We have to talk about composition of your images but it's very difficult to separate the idea of composition and point of view, background.

And even lighting, they all go together.

When you adjust your light -- you'll see later -- you're going to get a different kind of shadow and that shadow becomes part of the composition.

So, we've attempted to separate them into three categories, but really they are very closely connected and it's something to keep in mind.

So let's start with these leaves, these autumn leaves that I put on a light box, which you will see more of when we talk about light.

In fact the light box itself is an important compositional element in this image because it's giving us a very strong negative space between the leaves.

And, it could be an interesting thing to play around with, using the background as part of your composition.

Something to think about.

Taking a look at these crystals, which I just randomly placed on a background just to show the ability of creating these crystals.

Uh, this is, you know, an okay image.

Um, by the way, notice how the shadows of these crystals become part of the composition.

What I finally decided to do was, simplify the image and just selected four crystals and made a more close, close-up shot of them.

They're both fine and and that's one of these issues about what's better.

I mean, we could split hairs and -- I really don't think there's any...we could argue either way.

That's the fun part about this.

Once again, there are no rules to any of these things.

One of my gut ideas, which has no data associated with it is I think it's more interesting to show two of something rather than show one.

And I suppose that I could speak to some psychologist and discuss whether we really do perceive it more.

I don't know, I just, it's just the way I do it.

And I'm suggesting that if you like what I do, then maybe you'll wanna do it, too.

I did take these two devices (by the way, it does show that you can do more than one, you can create more than one) and I photographed it this way.

I photographed it in my studio with a skylight above.

And notice there is a little problem with depth of field.

The one above is not really as sharp as it should be.

And so I stopped down, which you know, that what that means, so that the aperture became smaller and I gave myself more depth of field.

That is I got more in focus.

And what [laughing] happened was, I got so much in focus that I could actually see the detail of the skylight with the clouds showing through.

This is tangential to the point, but it's all connected and you have to really pay attention and learn to see what it is you're getting at.

Eventually, I would up, I thought that this next image was the best.

Again, using two and not necessarily showing exactly the edge of each, I think it's an interesting idea to not completely finish the image.

Let the viewer finish it in more of a participatory involvement, perhaps.

ONCE AGAIN THIS IDEA OF TWOS: Here are two balls that have so small a pattern that we're seeing light refracting.

And here are two silicon chips that have material embedded on it.

Again, I decided to do it in twos.

Here's another two duet, two petri dishes of E. Coli growing.

By the way, notice the composition: It's not exactly equal, equally divided.

I have one a little more than the other.

For our book, No Small Matter, we wanted to talk about self-assembly.

Actually these are two acrylic dishes with acrylic balls that literally line themselves up and I did it in twos as well.

You know, again, it's an idea that I'm comfortable with.

It's actually easier to compose when you have two things.

At least it is for me.

You might give it a shot.

You might think of using the process of composing your picture as means of telling a story, a visual story of what your devices are about.

What you're seeing here, you're seeing basically three components of an image.

You're seeing the underside of a wafer on your upper left, the green upper left.

And that wafer has fabricated on it small chips.

So the fuchsia color is what the wafer looks like as a whole.

And then we we have the individual chips on top of the larger wafer.

So you'll see the individual ones as well.

So trying to sort of say this is a fabrication of these particular chips that deliver drugs.

That's why we wanted to show the underside of the wafer.

By the way, all this needs to be discussed in a caption.

None of this works without text, but uh this is an attempt to visually describe what this is.

In this next one, these are fibers that are constructed so that they have different optical qualities.

And the attempt was, I tried to weave them in sort of a [laugh] fabric because that's what they were thinking of

making it work with.

They were imagining these fibers literally being woven into clothing.

I don't know if it ever happened, but this is a number of years ago.

Once again telling, suggesting the use of material.

In this next one I was just playing around with, this was trying to show glass when it's treated properly.

You see on the upper right and the lower right when glass is treated in a certain way it shatters properly and safety wise whereas the other one in the more triangular area, it's just not the way that we wanted.

It is a little too artsy probably or many of you, but again, I was just playing and I do want you, as I continue saying, to play with this stuff.

The next one it was about corn that was treated in a particular way and I decided to use the containers, the plastic material that it came in as a suggestion of how these are delivered.

And finally, just some devices that evolved over time.

These are various iterations of a particular idea and we see how they changed, how they evolved, telling a sort of chronology of these particular devices.

This is an example of really stretching our imagination.

It's of the watch that we've seen before on my computer screen as well, which I have focused in on and we're seeing a detail of the watch.

Using the computer screen as another light source but a compositional one as well.

So here I'm selecting the image of the watch on the screen.

I don't like the colors here.

That's what we're doing here, we're basically going to be matching the colors.

So I selected the watch then inverted, selected the real watch, as opposed to the screen, and now we have an image that is balanced, color-wise.

Just imagine, perhaps, another kind of image on your screen with your device.

Maybe to expand the explanation of how your image works.

Something you might want to think of, using your own imagination.

So this is just a hint [laugh] of what you could do with composition.

And, as I said before, it's very difficult to separate this idea of composition with point of view and backgrounds, which you'll see in very shortly.

So, you know, it's all connected and I could have very easily put some of these in other categories, but thought it would be fun to just try for myself, by the way, in separating them, but they are truly very much connected.