Hello, this is Eric Bobrow, and this lesson will continue on our exploration of the Interactive Legends and Visual Favorites, and look at a number of variations that can make this even more effective and versatile.

Here we have a version of the project that I just started as an example, just putting a few walls and components that I had eyedropped from the legends. And we'll just briefly recap one of the issues with the system that I have currently outlined for you, is navigation. [:47]

Suppose I want to go get a new wall type. For example, I want to pick out an interior wall type. I would have to zoom out to Fit In Window here, and then go zoom into the area of the walls that I want. And perhaps then eyedrop the wall type that I want. And then go back, perhaps retracing my steps here, and then now I can actually draw walls. [1:17]

So the challenge is that I have to continually navigate back and forth between the area that I'm focused on. And I may be in a large project, and I may be focused on a room, and need to go get some components. And again, I need to go find it, say zoom out. And say I need to get some cabinets or some other elements, and zoom in on them. And then I can use the eyedropper again, and pick up the settings for a cabinet, and then go back here to zoom in on the area. [1:55]

So, this particular navigation issue is compounded by the fact that I may want to have the building without the legend showing. So when I go to 3D, so here's my view. And if I say Fit in Window, now there's nothing else visible. So I would need to have to switch views as well as zoom in and out to access the Kit of Parts. [2:22]

So let's look at a variation that allows the legend to be accessed directly from a worksheet. Many people have asked me about how we manage to have the interactive legend in a worksheet. And I'm going to demonstrate that to you now. Worksheets are an area of ArchiCAD that were introduced in I think version 11. We right click on the worksheet group in the project map. I can create a new independent worksheet. This is only one way the you can create worksheets, but it's the one that I need right now. And I'll just give it a name. Let's say, "Interactive Legend - 01". So "IL" and call this "Interactive Legend". Now, I'm creating this worksheet here, and it's blank. [3:16]

So initially, every worksheet is going to be blank when you start out, if you create an independent one. If you use the worksheet tool, you can actually use that to copy information from the plan or any other view, into the worksheet, and create essentially 2D representation of whatever you were looking at. [3:37]

Now, you'll notice that in the worksheet window, all of the 3D tools are gray on the left hand side here, whereas we do have access to all of the standard 2D tools. And this is why people ask me, how do you get 3D stuff into a worksheet, if you're using it for interactive legends? After all, we can't place walls, or doors, or windows, or roofs, etcetera, into a worksheet. And we can't even paste them in. If you do paste them, they will come in as line work. In other words, they'll be converted into their graphic equivalents, much like when you select things and explode them on the plan. [4:15]

So how do we get this effect of having a worksheet with the Interactive Legend accessible? The answer is Virtual Trace. So I'm going to go back to the View Map right now, and say that I would like to make the Legend

view as a Trace Reference. So I'm going to say, "Show As Trace Reference". And once I do that, you can see, we're looking at a little bit of the building that sticks out here. And if I do Fit in Window, we'll see the building and all of the Interactive Legend components. [4:50]

Now, it turns out that I can zoom in on this, and let's say, look at the wall types. And I can use the eyedropper. So I can use the eyedropper, let's say on this very thick wall type here. And I can go back to the floor plan. So let me just switch windows here to the floor plan. You see I'm in a worksheet, and I go back to floor plan, and I can go and draw. And you see that I've actually got this very thick wall that I've eyedropped. So in other words, from the worksheet, I'm able to do that. [5:28]

Now, this is actually a separate window. If I drag the floor plan window down a little bit, you'll see that these two windows coexist. What that means is that I can easily go and switch here, and let's say I wanted to get an interior wall, a thicker one, and I can eyedrop that. And then I can click on the part of the floor plan and just draw. I'll just draw in a couple pieces of wall as an example. So these two, I can go back and forth very easily. [5:59]

Now, the worksheet here, when I click on it, it does bring up that window to the front. So it's totally effective, but the appearance of it is a single color. This is just one of the options for Virtual Trace. When I click on the Virtual Trace Popup, and say I'd like to bring up the Trace And Reference Palette, I'll see that the Trace Reference is right now set to be a single color, blue. I could make it red, I could make it any other color. But, an option that people don't frequently use, but is perfect in this case, is to say, "I'd like to look at this in the original color". And I choose that. You'll see that it now looks exactly like it did when I was looking at it directly on the floor plan. [6:46]

So, it now really is much easier if I say Fit in Window here, to look at this and zoom in, and perhaps select elements, and look at their colors. And just basically feel like these are the real elements, rather than being a Virtual Trace. But remember, this Virtual Trace, if I turn it off, if I click on this button, it disappears entirely. Because, there's nothing in this view. All I have is a reference in the background of this view. That means I can't actually select anything. If I have the Arrow tool, and I try to click on this, it will say, "This Element Is Inactive In This View". [7:30]

It recognizes that I'm pointing at an element, but it says you can't select it, because it's not actually active in this view, it's in the Trace Reference. However, what I can do is use the eyedropper. And so I can pick up the settings of this, and then I can go back for example to the plan, and place elements like that. [7:48]

So that's the basic strategy for working with the Interactive Legends in a worksheet, is that they don't live in the worksheet, they're just viewed in the worksheet. Now let's refine this approach a little bit. I'll move the plan view back to here. So one thing, of course, is we can actually have the plan and worksheet side by side, or partially exposed, and click back and forth. I can also go to the Window menu and say, bring up the worksheet here. And I can go at any time and go back to the floor plan. [8:28]

Of course, the floor plan has a shortcut, F2, that I think most people find easy to remember, because it's 2D

rather then 2D, so F2. But the worksheet doesn't have a shortcut here. However, if you right click in empty space, and you have nothing selected, there is a special menu that says Go To. That's a special menu item, one of the options here is "Last Worksheet". And so if I select that, it does bring up that worksheet. So I can hit F2 to go back to the floor plan, draw some stuff, and then when I want to go back to the legend, I can say, "Go To, Last Worksheet". [9:11]

Now you can set up a keyboard shortcut, which is what I have done in my copy of ArchiCAD. And you'll notice this little up arrow, that means the shift key. So I'm saying, if I press down Shift and the letter "W" on the keyboard, it will jump to the last worksheet. So to demonstrate that, I'll click here, and I'm not touching the mouse. And I'm going to hold down the Shift key and type "W". And you can see that it brings back up the last worksheet. So I can now switch back and forth between the legend and the floor plan, by hitting Shift+W and F2. They'll go back and forth. [9:45]

You can set up your own keyboard shortcut by going to the Options, Work Environment, Keyboard Shortcuts. And this is something that you can do at any time to add more convenience into ArchiCAD. One little trick here is that if you look in the current menu structure, and you try to say, where is the last worksheet? It may be a little bit hard to find. We may be able to find it under the View, Navigate Here, and let's say we have worksheets. But worksheets here, this actually only allows us to select worksheets on the fly from that menu. There's no particular shortcut that's going to get the last worksheet up from a keyboard press. [10:32]

So instead of looking at commands by current menu structure, we can say I want to look at all commands in alphabetical order. Not everybody knows you can do this, or what this is for, but what this allows you to look at all the commands ArchiCAD has, and you can scroll through here, and also type a letter like "L", and you can click in here to activate this area, then hit a letter like "L", and it will jump down to be area where the first command that starts with an "L" is. The reason why I did "L" is because "Last Worksheet" is the command that we want. [11:10]

And you can see that I've got a shortcut set up, Shift+W. To add another shortcut, you can easily type it in here. So if I typed in Shift "T" or something like that, it says, you could use that, but there's a conflict, because it's used for the top elevation, when you want to see the height or the top elevation of something. So I won't actually do that, I won't click the sign anyway. But this is how I made Shift+W, which I don't believe is a conflict of anything. [11:35]

So you can do Shift, or CTRL, or Command, or any combination of the modifier keys. And you could use an individual key, but if I were to type "W" for example, "W" is already in use as a toggle between the Arrow tool and the last tool you were drawing with. So I don't want to overwrite that. So, I'm just going to cancel this. But that's how you would find the shortcut that you can add to go back and forth from the worksheet to, for example, the floor plan or a 3D view, if you were wanting to be in a 3D view and go jump quickly to the legend. [12:08]

So that's the basic strategy there. You can either have these windows side by side, or overlapping each other. You can click on them, or use keyboard or mouse shortcuts to jump back and forth. Or just go from Window,

Floor Plan, to the Legend. So that's the basic idea of having the interactive legend an accessible from the worksheet. [12:33]

Now, notice that when I'm looking at this building now, if I were to Fit in Window, that we're not actually seeing the legend, because even though this view is highlighted right now, it's not the active view. The active view, if I go back here, is the building without the legend. If I activate the building with the legend, and then say Fit in Window, you'll see that the building shows up with the Kit of Parts beside it. So I'm going to turn on building without legend, and this of course allows me to use the Fit in Window nicely. [13:11]

I can zoom just on my project without having to take advantage or look at the legend off to the side. And if I do, for example, the 3D view, it will only show the components that are in the current model. So I can hit F2 or F3 to go back and forth, without having the legend there. But if I do use for example, Shift+W go to the Interactive Legend worksheet, I'm looking at a blank worksheet with a view behind it that is the building with legend view. So that again is the trick there. [13:50]

Now, let's look at some variations of this whole concept. If I go back to the other session of ArchiCAD, which was based on MasterTemplate, we'll see that there are some additional worksheets that I use for certain purposes, legend purposes. And let's take one, for example, that is the interactive legend for sections. So I double click on this, and this will bring up a worksheet that has some components for use in sections. [14:27]

So what are these elements? I'll just zoom in on it. These are elements that you could eyedrop when you're in a section, and place in, for example, some dimensional lumber, or framing, human figures to give scale, insulation, objects, and even preset labels. So when would you use these? I could, of course, switch to this, eyedrop it, and then go back to a section and place it. But what's intended here, and I'll show you how this works, is for us to be in a section. Let's say that I'm looking at a section of of this little sample project. So I'll take the section here. [15:10]

So in this section, if I want to put in some information from the legend, I can use Virtual Trace to look at that. So I'll go and take a view of the worksheet that is set up for the Interactive Legends for Sections. And I'll right click on this, and say "Show As Trace Reference". And you can see that now, off to the side, I've got these components visible. So if I wanted to put in some framing, I can use the eyedropper and say I'd like to select this, or activate that, and I'll just click. I'm just going to click in an empty space and put some of these in here. Or if I wanted to put in some human figures I could go and find this top spot here, you can see a corner, and then I can go and click, and perhaps place them at standing level. [16:08]

So you can see that I have access to this when I want it, and I can turn it off by turning off the Virtual Trace. So this is a great way to use a Legends in Sections or Elevations or Detail. So I'll bring up an elevation here. And you can see that the last time that I was working in this elevation, I had the Kit of Parts for Elevations visible. I'll just Fit in Window here. And you can see that we've got somewhat different elements. We've got some human figures, but we've also got a tree, and a car, and additional components that, if I eyedropped it, would be placed in. [17:01]

So right now, this is a Virtual Trace. If I use the eyedropper and find where the tree is, this is a 2D tree, not a 3D tree. And then let's just put it off to the side just for convenience here, I'll just click. And you can see that the tree is now drawn in into this elevation as a 2D component. Let me just turn off the Virtual Trace for the moment, just so we can see. This is now the actual elevation. And I've just placed in a 2D element. So turning on the Virtual Trace, I can have access to this as well. [17:40]

Now, the Virtual Trace, being shown in the background here, is conveniently located for this particular view. But sometimes, you will need to reposition these sort of things. So it's good to know that when you have the Trace and Reference Palette here, that if this is getting in the way, if it's not positioned in a convenient location, you can go and move this by clicking on the Reposition. I'll just move it up off to the side here. So this little button here is set up to Drag Reference. [18:17]

Now all of these options here for the Trace Reference are available in ArchCAD 11 and later, because that's when Trace Reference was introduced. So if you're in ArchiCAD 10, unfortunately, you won't be able to have an Interactive Legend like this shown as a Trace Reference. However, you can still have a separate window where you maintain these components, and go and eyedrop them. So you can at least get the benefit of having a Kit of Parts. It will just be a little bit less convenient in terms of having to switch back and forth. [18:53]

Now, all of these components here that we're looking at as the Interactive Legend for the Elevations and Sections are 2D things. So, even though it is a car or a tree, it's really just a 2D picture of the same. So that is the reason why I can have these components in a worksheet directly, like I showed you a couple of minutes ago. Because I don't actually have to have 3D components. After all, in a section or an elevation, at least at this point in ArchiCAD, you cannot draw new 3D elements. That is one of the limitations of ArchiCAD up through version 14. I don't know if that will change in upcoming versions, but at this point, if you're in a section or an elevation, you can draw new 2D elements and modify existing 3D elements, but you can't actually place new 3D elements. At least not without an add-on. There are some add-ons from some third party companies that allow you to create some new components selectively.