that the result can be sent around the world with a single click.

All these factors suggest that a radically different workflow is now in order. And as nearly as I can tell, that is indeed what has happened in the photographic industry—but not in the discipline described in this book.

Professionals who process digital images have not had to absorb anything as revolutionary as the development of digital cameras has been for photographers, but in other respects the pace of change has been faster. Increased computing speeds and cheaper memory, for example, benefit retouchers even more than they do photographers.

At the turn of the century, photographers had a good understanding of how to take a picture. Retouchers, on the other hand, were still groping for the best techniques. Meanwhile, the market for purchasing processing services has changed more drastically than that for buying photography.

Yet in color correction, the workflow has not changed very much. It needs rethinking, and for the last decade or so I've been doing a lot of it. What is the best way to get good quality if you are limited to spending an average of five minutes per image? What if the average must be one minute?

In asking these questions I made some wrong assumptions. I took for granted that a five-minute time limit implied a quality hit. As it turned out, I was mistaken: the workflow described in this book usually gives better results than older, slower ones.

And I assumed that the likely images for the new workflow would be travel shots, pictures of property for sale, personal stuff for posting on the web, and so on. Such pictures

invite bright, happy colors. Absolute fidelity to the original scene is not usually important; a positive feeling is. This, also, turned out to be an incorrect assumption: the workflow is generally applicable to any type of image.

On its introduction in 2007, I called it Picture Postcard Workflow (PPW henceforth) because it often produced the type of deep, rich, pleasant feeling associated with such postcards. The name turned out to be a poor choice for cultural reasons: Americans put a positive spin on the words *picture postcard,* but several countries feel differently: the term is understood to suggest cheap-looking imagery. Too late to change now, though.

What Is the Workflow?

PPW, then, is the name, for better or worse. It departs from past practice in that color and contrast are always handled separately.

The approach is disciplined. After two introductory chapters, each step is laid out in the order in which it would be applied, including a statement of how difficult each is and how often it is used.

The workflow can be heavily automated, and a lot of that automation is yours for the downloading, at least as of this writing, including 14 actions. Some are so complex that they *have* to be in action form, as doing things manually would take much too long.

A free PPW panel installs these actions with one click, offers many variations on them and includes a mountain of documentation. I wrote the actions, but the sophisticated scripting of this panel is beyond my capabilities. Instead, it was developed and encouraged by some of my Italian friends.

My books historically have a long life—say four or five versions of Photoshop. Actions have a long life, too. As far as I know, the actions that our panel loads work in any version of Photoshop released in the last decade.

So far, however, panels for one version of Photoshop don't work in any other. Our in-staller detects whether you have Photoshop CS5 or CS6; it is incompatible with anything earlier. We intend to continue development for future Photoshop releases, but can offer no guarantees and no technical support.

Therefore, the panel's importance is downplayed in the text. Instead, we've prepared several videos that show how its options work and should convince you of how much speed the panel adds. We even have one video where the development team talks about how the panel came about.

Originally this workflow took about five minutes an image on average. That's now down to three, thanks largely to the panel's efficiency. But what if you don't have three minutes? And what if it's an important image and you're willing to spend more time?

The three basic workflow steps are color-contrast-color. First we eliminate color that is clearly incorrect, next we adjust contrast, and finally in the fun part, we establish pleasing, exciting color. The steps are separated because the first two are more effective in RGB while the third works better in LAB.

If you must get the time down to one minute, then eliminate those first two steps. The final LAB action can serve as a semi-complete workflow, with better results than any equally quick alternate method.

The above is a cost/benefit analysis. The one-minute result would likely be better, often much better, if the omitted steps were restored, but we have decided that the gain isn't worth the extra two minutes.

The same considerations apply to the basic three-minute PPW. Certain steps, certain adjustments are omitted, even if they could improve the image slightly. The PPW philosophy is that they don't do enough to warrant the additional time to execute them.

You would think that for images worthy of more than three minutes, we should just restore these omitted embellishments, to get the improvements that are admittedly

possible. At one time, I thought so too. It seems only logical. But it's wrong. It is dead wrong, absolutely, positively wrong.

If you have more time, pretend you don't. Go through the three-minute workflow just as if other options didn't exist. Then, when you finish, do the work again from scratch. And, if time permits, a third version after that.

Even if your only choice were to accept one version or the other as is—and there are many other options—your odds of making a big improvement this way are much greater than if you fritter the time away by making small improvements in certain settings.

The PPW is volatile. It leaves a lot of room for user judgment. Do the work a second time and the results will be quite different. This is particularly true if you are satisfied with your first try and are willing to experiment the next time by altering certain steps.

I do not like fast food, but I like fast color correction. Alternate versions can be blended in ways that emphasize the best points of each. The improvement can be huge. That multiple quick versions are superior to a single careful one is the most important thing I've learned about image processing in the last several years.

Who Should Read This Book?

Parts of the PPW, particularly the final establishment of color, are beginner-friendly. But this is no collection of recipes. If you have read my previous books, you know the drill. If not, be aware that your way of thinking will be challenged. Google discussions about those books, and you will find one person after another advising that they must be read more than once.

Saying that about a book does it great honor. I am not aware of any other book written in the last hundred years, regardless of discipline, with such near-unanimity about the need to re-read.

In principle, the inexperienced should look elsewhere for their reading pleasure, because this book is tough. In practice, history shows that the ambitious ones won't. To these brave souls I offer two concessions, one old, one new.

First, the chapter structure is as in my earlier *Photoshop LAB Color:* first half accessible to everyone, second half geekier. Note, though, that *accessible* means only that among the many things that might derail you, lack of knowledge of Photoshop will not be one. The first halves assume that you know how to make adjustment layers and change their opacity and not much more.

Complex color concepts, however, don't require Photoshop expertise. They require a brain and a willingness to use it. I have no hesitation in including this difficult material in the first halves of chapters. It is one thing to know where you want to go with an image, and another how to get there. Many amateurs can manage the first but not the second; many experts are the other way around.

Consequently there is a case to be made that the most important part of the book has little to do with technique, and the more prepublication comments I get the more I see the point. For example, later in this Introduction, as I try to explain one of my own mistakes in execution, I go off into a riff on how such errors occur. It provoked two comments that this one page justifies the price of the book, because the readers had not considered my point previously and now agree with it. Near the end of this Introduction you'll get a recommendation from another reader as to how you should approach the book. The recommendation surprised me as I assume it will you, but it has to do very much with the idea that technique is not the most important thing being discussed.

The second concession is video support. My previous books have all contained CDs, for which there is no longer a need. Today's high bandwidth and essentially free online

storage has allowed us to post however much we want.

Given a choice between print and video, I prefer the former, because it allows more depth. But why choose one, when we can have both? Video has advantages. Readers have complained that sometimes they draw a blank on certain simple explanations. If they could only see somebody demonstrating what I was talking about!

This time, therefore, some friends and I have recorded videos, to clarify points chapter by chapter. Sometimes this consists of redoing a certain image, sometimes exploring different directions. Many videos demonstrate the use of the PPW panel and its options. We plan to add updates when appropriate. Topics that were recorded by press time are listed in the Notes & Credits section, which begins on Page 431.

In short, this book is designed to be quite a bullet train. If you decide to hop on board, heed the warnings—but enjoy the ride.

Who Is the Nominal Author?

As pointed out earlier, I have written about this subject for a long time. Knowledge has advanced so rapidly throughout that period that whatever reputation I have for things I said in 1995 or 2005 is of little value today.

Even so, I have unique qualifications.

Some evaluation of image quality is subjective. Some is not. Most people have great difficulty understanding which is which. Getting it right is critical, at least if you're an author, teacher, or supervisor of others who do this type of work. If close to 100 percent of viewers dislike a certain effect, it is fair to describe it as an error. If, on the other hand, a certain percentage of people like it although you or I do not, then it's just personal preference. We cannot impose our taste on other people—the problem is to know when we are inadvertently doing so. All of us have blind spots where we cannot imagine that some-

body else may see merit in a certain version, whereupon we condemn it for being "wrong" when in fact it is a matter of opinion.

I make this mistake occasionally, but not as often as other people. I have taught hundreds of three-day, small-group classes. Every student works on the same image and then the results are compared and discussed. I have participated in about 10,000 such group discussions—every class features more than 20 of them. When I state my own position, I now have an excellent, if still imperfect, idea of when a group is going to agree with it unanimously, and when there will be dissent. If I tell you that a certain result is a mistake that would be overwhelmingly rejected by impartial observers, you should give that statement a bit more than normal credence.

The same applies to claims that a certain image correction is a good one. This is a tough thing to know for sure when the only thing you have to compare it to is the original or another version that you have made yourself. It is easy to assume that something that looks great next to the original is in fact great—until you see someone else's file that is obviously much better.

This problem afflicts me, too; you'll see proof of it at various times. But if I have any doubt, I can assign an image as a classroom exercise and get scores if not hundreds of competing versions from people who are serious about color. Not every image in this book has been so tested by fire, but many have. As to those, if I say that the version being shown is a good one, it doesn't mean that it is perfect or that you couldn't do better yourself. It means that a whole lot of qualified people have tried the same image and the result being shown is competitive with the best of theirs.

Finally, I have a resource that no one else can match: the ability to assemble a group of competent people to represent your interests while this book was being written.

Who Was Behind the Scenes?

The entire book was carefully vetted by a group of beta readers. As with my previous titles, they were chosen from more than 50 volunteers from my appliedcolortheory group, after filling out a questionnaire designed to produce diversity. An enormous amount of work was required of them. It is an amazing honor that so many people volunteered for this difficult duty.

The twelve people I chose said the following about themselves:

● Two are currently professional photographers, two were professional photographers once upon a time, five described themselves as *serious* amateur photographers, and three people said none of the above.

● Eight people described themselves as Photoshop experts.

● Six claimed professional educational experience, Photoshop or otherwise.

● Four said they had professional writing experience.

● Seven said they typically spend half or more of their working time in Photoshop.

● Six said they retouch professionally.

● All twelve had experimented with the PPW panel.

● Eight people claimed a background in the hard sciences.

● Six claimed a background in fine art.

● Seven knew me personally, five did not.

● Seven said that their work normally commences with a file in a raw format.

● Six said that their final file is almost always RGB; three that it is almost always CMYK; three that it might be either.

● Ten completed the full program and have had input on every single page. Four of these hail from the United States, two from Italy, and one each from Australia, Canada, Portugal, and the United Kingdom.

This is the third book I've written with the aid of such beta readers. A Facebook group made this readership step more effective this time around. Chapter drafts went to the group over a period of three months, deadlines were announced, and each member sent me an annotated PDF reaction. In-group discussion of any chapter was prohibited until everyone had submitted these private comments. The readers had access to all original files and sometimes produced their own alternate corrections.

Their feedback defined this book. Every chapter had significant changes and four, plus this Introduction, were so heavily overhauled that the group had to read and comment on a complete second draft.

Naturally, the readers liked certain chapters more than others. In fact, the book almost died in its infancy when there was an icy reaction to Chapter 1 and parts of Chapter 2. Fortunately it was a while before the next unpopular chapter turned up.

You will be hearing from many of these readers by name later in this Introduction and throughout the book.

The Images in This Introduction

The beta readers found fault with Chapter 1 for a number of reasons that have been duly addressed. However, they also pointed out a difficulty with the overall concept. I wanted to show a start-to-finish correction as a preview of the workflow. Good idea, but what to choose for the example?

I thought it should be an amateur photo of reasonable quality, of an outdoor scene, where nobody would be likely to complain if the colors came out a bit more intense than they are in nature. Hence, the scene of Emerald Lake that still is the focus of the chapter.

Some readers argued that the original should have been shot by a professional, because this is a book aimed at professionals even if most potential buyers aren't. Others advised choosing a worse original so that the corrected version would seem more impressive. Several, understanding how fast the

Terms and Acronyms

Here is a list of some of the acronyms and specialized nomenclature that appear frequently in this book.

Bigger Hammer: A technique for drastically enhancing highlight and/or shadow contrast. We have it as an action. It is described in Chapter 10.

Channel blending: merging parts of channels to create better contrast, discussed in Chapter 4.

Color Boost: an action that is one of the principal PPW color enhancements. Discussed in Chapter 5.

Color mode preserves detail on layers below it.

CR-CS5 and CR-CS6 are used to differentiate the improved Camera Raw structure introduced in Photoshop CS6 from that of previous versions.

Darken and Darker Color modes prohibit lightening but otherwise behave like Normal mode. Darken works channel by channel, Darker Color overall.

False profile: a way of tricking Photoshop into seeing a lighter image. Uses are shown in Chapter 12.

H-K: An action described in Chapter 13. It downplays dull colors to prevent competition with brighter ones.

H/S: The Hue/Saturation command.

HDR: High Dynamic Range, an amorphous term now used to describe extreme color and contrast effects.

Lighten and Lighter Color modes prevent darkening but otherwise behave like Normal mode. Lighten works channel by channel, Lighter Color overall.

Luminosity mode preserves color on layers below it.

MMM: The Modern Man from Mars action, described in Chapter 6, creates color and contrast variation.

Multiply mode darkens everything except where one of the sources is pure white or pure black.

Overlay mode lightens the target where the overlay is light, and darkens it where the overlay is dark. The power behind the Bigger Hammer.

PPW: The Picture Postcard Workflow.

S/H: The Shadows/Highlights command.

SWAG: A Scientific Wild Ass Guess.

Soft Light mode is a relative of Overlay, used in the Bigger Hammer when shadows are the main target.

USM: Unsharp mask, discussed in Chapter 15.

workflow is, said that explaining each step so thoroughly made it seem as though each correction would take an hour. Still others found fault with the subject of the picture, that there should be people in it, and on and on.

In reply, I noted that so many photographers have kindly handed over their work with permission to use it for educational purposes that I now have about a terabyte's worth of professional shots, and that I doubted that among them could be found a single one that would satisfy this beta group's criteria.

A consensus developed. The group wanted, and got, a Workflow Summary at the end of the book, starting on Page 439. Meanwhile, Chapter 1's format requires close examination of one, and only one, file. Yet one picture cannot summarize the workflow. To compensate, I should, the group opined, add half a dozen "somewhat typical" PPW results here in the Introduction, commenting only about aesthetics and not matters of technique.

Fortunately, I had a good source of somewhat typical originals. In May 2012 I threw a month-long party to celebrate retirement, old age and several other excuses. My wife and I rented a large villa in Tuscany, and invited my best friends from all over the world to come for a week apiece. At the end of the month I had gained ten pounds and ten thousand photos, because all guests let me copy their cards before checking out.

I cut the ten thousand down to about six hundred, which I corrected and distributed. Already you should be able to see the connection. This is the type of work for which the PPW was designed. Quality is important, because the recipients of these files know who processed them and have, harrumph, certain expectations. On the other hand, I'm not getting paid. Yes, I would like to do a good job, but I'll be dipped if I'm going to take more than two days doing it. That implies three minutes an image, on average, and zero local retouching, global changes only.

These pictures featured every type of subject. They were shot by people from twelve different countries. Lighting conditions were anywhere from optimal to abysmal. Skill level ranged from some of the best photographers in the world, to retouchers who are great at processing photos but poor at exposing them, to personal friends who wouldn't know an SLR from an SUV because they have no connection to the graphic arts.

Accordingly, I drafted this Introduction with the six pairs of images you're about to see. As usual, it went out for group comment, and as usual, certain infelicities of style, substance, and organization were found and zapped. Then the fun began.

The annotated files that came back generally dealt with text matters. Some readers, however, also commented about the images. It wasn't a big enough sampling to prove much, but it was clear that the group agreed on certain things and not on others. A light bulb went off in my head.

I noted earlier that specialized experience lets me predict response to a given version rather more accurately than the average bear. Being able to gauge how people will judge our work is critical to our success. If a person disagrees with us we need to know whether it is simply because tastes differ or because we have made some kind of mistake.

So, I said to myself, here is a rare opportunity. The group is chosen because it cares deeply about image quality, but also for its diversity. Members are technically qualified to comment; as a group they are more representative than would be, say, any organization of professional photographers or of retouchers.

The readers were enthusiastic about the idea of sharing their views on the images with you. I therefore asked each of them to prepare a memo about every one of these six corrections, trying to talk about overall impression, specifics of what made the execution good or bad, and what it said for or against the workflow. I also asked them to predict whether the rest of the group would agree with them. Several people went further and made their own versions of the images, as I had given them access to the originals.

I incorporated their views into an expanded second draft, which the group reviewed again. I am sorry to add so many pages to an Introduction, but I think their comments make fascinating and instructive reading and hope you feel the same way.

The Past, the Present and the Future

At the turn of the millennium, I wrote a long magazine column about graphic arts history. I said that the twentieth century was an excellent one for the advancement of imaging knowledge but that it had to take second place to the fabulous fifteenth, when Leonardo, Botticelli, and similar luminaries were showing the rest of the world how it was done, all without the benefit of Photoshop.

I'd now say that progress in the last quarter-century beats anything at any time in the past. Knowledge has exploded and the number of people who possess it has increased astronomically. In my classes, images that were too difficult even for experts five years ago are now cannon fodder for intermediate users—you'll see some proof of that statement later in the book.

Evolution is natural for the PPW and any other novel workflow. About three years ago, I recorded three PPW videos for my friends at Kelby Training. They're still available and still popular. There was no PPW panel back then and I wasn't using actions, but the content regarding initial color correction in the first installment would be almost unchanged today. The second video, contrast enhancement, is still basically correct but I have since added several refinements. The third, on finalizing color, was effective enough in its day but the techniques shown in Chapters 5 and 6 of this book make most of it obsolete.

Three of the six corrections shown in this Introduction would not have been possible with the PPW of three years ago. One wasn't even possible before writing this book; I know, because I was dissatisfied with my results on a certain category of images, decided that a new technique was in order, and found one with experimentation.

When files for the following examples arrived in a raw format, what is shown as the original was acquired using the defaults of the version of Camera Raw introduced with Photoshop CS6, except for one case in which highlights were enhanced. Otherwise the original came as a JPEG. The show is about to start. I suggest that you grab a piece of paper, go through the six before reading about them, write down your thoughts, then compare them to the group reaction.

I–1 Yellow Flowers in Tuscan Field

From the First Draft of This Introduction: The PPW specializes in this type of image. The yellow flowers should be brilliant. The technical problem is that the greenery has a big yellow component, too. Brightening the flowers may make it hard to avoid overwhelming the viewer with vivacity. The enhancement techniques shown in Chapter 5 and 6 handle this gracefully. Meanwhile, there is realistic detail throughout, and an action shown in Chapter 8 has deepened the sky.

•   *The Beta Readers* thought on the whole that this was the most successful correction of the six, and correctly anticipated that there would be broad agreement.

John Jacobs: "This has the 'wow' factor that is so indicative of the PPW. The sky, distant hills, and yellow field are beautifully rendered. The vineyards are aggressive in the separation of detail and if it was not being used as a postcard, could be easily brought back a bit by use of a slider."

Alessandro Bernardi: "Detail is everywhere and looks natural without any excess of local contrast. Also what I like very much is the way you have differentiated the yellow flowers from the greenery, but above all the way you have kept all the subtle colors in the sky while retaining the shape. If I have to find a defect probably I would like to see the ground just a little bit warmer with slightly more yellow."

Marco Olivotto: "I know from experience that this kind of photograph can be a serious problem: introducing variation and shape in the yellow area is very difficult with traditional methods, and sometimes hopeless unless one is very good at dealing with local contrast, or willing to try out exotic blends. This is, to me, the perfect example of what PPW can do."

•   *The Aftermath.* No photo is ever considered perfect by every viewer. Some would have liked this picture a bit less colorful. Others wanted even more, looking for the effect now often described as HDR.

These are valid desires but not valid criticisms of the method. The PPW has a step that deliberately introduces excessive color. At one point, all six example images were much more colorful than shown on these pages. The user (that's me) had to make a judgment as to how far to back off this wild color, and whether to do so uniformly or in a way that emphasized certain things.

Taking color out is contrary to traditional practice, which is to force extra color in until satisfied. The PPW method is more manageable, when you think about it. More importantly, if you believe that any of these pictures are too colorful, or not colorful enough, all it means is that you would have made a different decision than I did when the time came to back off. No extra step would have been required. You would have had the result you like in the same amount of time.

I'm giving you the technique to get where you want to go, not trying to force my own personal views of how much of it to use down your throat.

Postcard I–1 *The Picture Postcard Workflow in action. All six photos shown in this Introduction were produced quickly, with no selections or hand retouching. The originals (or reasonable acquisitions from a raw module) come from people of widely varying skill levels; all were taken in Tuscany in May 2012. Here, the problem is how to suggest the brilliance of the yellow flowers without making the entire image too colorful. This sort of thing is covered in Chapters 5 and 6. Also, the sky was enhanced using methods discussed in Chapter 8.*

I–2 Florence Street Scene, With Duomo

From the First Draft: Here the key interest area dates from that fabulous fifteenth century. Unlike the yellow flowers that were the most important part of Postcard I–1, Brunelleschi's dome can only absorb so much color. On the other hand, unless small objects such as the street signs, clothing, and flags are colorful, the photo may resemble a black and white. The key step in arranging this was an action described in Chapter 13, aimed at suppressing duller color.

- *The Readers* thought this one was as successful technically as the first, but the opinion was hidden by a barrage of commentary about what we ought to try to achieve and indeed whether this photo should even have been shot. Or whether all of it should print.

James Gray: "An absolutely amazing improvement in a mediocre image. It reminds me of the problem with many of my travel images. I do like the sky in the original better than in the post processed image. I think that the color in the sky and building is a skosh too green. I think that all will agree that the postcard is a vast improvement over the original. I would have liked to see more contrast in the dome. I would have cropped most of the people out of the bottom."

The flowery field was a scene that must be taken in its entirety. This one is not; it has one object that is far more important than the rest of the picture. The same is true in many product shots. Postcard I–6, which showcases a beefsteak, is another example.

When confronted with a picture falling

into this category, skilled people are reluctant to add too much color or other activity elsewhere, fearing that they may distract from the object the viewer should be focusing on. Unsurprisingly, some readers complained that I had made the street too busy—too much contrast, too much color.

These complaints state a good general rule. According to me, however, that general rule needs an exception here. The huge cathedral so dominates the photo that *nothing* can distract from it. Putting the activity in the foreground just makes the scene more real.

● *The Aftermath.* As indicated at the outset, this book assumes that each photo has already been taken and that we have been asked to work on it. If the photo is technically sound and artistically meritorious, so much the better. Neither factor, however, has an impact on what we have to do. So I could just dismiss as irrelevant the comments on whether this photo is worth working on. I will cast a vote nevertheless.

Brunelleschi's dome is one of the most photographed objects in the world. Pictures of it in isolation are a dime a dozen. Showing its great beauty is not a problem. Its architectural merit is plain to those who understand such things. But the dome is also known for its enormity. That such a monster could be built more than half a millennium ago is hard to believe. Most photographs can't capture its scale. Distant shots can do it, but tend to make the rest of the area look like a kind of Disneyland. This photo puts the size in the context of a major city.

I therefore disagree with many group members about the merits of the original. I share the views of Frederick Yocum: "The flatness of the original has disappeared. The stronger colors separate the foreground from the bulky muted presence of the Duomo and turn what could have been a snapshot into a statement about the omnipresence of the church in the landscape of Florence."
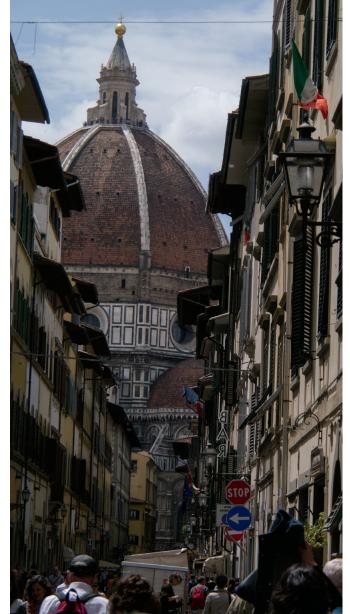
I–3 In a Darkened Restaurant

From the First Draft: Now comes a series of three with lighting problems. Postcard I–3, shot in a dark restaurant, starts with an awful cast and no detail in the faces. The PPW has little difficulty with the excessive darkness, but the cast reduction is nasty in any workflow. After seeing a lot of these sorts of images from this trip, I came up with a new method, discussed in Chapter 9. And speaking of new techniques, it is fitting to have a picture of beta reader Adriano Esteves, shown here with his wife Catarina Morgado. Adriano developed an important modification of the MMM action shown in Chapter 6. His contribution is now an option within the PPW panel.

● *The Readers' View* was summarized by James Gray: "I think that if I were Adriano or Catarina I would not like the image even after it is processed. I do not yet grasp the advanced techniques that I assume you used. The postcard is a big improvement over the original and does create a distinct separation of the people from the background. However, I do not like the color variation in Catarina's face. The redness in her cheeks and nose is too much. It seems that most of the improvement in the image is in the background and not in the faces. I think there is too much variation in the color of Adriano's face as well. His chin and neck seem to have a green cast while his right ear looks too red."

Everyone agreed. The redness was described by one reader as "not flattering" to Catarina and by two less diplomatic ones as making her look drunk.

Marco Olivotto brought up another point: "The woman's skin seems too pink, which suggests a cold environment; but the man's T-shirt says it can't be cold, so I'd err a bit on the warmer side. The walls are portrayed as very neutral, and I wouldn't be 100% sure about this—what can be seen of the mirror and shelf suggests not a very modern place, so a hint of yellow may be appropriate."

Postcard I–2 The foreground needs to be lightened here, using techniques shown in Chapter 12. Also, the dome dates from the fifteenth century, so there is a limit to how much color it can take. But without the brightly colored objects in the street the picture looks dead. Chapter 13 describes a method that discriminates against duller colors, keeping them subdued so as to emphasize purer ones.

Others criticized leaving the reflection on Adriano's head, but this is not fair because local retouching was prohibited by the rules of engagement.

Those predicting the outcome correctly foresaw that this would be the least popular of the six. That may not be fair either. Two people reported trying this image out for themselves, without success with the lighting issue. Adriano himself said, "This photo is one of the difficult category where the original is very weak but we must do the best we can with it because for some reason it's important. And I fail miserably, so this is a good exercise to include in the book—it represents reality in that we all handle photos like it."

In other words, these readers trashed my effort even though I did better with this picture than they could. Life is full of injustices—and lessons.

● *The Aftermath.* Recall how some thought that the flowery scene of Postcard I–1 was too

colorful, but others did not, and still others thought it was not colorful enough. These differing opinions justify use of the phrase *a matter of taste.*

In this picture, however, nobody likes the redness in Adriano's ear or Catarina's cheeks. I don't like it either, now that attention has been called to it. That means it cannot be described as a matter of taste. The appropriate term is *an error.* How it came about has ramifications that go well beyond imaging.

Errors are inevitable during every phase of graphic arts work. Hopefully they get caught and corrected before the client or whoever the final judge is sees them. Therefore, in every area of our discipline there is some form of inspection. Sometimes that inspector is us, as when we check a final image to make sure that highlight and shadow are correct. There can also be a person whose main job is catching errors: a proofreader, a plate inspector, or the like.

Supervising this inspection process in large companies was an important part of my prepress work for many years. I was successful in reducing the error rate, but never to zero. When the company did release work containing an error, I would investigate why it happened. Often I felt that it was not so much the inspector's fault as that of people earlier in the process who failed to take actions that would have made a subsequent error almost impossible.

When the error *was* totally the fault of the inspector, though, I detected a disturbing pattern that I should have remembered when working on this picture, and that you should take to heart.

In a surprisingly high number of cases where the inspectors let an error through, they had already detected a major snafu.

You have to be sympathetic. I certainly was. Here were these people who had just saved themselves and the company a peck of trouble by finding and fixing a terrible error.

Is it any wonder that they felt good enough about it to cause their attention to lag?

I have repeated over and over, to employee after employee, and now to you, that when you have found and fixed one big problem, pay extra attention, because you are more likely than ever to overlook another—such as obviously excessive fleshtone variation.

In this particular image the elimination of the cast and introduction of shape in the faces justified my feeling pleased—but not turning off normal evaluation processes. *If this had been an easier original, no way would I have missed the problem in the faces.*

On a happier note, I can report that Catarina was *not* drinking on this occasion, for the best of reasons. A few months later, she and Adriano celebrated the birth of their first child, Matilde, to whom we all wish a long life of many highlights and few shadows.

I–4 Dining al Fresco

From the First Draft: On to a different restaurant, with faces deeply in shadow. Previous iterations of the PPW could handle this situation fairly well, but a new feature of the panel made for a dramatic improvement. Chapter 10 has an action called the Bigger Hammer, used for pictures in desperate need of highlight and/or shadow detail. Postcard I–4 seems a questionable candidate, and in fact the action's defaults do poorly with it. Investigating alternative ways to use the action used to take too much time. Now, however, the panel allows quick previews of different Bigger Hammer settings, and I found one that I thought worked well.

- *The Readers' Response:* "This will be the most controversial of the six," predicted Adriano. "Some will love it, some hate it." He incidentally, identified himself as one of those who loved it, citing its "alien HDR look", which I am not certain is a compliment.

His prediction did not come true. There were no extreme views. The main area of

Postcard I–3 *An evening in a Florence restaurant with dim lighting. The resulting orange cast is difficult to manage with traditional methods. A technique shown in Chapter 9 uses the complementary color to minimize the cast and create more distinct separation of the people from the background.*

agreement was that this sort of picture happens more often than many think and so having an example of it is useful. Mike Demyan: "Typical snapshot taken from 'inside to outside'. The camera exposes for the 'outside' and underexposes the 'inside' people. Good exercise for fixing this type of shot."

Some liked my neutral-to-pink skintones; others wanted them yellower. The most common comment, as always, dealt with how far to take the PPW effect.

John Jacobs: "This is the most severe change from the original of any of the six. Standing alone, it would be a good holiday shot, capturing the mood and moment. Overall, it is too bright and I believe the average viewer would be fine with the whole image darker. This would help make sense of the roof over the subjects and give more of an impression of inside-outside."

Frederick Yocum: "Often when photographing people, we don't get to pick the best moment. This leaves us with only bad choices. Lose the background or leave the foreground murky? The final photograph has an embarrassment of riches when it comes to detail. It feels a little overprocessed with no place for the eye to rest, but there is a lot of animation in the subject and it all seems to work together."

And now a couple of comments that bear on the workflow itself.

Russ Brown: "I have to admit to still not being a big fan of the workflow for people pictures, however Postcards I–3 and I–4 do demonstrate that a big improvement as well as an acceptable result is obtainable easily by using the workflow. A similar and perhaps better result would be achieveable in other ways but would probably take much more time, effort and skill."

John Pavel: "Fine as snapshot for personal use. Processed version a definite improvement. Faces are very slightly on the sculpted side of realistic."

The "sculpted" look that John describes is a common result of this workflow and can be avoided if need be. For example, if this had been a picture of two women rather than two men I would likely not have used this effect, preferring smoother faces.

● *The Aftermath.* I don't agree with Russ that traditional techniques would get something equivalent here, with or without additional time. I think they'd be more likely to be competitive on the next image, Postcard I–5. Other than that, nothing about these comments surprised me. Mike submitted an alternate version that I liked better than mine. The basic difference was that he had the faces slightly darker than I did. The neutrality of my faces suggests the shadow from whence they came. If I left them so light I should have added a more golden fleshtone. Or I could have taken Mike's approach and kept my own color without lightening so much.

I–5 Sunlight and Shadow in Siena

From the First Draft: Taken with a fisheye in the streets of Siena, this one is an even more extreme sun-and-shade exercise. Chapter 12 shows how to handle this kind of image.

● *The Readers* liked it almost as well as the flowery fields of Postcard I–1. Russ Brown: "This alleyway is, I think, the best of the six. This really shows how a picture which might otherwise be discarded as unfixable can be turned into a dramatic and interesting shot."

Agreeing, Adriano Esteves: "My favorite before/after of the entire Introduction. Detail, color, highlight recovery, good photo. Who the hell turned on the lights?"

James Gray adds, "This is an awesome improvement. It is really a great demonstration of what can be done using the techniques of Chapter 12. The effect is almost magical. How can anyone not love it? A skosh more color might have been even better. I assume everyone will agree about this one."

Those finding fault generally said I had

Postcard I–4 *The al fresco meal is an Italian custom. The subjects are squinting in the sunlight, but the canopy has put the faces in shadow. The Bigger Hammer action introduced in Chapter 10 corrects the lighting.*

gone too far. Taking the opposite view, Alessandro Bernardi joined James in saying it should be *more* colorful. He also suggested moving the whole picture toward yellow.

Representing the hard-bitten prepress specialist, Clarence Maslowski rained on the parade. As might be expected, he assigned more of the blame to the photographer than to me, saying, "This image comes up a little short. It is my considered opinion that any photographer should expose for the highlights and let me worry about the shadow end of things. I can fix 'em. This image could have been infinitely superior if there were better detail in the sunlit area at the base of the stairs. This image does show the power of the PPW technique. And we can see the interior of the alleyway. I do think you went just a little too far in lightening the darker tones. You quoted Ansel Adams in Chapter 15: *I believe there is nothing more disturbing than a sharp image of a fuzzy concept.* Is this validation? I would think that the professionals on our team would agree with me."

- *The Aftermath.* This is actually the easiest of the six exercises, which is why some of the opinions weren't as enthusiastic as they were about the more difficult Postcard I–1.

Many PPW techniques are more effective when the photo isn't as gray and monotonous as this one. Two readers, understanding this, prepared versions in Camera Raw and Lightroom, respectively. 2012 additions to these modules make it possible to get similar contrast effects to what's shown in this particular image, although previous releases could not. The remaining PPW advantage on this picture is color variation.

I–6 The Controversy: Where's the Beef?

From the First Draft: Finally, back to normal lighting for one of the great meals of the world, bistecca fiorentina. This thick cut is always served rare. Ask for it cooked medium and the chef is likely to refuse and say some-

thing in Italian that you are better off not understanding. Menus often have a snooty line stating that they will not prepare the meat any other way and if you don't like it, order something else. This note is in English, of course, no need to inform the Italians. Anyway, the added depth and color variation underscores the PPW's suitability for food shots.

- *The Readers* went ballistic. You may wish to duck before reading their exchanges, as the crossfire is rather intense.

John Jacobs: "Great! Love it! Especially the life that comes from the improved color and texture. The best correction of the six."

Marco Olivotto: "On a scale of one to five, this is a one. If you point a gun at the head of an Italian and tell him to choose one of these two, I could foresee 95% of the votes going to the original. The final version is amazing, but it would look inedible to many people."

Shall we try another pair? Mike Demyan: "Good food photo example. Your correction shows how to bring out the 'taste' of the entree. Makes my mouth water—mmmm!"

Alessandro Bernardi: "I don't think that anyone would like to eat something like this. If you show your version to the chef, I suspect he will try to kill you. It's clear that the steak has a cold cast that must be corrected, but in the final version the color of the cooked part of the meat is too grayish, while the bloody areas are too magenta, purple, compared to the cooked ones."

The rest of the group divided evenly between those enthusiastic about the correction and those finding it slightly too colorful—though not the wrong color. Those predicting group response said they expected a near unanimous favorable rating. I'd have predicted that myself.

- *The Aftermath.* What you just read is why I asked every group member to comment on each image. When I sent out the request, I tried to avoid biasing anyone. All I said was that the comments so far indicated that the

***Postcard I–5** An alleyway in Siena shows a common photographic hazard in regions with strong sunlight: the dark parts are plugged, the light ones almost blown out. Techniques shown in Chapter 12 bring the two halves closer together.*

group saw eye to eye in some cases and not in others, and that a certain result was considered the best of the six by some and the worst by others. But I did not reveal which it was.

My coyness did not fool Marco. Not only did he realize what image I was likely referring to, he made an astounding, but correct prediction: he said that Italians would hate the picture and everyone else would like it. Here's part of his reasoning:

"To me, this is a cultural problem…we have some very colorful mosaics in Italy, some dating back more than a thousand years, but the most vivid of them are tame with respect to what you may find, say, in India. Same goes

for food: my feeling is that there is a more aggressive idea of what the food should look like in America than in the Mediterranean area. Your version is not objectionable on the technical side, but my feeling is that it would fall flat, aesthetically, in my country. If McDonald's decided to include florentine steaks in their menu, so be it—but this is not how a luxury recipe book in Italy would wish to depict the steak."

There is likely some truth in the explanation, but a general Italian preference for subdued color is belied by previous comments. Marco and Alessandro themselves strongly endorsed the very colorful flowers of Postcard

I–1. And in the Siena scene of Postcard I–5, Alessandro was one of only two readers to say that my version was not colorful enough.

Food, however, appears to be different. My view is that Italians are more fanatical about their food than just about anybody—as witness the irate refusal to cook meat to any other than the Correct degree of doneness.

The violent negative reaction shows how quickly our work can backfire if we provide unacceptable color. Note this does not mean *too much* color—that can always be adjusted. Marco and Alessandro may believe that there is too much color here but they also say it is the *wrong* color. Alessandro explains:

"In food work it's commonly accepted that a warm cast makes everything more inviting, especially if we talk about meat. Google "bistecca fiorentina" and you'll get a lot of images. The best ones will be more or less always the same: reddish in the bloody areas, not purple, while featuring a yellow or warm cast in the meat. So I'd suggest to add some warmth to the image, otherwise it looks unreal or unattractive."

Memory plays a critical role, and memories are sometimes biased. I have eaten a lot of bistecca fiorentina in my time. Postcard I–6 represents my memory of what it looks like, since I had not imported a steak and a Tuscan chef and kitchen to look at while I worked. Then again, as Alessandro never tires of reminding me, I am not Italian. My memory of the color is influenced by American preconceptions of what rare beef looks like. Is he right that in reality it's more red, or even orange? Possibly so, but that's not how I recall it.

Also, you shouldn't take Marco's rhetoric too literally. Nobody is holding a gun to anybody's head. We don't have to choose one or another. Creating something that strikes people as being over-the-top is an occupational hazard of the PPW. The solution is to have a conservative version available. The

original image qualifies. It's not exciting, but it's reasonable. It can be blended with my version in many different ways, and the degree of blending is up to the individual. I believe Marco when he says that some people might prefer the original to the corrected version, but I would not believe anyone who said that they would prefer the original to a new version that had a third of mine averaged in.

Frederick Yocum gets the last word. "This exercise is not about rescue. If you saw the original you would be satisfied. It is in focus, well lit and adequately records a beautiful plate of food. The corrected version does not sacrifice any part of the original, just gives us more. Is it too much? It depends on how hungry you are."

*   *   *

I hope the extended discussion of these six images has been enlightening about what makes people like pictures, and especially how to distinguish matters of taste from outright errors. And even though little technique or procedure was discussed, I hope you get the idea of what the PPW does—that it offers a very quick way to produce striking imagery, with the flexibility to decide how colorful an image you want.

I trust, also, that you grasp why this book is different from others on similar topics. For one thing, it's wide-ranging. In principle it's about a specific workflow but you may find that the most valuable sections have nothing to do with it and are concepts only.

Moreover, a committed group of highly qualified beta readers changes everything. This extended Introduction would never have happened without their discussions. They had a clear feeling that something like this was necessary. Was this the best way to

Postcard I–6 (opposite) One of the world's great dishes, the Florentine beefsteak, is always served rare. The redness is therefore correct, at least in the opinion of some. Methods of enhancing contrast in the meat and the darker bone are discussed in Chapters 4 and 7.

implement it? I don't know, but I know that without these readers, there would be nothing of the kind here.

Finally, I hope you can now visualize both the frustrations and the accessibility of this book. Parts are highly technical, difficult even for expert retouchers. On the other hand, certain extended discussions are quite challenging but don't require any particular background. In reviewing this Introduction I can't find any reason why a reader would even need to know how to launch Photoshop to understand what's being said—yet some of these concepts would baffle color experts.

Adriano is one of those experts. After completing his read of the entire book, he asked to offer you some extraordinary advice. I'm not sure I agree, but here it is:

"I would add that everyone's first reading of the book should be without Photoshop and computer. I've done this with all Dan's previous books and this one is no exception.

"Every book from Dan has so many layers of information that if you follow in Photoshop you will lose the plot and start concentrating on the process. I've seen several designers in my company starting the books and never finishing because of this.

"So, read it like you don't own Photoshop."

*   *   *

This, then, is the current state of the Picture Postcard Workflow, including some changes during the course of writing this book. Unless you think that we already know all there is worth knowing, that change will continue.

I bought my first Macintosh 25 years ago. Half a decade later, I was correcting images professionally in Photoshop.

The big advances since then have been related to hardware, not software. We were ignorant back then because there wasn't

anyone to teach us. Experimentation was difficult to impossible. To store all the images I worked on to prepare for this book would have required an investment of a quarter of a million dollars or more in hard drives alone. To get all these images into digital form would have required huge expenditures for scanning the film (you remember film, don't you?) Even assuming that I had the money and the inclination, I could only have tested a small fraction because each experiment would have taken fifty times as long.

Hardware has thus driven the accelerating vehicle of knowledge, which in turn has changed our taste. Now that the capability exists to create photos with wildly unrealistic brilliance, many people have decided that they like that look, leaving me somewhat of a centrist. The surrealistic look is known today as HDR; a few years ago the same acronym was used to describe results similar to those shown in this book.

With all this change, one thing has remained the same. We do things the best way we know how given the tools we have to work with. It is entirely appropriate that the most significant tool introduced here, the one that can't be duplicated at all with other methods, depends not on some recently revised raw module, but on a command so ancient that I and every other expert wrote it off as useless in the early 1990s, and which hasn't been heard of since. Read about it in the second half of Chapter 6 if you don't believe me.

Is the idea of separating color and contrast completely, with the improvements we expect to continue, the workflow of the future? I don't know, but would assert that in the year 2013, it is the most reliable and the quickest way to assure top image quality. Time will tell whether I was right.