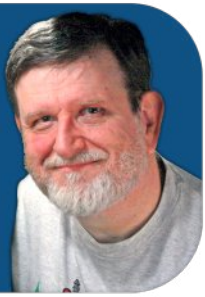
PUBLISHER'S MUSINGS



Model Railroad Hobbyist | July 2023

VIEW READER COMMENTS

JOE FUGATE TALKS ABOUT SELECTIVE COMPRESSION AND NEGATIVE SPACE ...

YOU CAN TELL A NEW MODELER HAS MADE THE FIRST big transition to more savvy modeler once they realize they can't fit the entire Union Pacific into their layout space.

Selective compression is a requirement for all but the most limited of layout scope. Basically we keep the most iconic and memorable elements of the rail line we're looking to model, and then we throw out the rest.

And what we do keep, we likewise cleverly shrink it down, dropping the number of elements down, yet still retaining the overall feel for those familiar with the prototype.

My Siskiyou Line 1 layout space was about 50 feet long in its largest dimension.

In HO, that's maybe four thousand feet at 87 to 1. Imagine the futility of trying to cram the entire Siskiyou Line route from Eugene, Oregon to Roseburg, Oregon, a 60-mile distance, into a four thousand feet of distance.

Macro and micro selective compression

Selective compression can be applied at two basic levels – at the "macro" level to tease out the signature elements of the

entire rail line we're looking to model. Then there's micro-level selective compression where we're shrinking down that rail yard by reducing the number of tracks, or we're shrinking down that massive warehouse by going from ten doors to four.

In all cases, selective compression works to disguise the fact we've removed several of the pieces. By determining and keeping the "signature" elements, we're aiming for the compressed result to still be easily recognizable as a facsimile of its prototype.

Selective compression examples

Right off the bat, selective compression starts with reducing the length of the trains we're running on the layout. Instead of 100 car monsters, we're looking to model say a 20-car train, including the head-end power, mid-train helpers, and caboose.

One trick I have found when trying to decide on how long to make the selectively compressed trains has been to consider field of view. What length of train is needed to look sufficiently "long" when viewing it?

Let's say I'm focusing on the middle of a train passing by and I'm right next to it running on a shelf say less than 24" wide. If the front and the rear of the train are outside my field of view at that point, then the train feels "long" to me.

Another selective compression trick often used on model railroads is to tighten clearances. I can place that highway paralleling the rail line closer than needed in real life and it will look fine.

Another selective compression trick with regard to highways is the markings. Center dashed lines can have dashes far shorter and closer together than in real life, especially when modeling a freeway. In fact if you model the actual size and spacing of center dashed highway lines, they often just look wrong.

I think part of the reason for this is because we typically see the center dashed line of a highway from a few feet off the road in our vehicle, which greatly compresses their length and spacing. We're not used to seeing highway center lines from a helicopter view.

Other things that get selectively compressed are parking lots and sidewalks. Cut and fill slopes are also generally compressed to be steeper than what would be typical on a real railroad or highway.

Another selectively compressed item that's often not obvious is trees. If you step back and look at trees along a real railroad right-of-way, you will often find the trees tower above the trains, sometimes 50-75 feet or more. Yet the typical model railroad tree is usually about 15-25 scale feet high.

Terrain contours also get selectively compressed, mainly because we just don't have the vertical space needed, especially to model mountainous regions.

A mountain slope may rise up many hundreds of feet to thousands of feet. Canyons may drop up a hundred to a thousand feet below the tracks.

Yet a three-foot mountain or canyon is considered massive on our layouts. We may also use forced perspective to have the trees and objects further up the mountain be much smaller than the ones down closer to the tracks.

And of course, there's selectively compressing structures and bridges. We reduce the number of bays, windows, doors, and floors, while still striving to still maintain the general look and feel of the structure.

On my Siskiyou Line 1, I selectively compressed a signature scene of the railroad truss bridge over the North Umpqua river. The crossing had three spans, but because of trees blocking the view, you could often just see two spans, so I reduced my model from three spans to two.

I also cut one panel out of the girders under the track, reducing the length between bridge uprights from four panels to three. I also reduced the height of the bridge by 20% to maintain the overall proportion of the bridge, length to height.

As a result, I reduced what would have been a six-foot bridge crossing to just under four feet – almost by one third. Most people never even noticed, yet if they knew the prototype scene they recognized it immediately.

Notice we all have to selectively compress reality to varying degrees in order to get it to fit into our limited layout space. Even the most ardent prototype modeler who is a stickler for no-compromise prototype accuracy needs to remember, we're all "faking it" when it comes to the actual space required by the prototype as compared to our model scenes.

Also if I look at famous freelance layouts such as John Allen's Gorre & Daphetid or George Sellios' Franklin & South Manchester, they have selective compression and forced perspective applied repeatedly all across the layout.

Yet we're all still rightly amazed at the modeling these famous layouts have portrayed.

Rather than call this fakery, we call it modeler's license and praise modeling that displays the illusion with finesse.

Negative space

In this issue's cover story, we discuss the concept of "negative space". I think negative space is a concept that selective compression sometimes runs roughshod over, and it is a concept that needs to be resurrected.

Negative space is basically the so-called "boring stuff" that has little to do with the railroad. It's the stuff that typically gets thrown out when we selectively

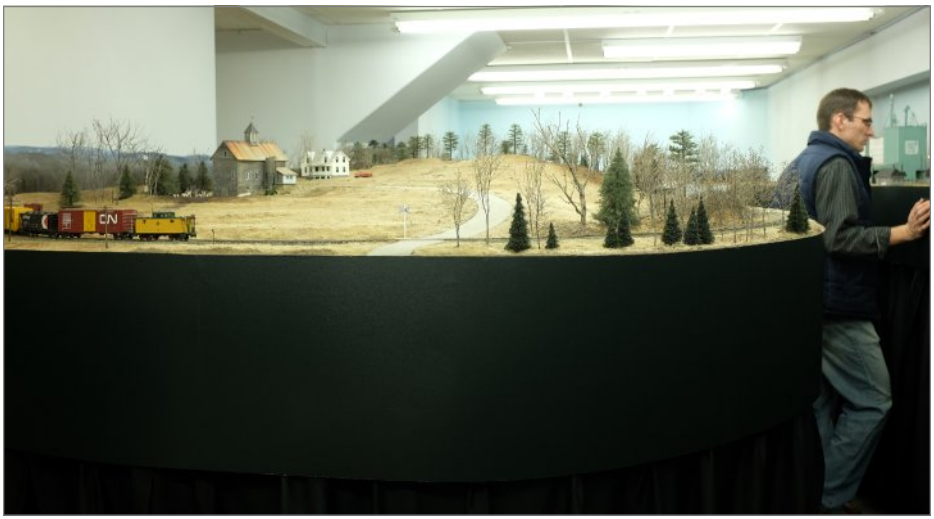
compress a railroad route into a layout track plan. Rather than adding something else "railroady" to the layout, a "negative space scene" takes space away from the railroady part per se, hence the term "negative" space.

But let's hold on for a moment. One of the things I really dislike about a layout is when the front of the train is rolling into the next town when the rear of the train is still in the last town.

It's even worse when it's a mountain grade. It just feels off when the locos are cresting the summit and the caboose is still back at the foot of the grade. My Siskiyou Line 1 had this very situation on one side of the grade up to Rice Hill, and I hated it.

There's another name for negative space: running space between towns. Modeling those rural scenes that are so typical alongside 90% of the railroads in North America just feels correct, so we need to balance out selective compression by adding back in some negative space in our layout scenes.

In fact, a well-done negative space scene on a layout can become a signature scene in its own right.



1. The Knox Farm scene on Mike Confalone's Allagash is a great example of how "negative space" that's "mostly nothing" can become a signature scene in its own right.

One of the great examples that I think of here is the iconic Knox Farm scene on Mike Confalone's layout [1]. There's basically nothing there except a big pasture and a barn and farmhouse in the distance.

The survey has ended

Our 2023 Reader Survey has ended. Next month in my editorial we will announce the drawing winners, and we will begin reviewing the survey results with you.

Along the way, we'll compare the results with past surveys to see what hobby trends there might be.

It's also convention season and we're attending several conventions this summer. If you're an MRH reader, stop by and say hello! ☑