Tips and Tricks To Improve Backdrops

Adding to the realism of your model railroad with backdrops.

Author and Photographs

- David A. Ellis June 2025
- http://gnbranch.blogspot.com
- Additional photograph: Dick Bradley MMR®

Learning Objectives

- Review AP Scenery requirements for “Background”
- Explore “Tips and Tricks” for improving realism
- Disguise 90° angles where the backdrop meets the benchwork
- View and analyze examples of model railroads and their backdrops

NMRA AP Scenery

- Background is 1/5 of “score” and should:
  - Realistically depict depth, distance, horizon, and sky.
  - Match scenery.
  - Smoothly transition to 3D portion.

Mindheim: Realism Tips

Article in March 2017 *Model Railroader* Magazine

- Effective backdrops one of "four cornerstones of realism"
- "The simpler and more toned down, the better"
- KISS: simple blue surface and low horizon
- Structure skyline: short and at 90° viewing angle
- Pitfall when waterway or road in layout meets backdrop

Not Just Realism, but . . .

- Help to establish your railroad's:
  - Season
  - Geographic Location
  - Era?
- Help to establish tone, atmosphere, mood

Tricks and Tips: Overview

Creating Depth and Expanding the Modeled World

Tabletop Height or Seams Break the Illusion.

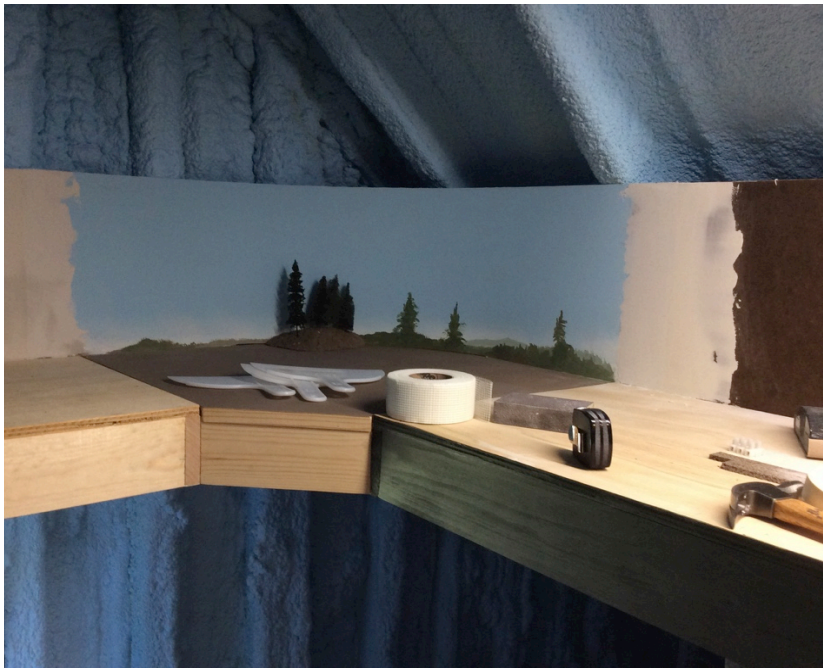
Higher Layout and Relatively Low Horizon

Realistically Depict Sky
Cove Corners & Hide Seams

Cove Corners and Hide Seams

Cove Corners and Hide Seams

- Typical wallboard techniques
- Fiberglass tape
- Three coats of joint compound



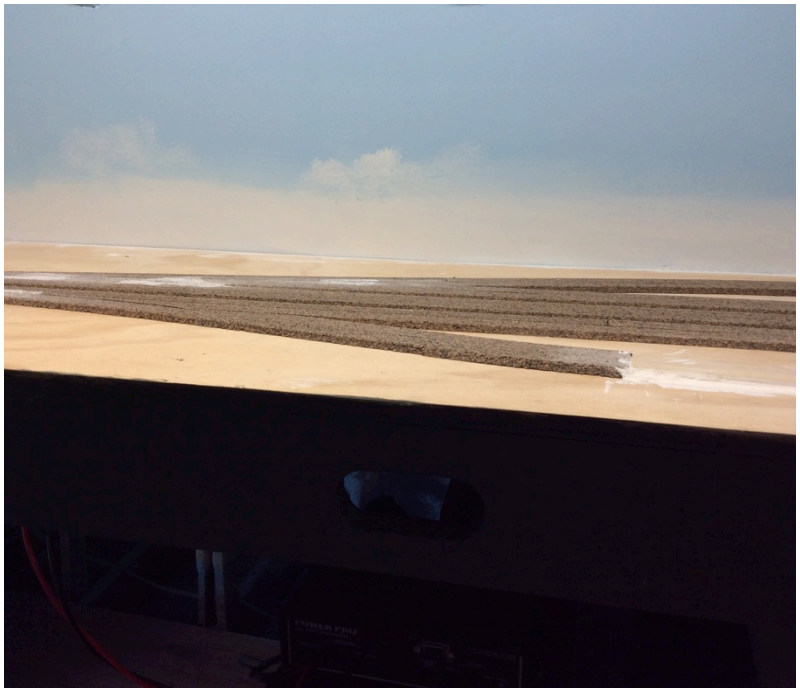
Realistically Depict Sky

Fade Towards Horizon

Realistically Depict Sky
Fade Towards Horizon

- Prime or paint with spray or roller
- Just a simple blue or gray color
- Fade blue into white at horizon

Realistically Depict Sky
What About Clouds?



- KISS principle—Maybe just faded blue or gray?
- Stencil and spray
- Use of airbrush
- Painted clouds
- Subtle, not solid

Realistically Depict Sky

Clouds: Paper Towel Technique

Realistically Depict Sky

Bernie Kempinski's Primer Wash Technique

Painted Versus Photo Backdrop

In either case the backdrop should be the background, not as detailed or intense as the trains.

- Beyond the sky, painted backdrops work best with natural subjects such as hills, fields, and trees.
- Simple impressions rather than cartoon or overly detailed.
- Most “experts” recommend using painted sky, even with photo backdrop.
- Photo backdrop is best for cities or buildings. Try to avoid conflicting perspectives or scales.

Tony Koester: Kitbashing Photo Backdrops
Article in June 2018 *Model Railroader* Magazine

- Adobe's Photoshop Elements
- Clone, skew, and paintbrush tools
- Cutting and pasting digital and commercial photos
- Hobby knife, Pan Pastels, 3M Super 77

Tony Koester's *Nickel Plate Road*

Paul Dolkos: Tips for Blending Backgrounds
Article in June 2018 *Model Railroader* Magazine

- Small photo prints less than 4” tall: low horizon line
- Located between 3D elements: “visual foils”
- Structure flats
- Home printer, matte paper, sky cut off, edges touched up with colored pencils, Dullcoat

Paul Dolkos's
Baltimore Harbor District

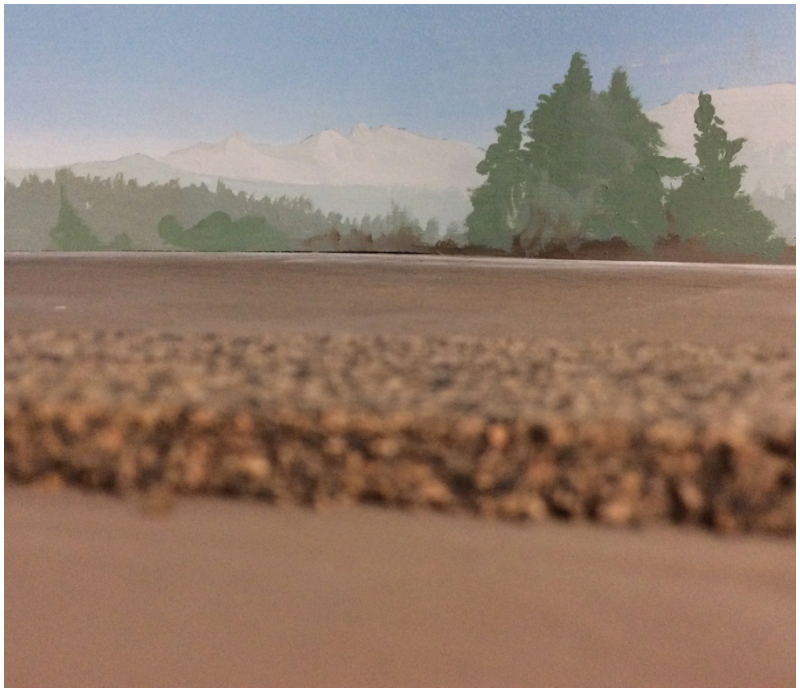
Paul Dolkos's
Baltimore Harbor District

Tricks and Tips: Using Color

Creating Depth and Expanding the Modeled World

Tricks and Tips: Using Color

Creating Depth and Expanding the Modeled World



- Related colors on layout and backdrop
- Scenery and backdrop **paints**
- **Scenery materials** and backdrop colors
- **Scale!**

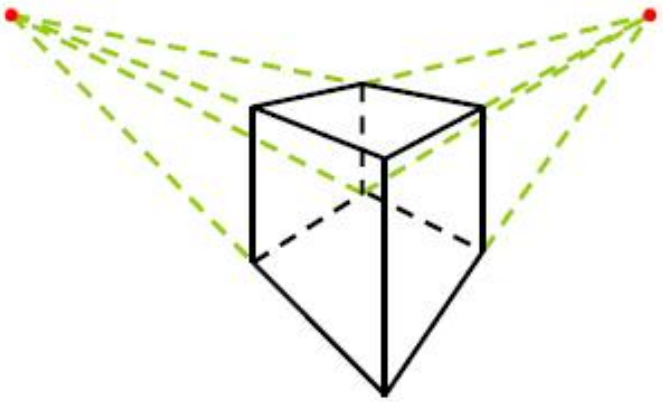
Using Paints & Color

Problems and Solutions
Shadows and Edges on Backdrops

- Problem: Shadows on the backdrop/sky
- Solutions: Lighting, Shadows on objects with 3D layering techniques
- Problem: Edges meeting backdrop
- Solutions: Hide edges

Quick Review of Perspective

Two Point Perspective



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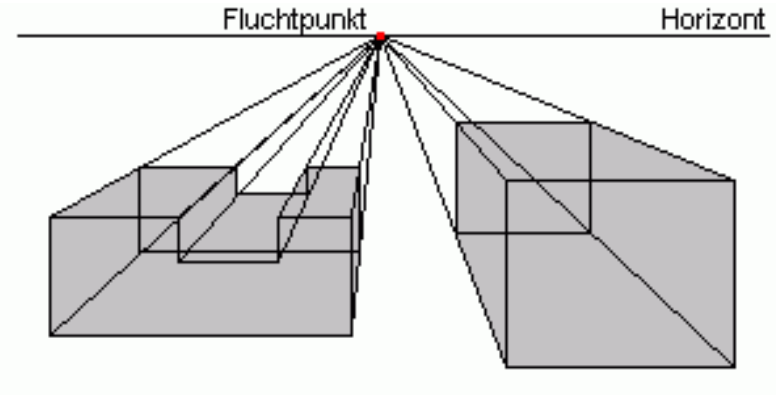
One Point Perspective



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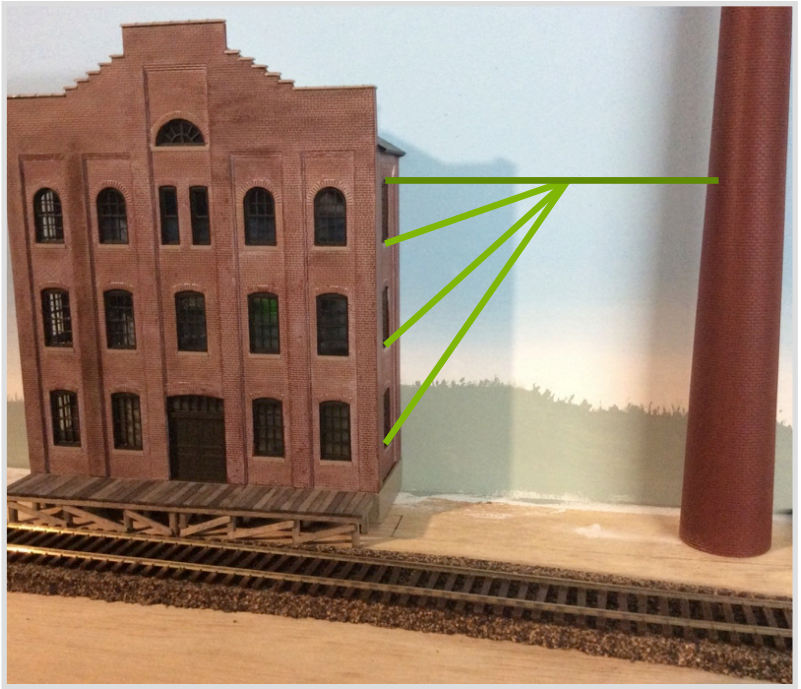
Problems and Solutions
Issues with Perspective

- Problem: Conflicting perspectives, vanishing points, and horizon lines
- Solutions: Avoid numerous vanishing points on different horizon lines



Problems and Solutions
Shadows on Backdrops

Problems and **Solutions**
Shadows on Backdrops

Tricks and Tips: Problems and Solutions

- Scenic divides
- Plan for coved corners
- Holes in the backdrop are another problem!
- Tear down RR and move, probably an overstep

Disguising the 90º Angle

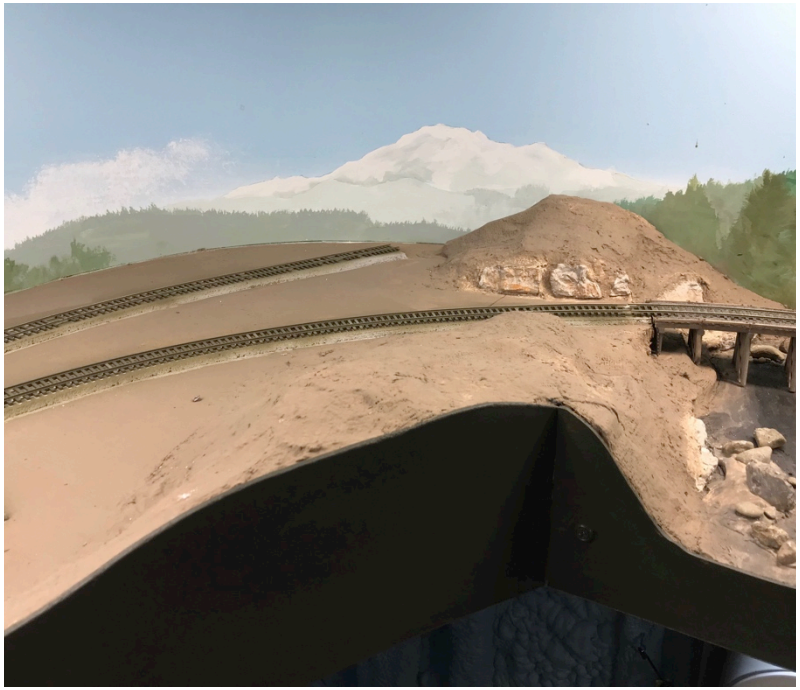
Where the backdrop meets the layout

- On the left, the dreaded 90º angle.
- On the right, foreground scenery elevated to hide the joint.
- What is working?

Disguising the 90° Angle

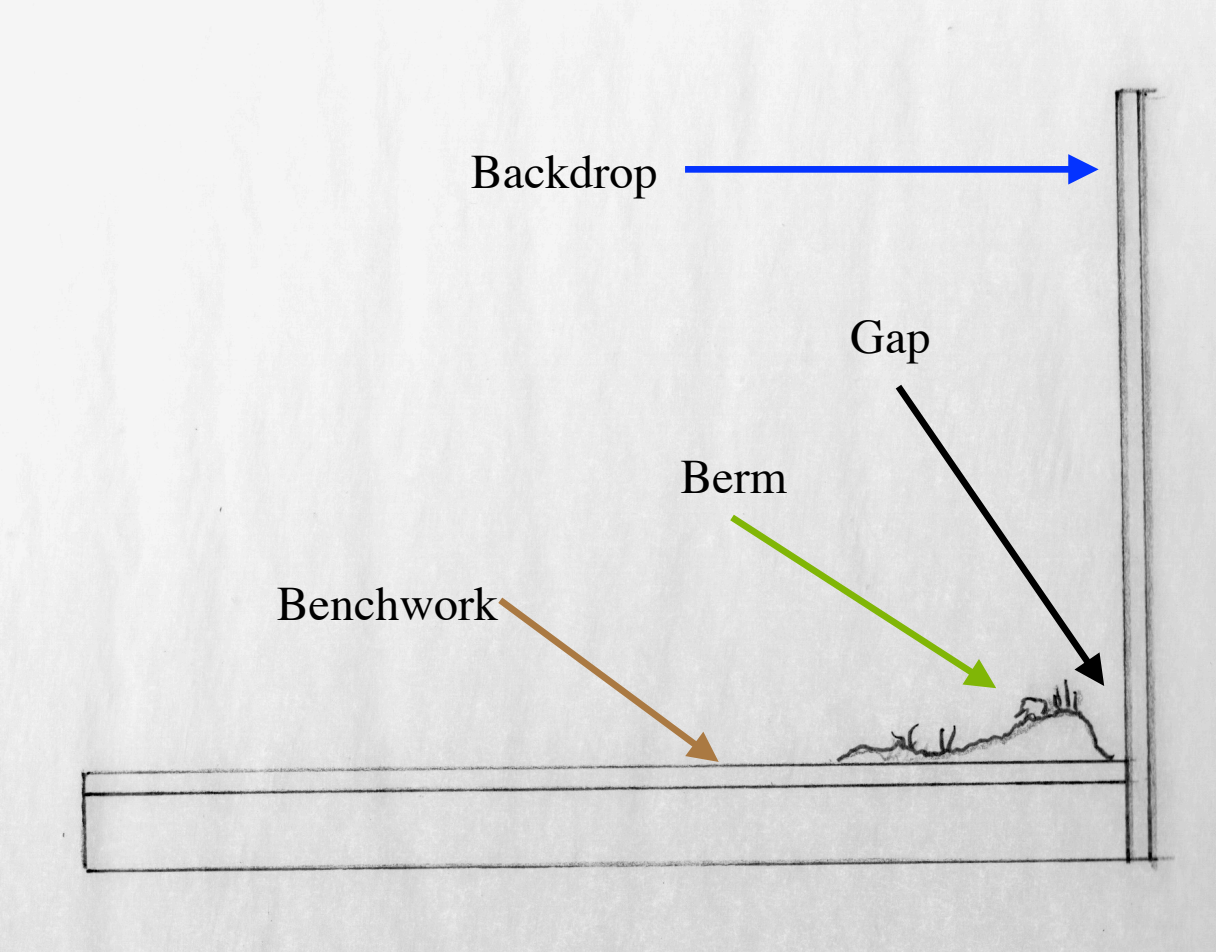
Cove the corners!

- Wide curve with hardboard at corner
- Prototype photos
  - Personal library & field trips
  - Google Earth
  - Real estate listings



Disguising the 90° Angle

Berms and Gaps



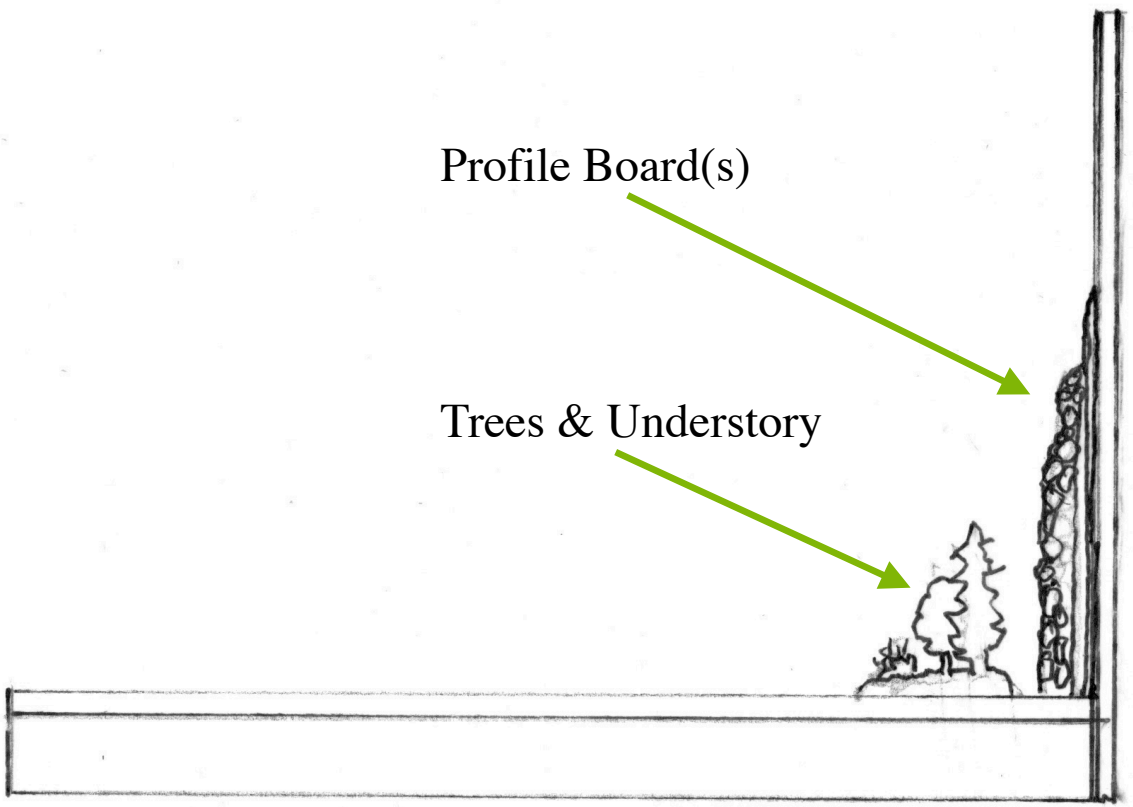
Disguising the 90° Angle

Berms and Gaps

- Slight rise in landform in front of angle
- A slight gap gives the illusion of distance
- Foam, crumbled newspaper, plaster gauze, Sculptamold, etc.
- Additional ground cover

Disguising the 90° Angle

Profile Boards



Jeff Mutter's
Erie Lackawanna Scranton Division

Disguising the 90° Angle

Where the backdrop meets the layout

- Rivers turn forming an acute angle
- Rivers disappear behind trees, buildings, or hills
- Use of mirror?

Neal Schorr's *Middle Division of the Pennsylvania RR*

Disguising the 90° Angle

Where the backdrop meets the layout

- Roads at acute angle
- Roads dip over hillside
- Roads disappear behind trees, buildings, or hills
- Size and color of 3D hills and trees compliment backdrop ones.

Marty McGuirk's
Richford Branch of Central Vermont

Disguising the 90° Angle

Where the backdrop meets the layout

Modeling and photograph by Dick Bradley

- Photo backdrop as solution of road into backdrop.
- Low horizon photo printed on matte paper mounted on backdrop.
- Size and color of 3D scenery and backdrop compliment each other.
- Cars, trees, poles, and people all disguise the joint.

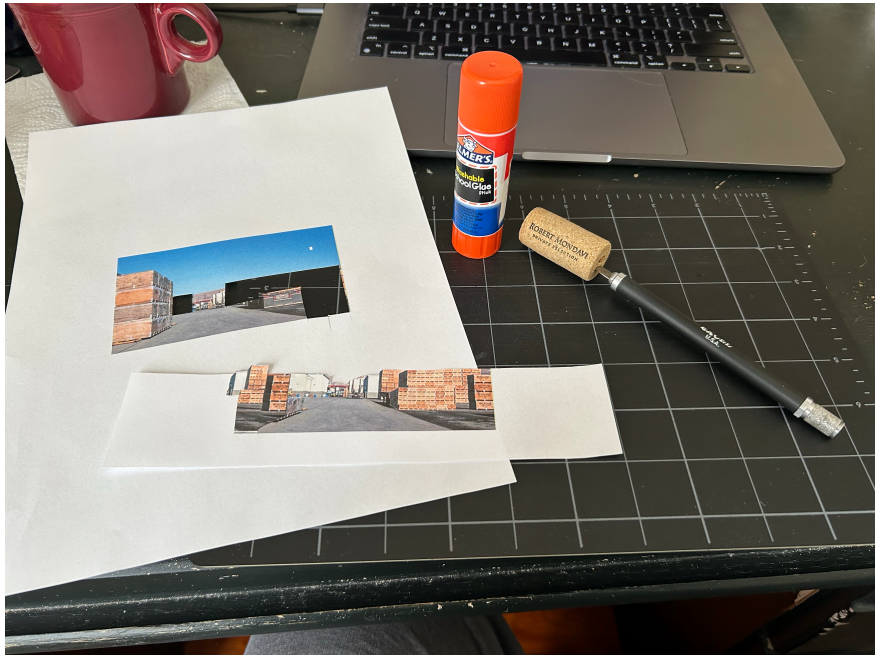
Road "Rabbit Hole"
Cove the Road

- Gerry Leone on Trains.com: Spaces to Places III, Part 4
- *MR* February 2021: Gregg Condon, Blending Roads into Backdrops

Road Rabbit Hole
Cove the Road

Combine the Dolkos Technique With Cove the Road

Google Image search



Combine the Dolkos Technique With Cove the Road

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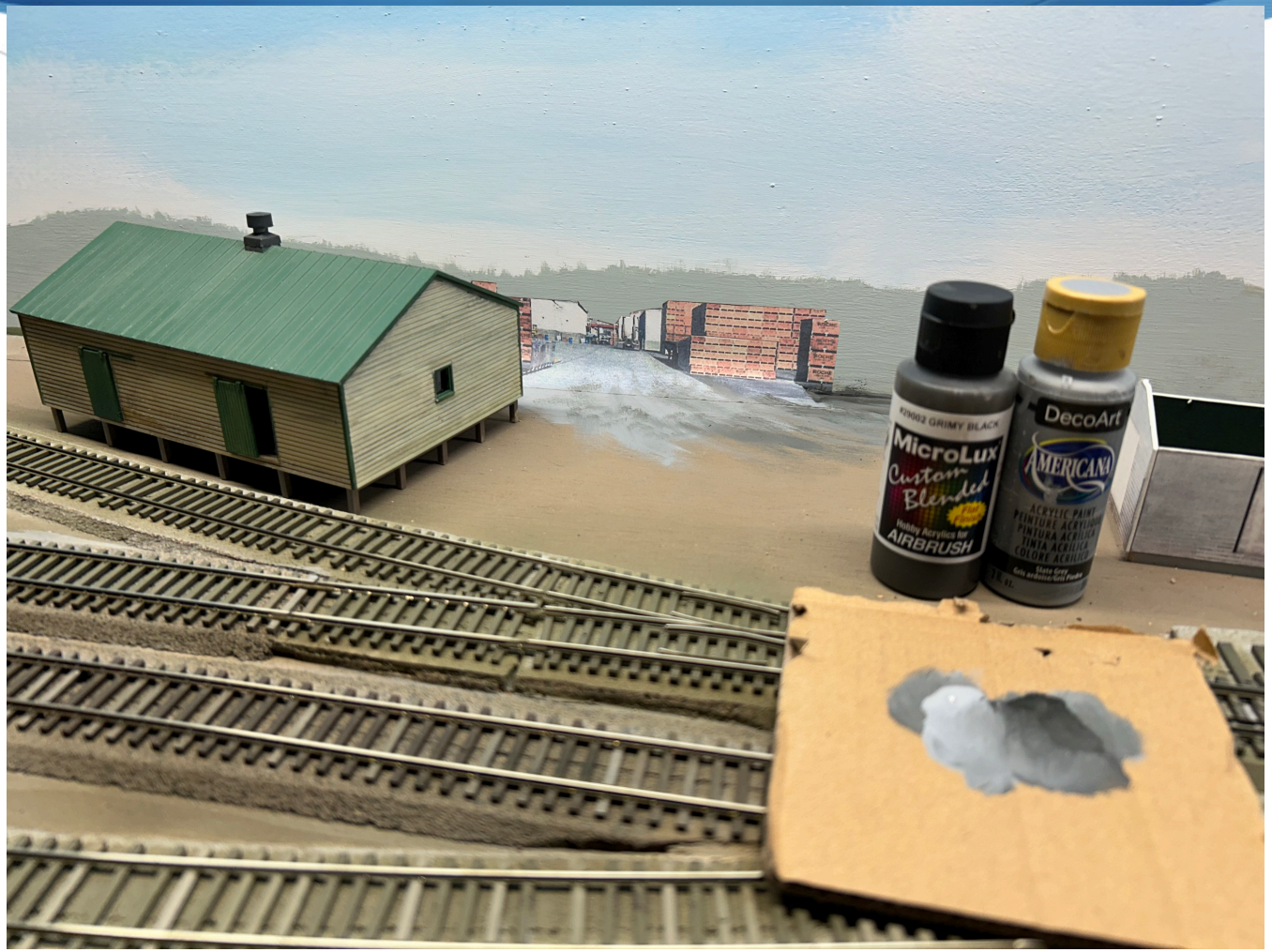

Disguising the 90° Angle

Where the backdrop meets the layout

Natural Features

- Distant 3D hills and trees: “profile boards” or scuff pad tree lines (Mirlon 4”X33’ Ultra Fine, Gray)
- Berms or hills
- Trees
- Shrubbery

Human Features

- Buildings or Flats
- Fences
- Signs or billboards
- Trucks or other vehicles

Tony Koester's *Nickel Plate Road*

Paul Dolkos's
Baltimore Harbor District

Bernard Kempinski's *United States Military Railroad*

Mat Thompson's *Oregon Coast Railroad*

Neal Schorr's *Middle Division of the Pennsylvania RR*

References & Resources

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- https://www.nmra.org/edutrain/blending-backgrounds-foregrounds-bruce-de-young-mmr
- https://www.nmra.org/edutrain/backdrops-tom-oxnard-mmr
- *Model Railroad Planning 2021*: "Beyond the Walls" by Bernard Kempinski
- *Model Railroader Magazine*: June 2018, Backdrop Special
- *NMRA Magazine*: April, 2017: "Quick Tube Building Forms For Backdrop Corners" by Jerry Lauchle
- *Realistic Layouts* by CJ Riley, Chapter 2: Secrets to Lifelike Backdrops
- https://www.modelrailroadacademy.com/video/tips-for-painting-backdrops-for-model-railroads-010359/
- Bernard Kempinski's blog post with a link to video with painting tips, particularly painting clouds:https://usmrr.blogspot.com/2021/03/floating-coves-and-backdrops.html

Questions?

Can a model railroad be art?

Mike Hauk's S&NY