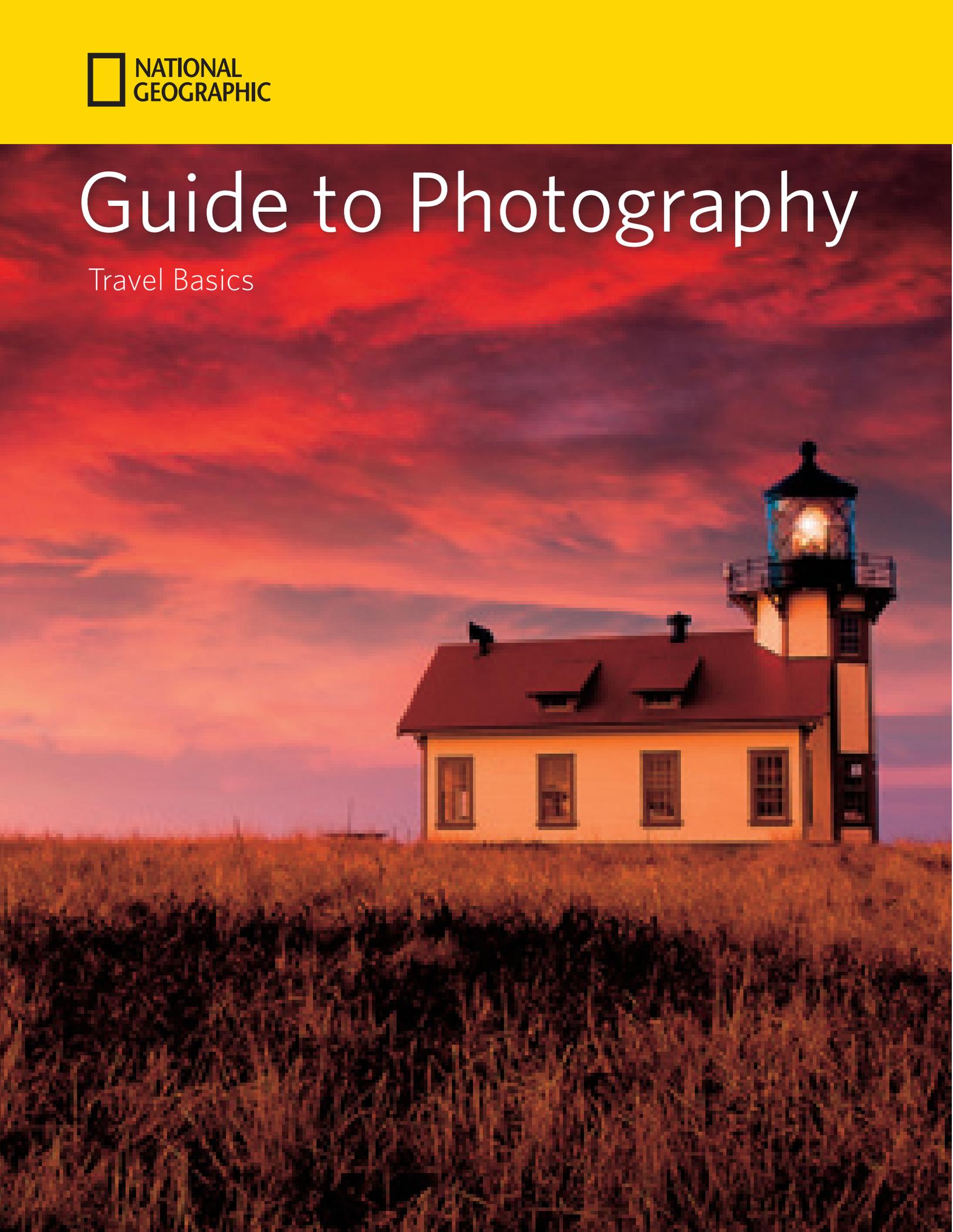


Guide to Photography

Travel Basics



▶ Taking a Picture

CREATING A PHOTOGRAPH requires only the single act of pushing the button that triggers the shutter, which is a moving curtain that lets light fall on the digital sensor for a set length of time. Everything else is preparation and internal mechanics. Photography, in other words, can be 99 percent anticipation and 1 percent action. The parallel between a photographer and a hunter, in which the trigger pull is analogous to the push of the shutter button, is obvious. Both shoot. But a hunter sends out a missile; a photographer draws in reflected light. He or she must make an artistic calculation beyond simple aim. Modern digital SLRs, increasingly user-friendly, allow photographers to concentrate more on that aesthetic than on mechanics.

1. Framing the Picture

- Light enters the lens.
- Light bounces off reflex mirror and through pentaprism to viewfinder.
- Photographer sees what the camera sees through the viewfinder.

2. Taking the Picture

- Photographer depresses button.
- Reflex mirror rises.
- Shutter opens at designated shutter speed.
- Aperture opens to designated measure.
- Light travels straight to sensors.



THE MORNING SUN washes this frozen landscape in a red glow of low-temperature light.
Octavian Radu Topai/National Geographic My Shot

► The Art of Photography

PROFESSIONALS often say they “make,” rather than take, pictures—a distinction that implies creative collusion between machine and operator, rather than a simple confluence of light and space.

In every carefully considered photographic accomplishment, four elements are vital: subject, composition, light, and exposure. In this book, we will use the shorthand of the icons below to highlight the choices that make a successful photograph.



Rita Mantarro/NG My Shot Puglia, Italy



SUBJECT

Most photographers document only family history—birthdays, weddings, graduations, or holidays. Others expand to nature or sporting events. A few make art. And some make art of all their pictures, no matter the subject. Shoot what’s important to you.



COMPOSITION

Good composition usually means unity and balance in shapes, colors, and textures. But mood, emotion, and actions are often enhanced by flouting conventional photographic rules; if it works, it works.



LIGHT

Landscape photographers will say they’re “waiting for the light.” Photojournalists must often use ambient light. A studio photographer creates his or her own, with lamps. But all know that light—low, soft, harsh, warm, or diffuse—is critical.



EXPOSURE

The amount of light that falls on the sensor must be calibrated by the size of the aperture opening and the speed of the shutter. Proper exposure is considered to be a full range of tones, from deep shadows to bright highlights, all with good detail.

► Focal Point

EVERY PHOTOGRAPH has a point of interest—and that point should be clear to the viewer. We look at photographs in much the same way we read text—from left to right and top to bottom in Western culture. The viewer’s eyes should not roam aimlessly around the frame. They should be guided to the point of interest. But that point should not always be in the center of the frame. Such shots can seem static, and thus boring. An off-balance composition can be very entertaining to the eye.

A focal point placed just to the left of center, for example, guides the eye to explore the remainder of the frame, where secondary information such as weather and environment can be used to round out the mood and fullness of the shot.

CLOSER, CLOSER

“Get closer” has become one of photography’s mantras, and it usually holds up. Make the object of your shot stand out. If you can’t move closer physically, use a longer lens.

Always think about what you are trying to say with an image. If you are making a photograph of an isolated farmhouse on the prairie, it must be large enough so that people can see what it is, but it shouldn’t fill so much of the frame that the viewer loses the sense of its environment.



THE BALTIMORE ORIOLE investigating an orange in the foreground—clearly this photo’s focal point—creates an energetic counterweight to the bird out of focus behind. **Mark Lewer/NG My Shot**

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▶ Framing

BECAUSE MOST OF US hang pictures on the wall and peer through windows, we have a well-developed sense of frames. But just as a hanging frame enhances a photograph, a frame element within the picture itself can enhance or emphasize the point of interest. A “frame” in these terms is an object in the foreground that lends depth to the picture. It might be a branch with leaves, the mouth of a cave, a window, a bridge or column, or a colorful doorway.

FRAMES SHOULD SUIT SUBJECT

Framing objects should be part of the environment, have aesthetic value, and be

appropriate to the subject. Just as a Rembrandt painting is unlikely to benefit from being displayed in a thin aluminum frame, a centuries-old mosque should not be framed by new concrete covered with graffiti.

The interior frame should not draw the viewer’s eye away from the center of interest. If it is much darker than the subject, or in deep shade, it may be rendered as a silhouette. The frame should be either in sharp focus or completely blurred. For architecture, it’s best to keep it sharp. For horizontal landscapes, a foreground of flowers or bushes can frame the background while hiding irrelevant clutter or space.

▶▶ **Don’t use the camera rectangle to frame all your pictures. Look for other framing possibilities within the scene, such as an arch or the shaded walls of a canyon.**



AJ Wilhelm/National Geographic My Shot Washington, D.C., U.S.

▶ The Rule of Thirds

IF THE CENTER OF ANY PICTURE is not a satisfying resting place for the eye, where is the best resting place? Artists, designers, and photographers have learned to follow the helpful concept known as the “rule of thirds.” Imagine that the camera’s viewing screen is etched with four grid lines (as in the photo below), resembling a tic-tac-toe game. As you look through the viewfinder at a scene, place the subject at one of the imaginary grid intersection points, often called a “sweet spot.” This gives the image

an overall dynamic balance. You can also place a center of interest and a counterpoint at opposing intersections.

Balance the composition so that both sides are pleasing but not of equal size, shape, or color. A small area of vivid color in one part of the picture will balance a larger area of less intense hue. A small animal will balance a large inanimate object. It will usually be clear which intersection is best, because whatever else is in the frame will either strengthen or detract from the image.

▶▶ **To get an idea of how effective off-center composition is, glance at some magazine covers. You’ll notice that the subject’s head is usually in the upper right of the frame so that our eyes travel first to the face and then left and down.**



IMAGINE YOUR PHOTO divided by lines into nine parts. Composition works best when the focal point occurs near one of the “sweet spots” where lines meet. Yves Schiepek/National Geographic My Shot Vietnam

▶ Leading Lines

LEADING LINES ARE LINEAR ELEMENTS in a composition that can carry the viewer's eye to the point of interest. They also create a three-dimensional quality on a two-dimensional image, through perspective. The painted center stripe on a highway, for example, seems to get smaller as it recedes, both as you're driving and as seen in a photograph. Conversely, a strong line badly positioned will tend to take the eye off to the edge of the picture and shatter the composition.

Landscapes and cityscapes are full of linear elements—roadways, train tracks, fencerows, ridgelines, tree branches, rivers and streams, boulevards, and rows of lights. Perhaps there is a driveway snaking its way to a farmhouse, or a fence slicing through the wheat, or the sweep of a curb, as in the photograph on the right, which ties two people into a relationship that otherwise may have been overlooked. Most subjects

contain strong lines, some as obvious as a river, others as insubstantial as a shaft of light or a fold in a scarf.

Leading lines are most effective as diagonals, and they work particularly well when the lines originate from the bottom corners of photographs: a winding road, for example, leading to an old church, or the Great Wall of China starting in the bottom corner of your frame and then leading the viewer's eye into the center of the picture. Depth of field is important when composing leading lines. If the line begins at the bottom of the frame, both the line and the main subject should be in focus.

Lines also have a more subtle effect on the viewer. What mood do you want to convey? Lines will help you do so. Horizontal lines usually convey serenity. Vertical ones emphasize power, and diagonal ones imply action.

▶▶ **Leading lines help carry your eye across the image, making it look and feel more three-dimensional. Winding roads, power lines, staircases, and fences are just a few of the features that can add this element to an image.**

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▶ Sense of Scale

WE HAVE ALL SEEN PHOTOGRAPHS of the Leaning Tower of Pisa in which a person in the foreground seems to be holding up the tower with his hands. Such a photograph is a trick of scale, a play on the relative size of objects in the frame. If posed side by side, the tower of course would be much bigger than a man.

Photography can sometimes distort scale, especially when objects are not recognized. Archaeologists and other scientists who gather unfamiliar artifacts often place a simple ruler beside the object before photographing it. Knowing the exact length of 12 inches allows the viewer to visualize the size of the artifact.

DOES IT READ?

When we look at landscape photographs, our minds make a series of mental adjustments based on previous experience. We've seen so many pictures of the Grand Canyon, for example, that we can easily work out its size. It's much more difficult to estimate the size of unfamiliar places or features.

When the subject is of indeterminate size—a mountain, a body of water, a stone

wall—a sense of scale can be achieved by including something of known size, such as a person, a car, a tree, or an animal, in the picture beside it. A human figure standing next to an oak lets us know just how big the tree is, and a cow standing in a field helps us comprehend the extent of the pasture. Photographing a cliff, a photographer might wait until some hikers pass along the trail to show its sheer magnitude. Giant excavation machines might seem ordinary until a picture reveals that a workman's head reaches only halfway up one of the tires. Lacking that sense of scale, a picture sometimes is not intelligible. "It doesn't read," a photo editor would say.

PERSPECTIVE HELPS

Sometimes perspective allows us to clarify scale. The location of the base of an object in an image is a clue to its distance from the camera viewpoint.

In landscapes, the ground or ground plane visually rises toward the horizon. The higher up in the ground area of the picture the base of an object is located (up to the horizon), the farther away it seems from the viewpoint.

▶▶ **When photographing vast landscapes or large objects, juxtaposing something familiar in size—such as a person, an animal, or a landmark—helps the viewer understand how large the main subject is.**

► Color

COLOR IS THE MOST SIGNIFICANT ELEMENT in composition, because each color carries its own “visual weight,” the extent to which it commands the viewer’s eye in an image. Color photographs that work in good compositions may be lifeless if shot in black-and-white, because of the color weight of certain hues.

For example, even a small spot of vivid color or a patch of white creates a center of interest if backed by large areas of duller tones. A spot of bright green in an otherwise dun landscape will carry as much visual weight as a large boulder. Despite their contrast in size, they will balance each other in a composition.

BLOCKS OF SHAPE AND COLOR

Blocks of color of the same hue or different hues of about equal tonal value can enhance and give depth to an image. The repetition of color and shapes will be pleasing and invite the viewer into the frame.

Colors can give a warm or cold feeling to a picture, reflecting our preconceived views on color. A winter scene can be enhanced by the use of blue in the picture to give that chilly feeling, for example, or a red beach umbrella on golden sand can evoke the feeling of warmth. But rigid rules can be misleading or irrelevant when applied to color choice: The photographer must trust his or her aesthetics or taste.

►► **Since we usually look for details, it can be harder to see blocks of color or shape. Squint a bit. Details will blur, and you will see things as masses.**



Chasen Armour/ National Geographic My Shot Tanzania

▶ Packing to Take Pictures

BEFORE YOU EMBARK ON YOUR NEXT JOURNEY, think about what equipment is essential to get the kind of photos you want to shoot and how much extra weight you can handle. While compact point-and-shoot cameras mean you need no additional camera equipment, you won't have the control you would with a digital single-lens reflex (DSLR) and several lenses, and often the pictures won't be as good.

Most professional photographers travel with at least two DSLRs, usually identical models that take the same lenses. Professionals generally mix and match zoom lenses with fixed-focal-length lenses, depending on what they're planning to shoot. Filters, flash units, memory cards, and cables fill out the camera bag.

▶▶ **Bring a few filters.** The basics include ultraviolet filters to protect the lens, polarizing filters that cut glare and haze, and graduated density filters to balance the range of darks and lights.

One or two zoom lenses, with a coordinated combination of focal lengths, are a practical alternative to numerous fixed-focal-length lenses.

Bring at least one backup for every replaceable part, such as batteries and memory cards.



▶ Seek the Authentic

TODAY'S TRAVELERS are intrigued by the authentic. We like places that still have their own distinctive identity—culture, heritage, environment. Photography, particularly travel photography, has a role to play in helping to document what's left of the authentic.

Authentic culture is sometimes as close as the nearest market or festival, and these are likely to be on the tourist trail. But often you have to arrive early or leave late to really see life as the people live it. The best photographs of another culture will be founded on relationships that you establish with the people there. Show respect and appreciation; spend some time getting to know the place and letting its people come to know and trust you.

▶ **Research your trip** in advance and find out how you will be received. Always ask permission before shooting.

Go early and stay late to take advantage of the quiet hours if lots of tourists are visiting your destination.

Learn a few words of the local language, and express genuine interest in the people you meet. Engagement creates rapport.

Hire a guide to take you places that tourists don't normally go. Choose someone of the local ethnicity—they know the language and customs.



Sharon Tenenbaum/National Geographic My Shot Myanmar

► Photographing People You Don't Know

WHILE TRAVEL is about destinations, as often as not our travel photographs feature people as subjects. Their manner, dress, and activities reveal as much about a place as its architecture and topography.

Start with people you naturally encounter on your travels—your cabdriver, a shopkeeper, a hotel clerk. People are proud of their work, and it's often easier to photograph them in that context than it is in a private moment. When you're ready to approach a total stranger, remember there's a reason that person caught your eye. Express your curiosity, and you'll find most people willing to talk. Before long, you can get around to asking if you can shoot some pictures. Approached in the right way, few people will refuse, and many will be delighted.

► **Befriend people first, and then take the picture.** That makes the encounter into a rich and rewarding experience.

People in heavily visited areas may ask for money to be photographed. Use your own judgment. Those who do so may well be anything but authentic.

In cultures where photography is uncommon, show your subjects the picture on the camera's display screen. It lets them know what you're up to.



Yasmin Shirali/National Geographic My Shot Massachusetts, U.S.

► Photographing People You Do Know

IT'S A NATURAL THING to want to take photos of the people you travel with, especially in front of key landmarks. For pictures that both of you will treasure, use your imagination to go beyond the obvious: Find an interesting angle; watch for moments of activity, not just poses; look for a way to capture the fun of traveling together (as in the photo opposite).

►► **Make photos of people** near famous statues or well-known landmarks special. Find an unexpected point of view, long depth of field, or humorous interactions with the landmark.

Photograph friends engaged with the destination, not just staring at you. Photograph them looking at the view, inspecting the flowers, or pointing the way instead of just smiling at you.



Markus Urban/National Geographic My Shot New York, New York, U.S.

▶ Capturing the City

CITIES ARE DIFFICULT SUBJECTS. Look for ways to photograph the experience instead of its the structures. Famous sites make good background elements, but structures alone can seem dead unless you find a novel approach.

Another key is to develop a shooting list: a checklist of the neighborhoods, buildings, parks, or places vital to the city that you want to be sure to photograph. Then, when you arrive, spend a day scouting out those areas. Look for ways to add a sense of place to your images—for instance, a rainy street scene (as in the photo opposite) can capture more character than a sunny straight-on of a famous landmark.

▶▶ **Be mindful of distances and transportation options in large, sprawling cities. Use subway and street maps, or a GPS, to plan your route.**

Break down your shooting list by time of day—perhaps markets in the morning, romantic scenes at dusk, and the theater district at night.

Shoot interiors—restaurants, shops, or galleries—at midday, when the existing light is harsh outside but at its peak inside.



Adam Regan/National Geographic My Shot

▶ Discovering the Country



Christiano Pessoa/National Geographic My Shot Brazil

TRAVEL IS ABOUT ESCAPE, and the urge to get away often leads to the countryside. Make the most of photo opportunities there, doing pretrip research just as you would when photographing a city.

Most likely you'll travel by car. Drive slowly. It's easy to zoom past good pictures. Subjects can be more subtle, less in-your-face, than those in cities. Stop often. Talk to local people in small-town diners and cafés, and it can open doors. People who live quiet lives may welcome the attention of a stranger taking pictures.

To do justice to wide-open landscapes, try using a wide-angle lens or shoot a panoramic photograph. Consider unconventional framing for an uncommon view.

▶▶ **Avoid the obvious.** If everyone else is photographing a spectacular sunset, turn around and shoot the scene in the waning sunlight. That's where the best light is.

Use silhouettes. Backlighting from the late afternoon sun can create dramatic images.

Shoot when the ocean is bluest. In the Caribbean, that means shooting at midday instead of dawn or dusk, when light bounces off rather than enters the water.