

Small Subjects, Big Lessons: Photographing Shiny Objects

By David Hayden

Like most photographers I know, I started as an opportunity shooter. I wandered around looking for something interesting or beautiful I could capture on film. My general attitude was that if I could get a few good photos out of a roll of 36 exposures, it was a good roll. If I got one outstanding photograph out of fifty or a hundred exposures, I was doing well.

At some point, I became more interested in studio work. Partly driven by the desire to create more intentional photographs without having to get up before dawn or miss dinner because of a late blue hour. The other reason was that I was growing tired of relying on luck or atmospheric conditions far outside my control.

I started collecting little subjects from around the house. Figurines, glasses, bottles, pieces of metal, and anything else that seemed interesting enough to place in front of a camera. Some subjects were straightforward. Others seemed almost impossible.

The worst offenders were shiny objects.

No matter what light I threw at them, they looked amateurish. Highlights appeared where I didn't want them. Reflections showed up unexpectedly. Glass looked dull. Chrome looked chaotic. Every adjustment seemed to create a new problem somewhere else.



Then I heard a concept from photographer Don Giannatti during one of his CreativeLive courses.

In not so many words, Don said, "Don't light shiny objects. Light what they reflect."

At first, I thought I understood what he meant.

Then I spent the next several years discovering what he actually meant.

Most of us come to photography through subjects that primarily absorb light. Landscapes, flowers, wildlife, and portraiture all train us to think in similar ways. We think about where the light is coming from, how strong it is, and how it shapes the subject.

Reflective objects force us to think differently.

A polished watch, chrome sphere, wine glass, or pair of eyeglasses is not simply being illuminated. It is actively showing us its environment. Every bright shape, every dark edge, and every highlight is a reflection of something surrounding the object.

Eventually I realized that I had been approaching these subjects backwards.

I was placing the object on the set and then trying to figure out how to light it.

Today, I usually begin by looking at the environment long before the object is introduced. What will the object see? What bright surfaces are present? What dark surfaces are available? Where are the windows? Where are the light sources? What distractions might appear in a reflection?

Once a reflective object enters the scene, every one of those decisions becomes visible.

In many ways, photographing reflective objects has more in common with portrait photography than people often realize.

Experienced portrait photographers learn to study catchlights. A quick look into a subject's eyes often reveals the entire lighting setup. The size of the modifier, its position, whether a reflector was used, and sometimes even the shape of the room become visible in the reflection.

Reflective objects simply extend that idea across the entire surface.

Instead of a tiny reflection in an eye, the entire subject becomes a reflection.

When photographing shiny objects, you aren't fighting unpredictable light, you are observing physics. The fundamental rule governing every reflection on your subject is a classic physics principle:

The Rule of $AI = AR$
Angle of Incidence (AI) = Angle of Reflection (AR)

The challenge is that most of us haven't spent much time thinking about the environment from the object's point of view.

Once you start looking from that perspective, a lot of confusing behavior suddenly makes sense. This is also where flags and bounce cards become some of the most important tools in the studio.

When photographing portraits or landscapes, we often think of adding light. Reflective subjects frequently benefit from subtracting it.

A black flag can create shape where none exists. It can darken an edge, separate a reflective surface from the background, or eliminate an unwanted reflection. Sometimes a piece of black foam core has more impact on a photograph than another strobe.



Metal Artwork by Tom Osner

White cards work the same way in reverse. They create clean reflections that define shape and structure. What appears to be a highlight on the object is often nothing more than the reflection of a carefully positioned white surface.

This realization changed how I think about lighting. I no longer ask, "How should I light the object?" I ask, "What do I want the object to reflect?" Those are very different questions.

Exposure introduces another challenge.

Photographers who spend most of their time with landscapes or portraits are accustomed to protecting highlight detail. Reflective subjects require even more attention because specular highlights can approach the brightness of the light source itself.

Unlike diffuse reflections, which spread light across a surface, specular reflections remain concentrated. A polished metal sphere reflecting a softbox may contain areas that are nearly as bright as the softbox itself. As a result, exposure decisions become less forgiving.

Blown highlights often occur long before the rest of the subject appears fully illuminated. Learning to recognize and control those bright reflections is an important part of working with reflective materials.

Fortunately, the solution usually isn't more equipment. It is observation.

The longer I work with reflective subjects, the more I appreciate how much they reveal. They expose relationships that other subjects allow us to ignore. They reveal the position of lights, the shape of modifiers, the brightness of walls, and the clutter sitting just outside the frame.

Perhaps most importantly, they reveal the photographer's understanding of the environment.

That may be why reflective objects remain such valuable teachers because they reward careful observation and punish assumptions. And once you begin seeing what they are reflecting, it becomes difficult not to notice those same relationships everywhere else.

But enough about my experience, it's time to build your own. Let's start real simple.

A couple of Exercises

Observation

Stand in front of a mirror, but instead of looking at your reflection, look carefully at everything that being reflected. You can even bring your hand up to eye level and point to various objects you see reflected. What you will likely notice is the angle of your finger pointing at the reflection is the angle at which the object presents to the mirror.

Simple enough.

Now place a shiny spoon on the counter or table and notice all those reflections coming from everywhere. As you do, pick any reflection and try to block it with your hand. Naturally, you will see your hand reflected where maybe there was a window or chair or your cat.

Ask yourself, what could I use to block this distraction/reflection that would be complementary. You could hold up a sheet of white paper near the spoon so you get a smooth reflection in that spot. Or maybe darken that side of the room if you can and see what happens when you subtract light from that area. This is often referred to as using "studio black."

The lesson here is to notice which reflections are important and which ones are not. Notice which reflections naturally tell you it's a spoon and which ones tell you it's a spoon in a kitchen with flowers on the counter next to a glass of water with a photographer staring at it with a silly look on their face.

Controlling Reflections

Now, looking at the spoon, try and figure out how you could get a smooth highlight just on one side of it. Take your white paper while still staring at the spoon and move that paper around until you have a nice straight highlight where you want.

Now, notice what happens when you move the paper farther away or bring it in close. Keep doing this until you understand how quickly the scale of the reflections change with even the slightest change in distance. A few inches can make the difference between a nice highlight and a white rectangular blob.

Repeat the above exercise using black foamcore or construction paper.

If you can, get a friend to help you and move both the black flag and the white bounce card at the same time. Notice the point where just the right placement can make the difference between a nice spoon photograph and abstract art.

There is another observation worth making before we move on.

Many photographers initially view reflections as a problem to be solved. I know I did. Every bright shape seemed like something that needed to be removed. Every reflection felt like a distraction.

The trouble is that reflections are often what tell us the object is shiny in the first place.

Imagine a polished chrome sphere with no reflections at all. What would it look like? Most likely, a gray circle. The reflections are what reveal the shape, surface, and character of the material. The same is true of glass, silverware, watches, and countless other reflective subjects.

The goal is not to eliminate reflections. The goal is to control them.

As you continue experimenting with your spoon, pay attention to which reflections help define the shape and which ones pull your attention away from it. Try replacing a busy reflection with a large white card. Then try replacing it with a black card. Notice how dramatically the appearance of the spoon changes even though the spoon itself never moved.

This is often the first clue that you are no longer lighting the object directly. You are shaping what the object sees.

That distinction becomes increasingly important as subjects become more reflective.

We've already discussed the concept that Angle of Incidence equals Angle of Reflection. Fortunately, you do not need to memorize the physics to make use of it. What matters is understanding that reflective surfaces behave predictably. If you can identify where a reflection is coming from, you can usually predict what will happen when you move, block, brighten, darken, or replace it.

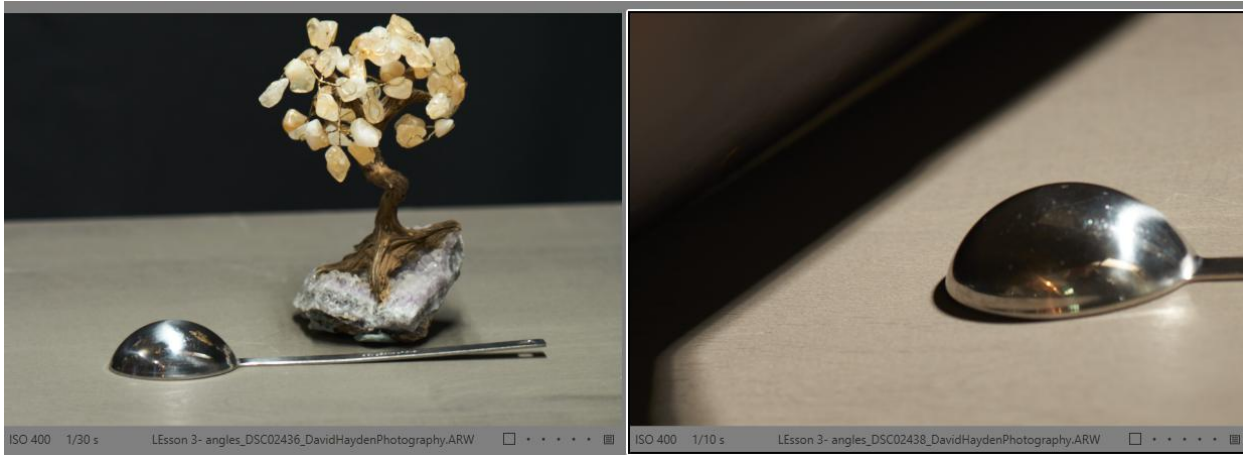
Over time this becomes less of a technical exercise and more of an observational one.

When you stop asking, "Where should I place the light" and you start asking, "What is the object seeing right now," a whole world of opportunity opens up to you.

Over time, this becomes less about reflective objects and more about learning to see. The same observational skills that help us photograph a spoon eventually help us photograph glass, chrome, jewelry, watches, eyeglasses, and countless other reflective subjects.

More importantly, they teach us to pay attention to relationships. The relationship between the subject and its environment. Between light and surface. Between what we intend to photograph and what is actually influencing the photograph.

Reflective objects simply make those relationships impossible to ignore.



In the left frame (DSC02436), the spoon acts as a mirror, catching chaotic reflections of the crystal tree behind it and the room's ambient light. On the right (DSC02438), by introducing a flag to block the background clutter and slowing the shutter speed down to 1/10s to capture a deliberate, smooth gradient bounce, the spoon transforms into a different, more dramatic shape..

Extra Credit: The One Spoon Challenge

Using nothing more than a spoon and simple reflectors or flags, create three distinctly different photographs of the same spoon.

Try creating:

- A bright, airy image
- A dark, dramatic image
- A product-style image suitable for advertising

The challenge is that the spoon itself cannot change. The camera angle can change if needed, but the real goal is to alter what the spoon is reflecting rather than relying on heavy post-processing.

As you work, pay attention to how white cards, black cards, windows, walls, and room lighting influence the final image. You may be surprised by how much control you gain without ever touching the spoon.

When you're finished, post your images to the Photo Club Facebook page. Include a brief note about what you discovered along the way. The most valuable part of this exercise is often not the final photograph, but the observations made while creating it.