



questioning Normal

Starting In Scale Model Railroading

A TMC Special Edition

As you can see from the cover, sometimes it's good to look at things differently. You'll see and develop an understanding that's more complete than if you stayed with the conventional path.

The same is true of the hobby, especially where layout design is involved. Clearly there's a lot of pain surrounding the process for many people, with conflicting advice on the best way to proceed coming from everywhere. What makes it worse is when egos get involved and the whole discussion degenerates into a pissing contest between hotheads who should know better.

Is there any useful advice out there? Well of course there is, but it can be hard to find among the noise and, until you as the layout builder understand what it is you want to accomplish, said advice won't be of much use yet.

Fledgling modelers are often told to consider their goals and reasons for building a layout. This is excellent advice, but deep introspection can feel like being in an alien landscape: strange and unfamiliar. What if you don't know what you want?

This book is designed to help by suggesting a series of questions to consider about the layout design process. I'm not saying it's the only way or even the right way for everyone; you'll have to decide that for yourself. If you get nothing else from the book, here is the big idea to remember: You are responsible for what you bring to this hobby

and what you receive from it. I've spent decades going through the same process as everyone else, building layout after layout only to get bored with all of them long before they were even close to operational, let alone finished.

It wasn't until I began looking at what I truly wanted out of the hobby and from a layout that I broke through the logjam of indecision and dissatisfaction.

Frustrated in the extreme, I reached the point of being willing, if not ready, to give it all up and find another pursuit for my time. Something was clearly not working; so I started to seriously question the conventional wisdom being promoted as the best way to go. For me, a willingness to walk away from the hobby allowed for clarification of my path instead of blindly following someone else's. Hopefully by considering the ideas presented here, you won't have to go through such extreme measures.

The book is part manifesto and part idea generator about things I learned. These essays originally appeared as posts on my blog at www.ostpubs.com. They are presented here in a more curated format with larger photos to illustrate the points made.

Enjoy.

Mike Cougill

Questioning Normal



Dream Analysis

Relax. This has nothing to do with Freud. I recently read a question online that asked: "What's stopping you from building your dream layout?"

The responses were predictable: Lack of money, time, space, commitment, lack of focus and the killer response of the bunch: my wife! Your wife? Seriously?

I don't take issue with the reasons offered. Life happens in all its forms to everyone. Furthermore, from the way the question was phrased, these types of responses were entirely predictable. I wonder though, where did we get this idea of a "dream layout" anyway? (Also substitute dream car, house, job, life, vacation, marriage partner...) The Dream is usually expressed as something like this: "My dream layout will duplicate every car movement through Enola Yard in 1955." Yeah, good luck with that.

I'm not against having dreams or dreaming big. I've chased my share of them; given up on some that weren't a good fit and hope to chase a few more before it's all over. The house I live in doesn't resemble the house in my head too closely at present. However, the two are getting closer together because my wife and I are working to make it happen. Will we ever get there completely? Probably not, but that's no longer the point for us. We're doing something in the here and now to bring that dream house out of my head and into the real world.

Maybe that's the lesson and reason behind the question that started the online conversation. When it comes to layouts and model railroading, maybe we need to dream differently. An individual may not have the resources to build the layout they ultimately want, but practically everyone can have a layout of some kind now, instead of waiting for some far off state of good fortune to arrive. We've bought the bill of goods that if we can't have our first choice desire in a particular form, then nothing else will do. I don't subscribe to that notion anymore.

I written about all of the failed layout attempts I've started and trashed over the years. Each one was supposed to be the "one." Flawed and imperfect as each attempt was, I learned something about myself and about what I really wanted from this hobby, so I gained some value from all of those exercises. I also don't consider the I&W to be my "dream layout" because I now understand there is no such thing. It has shortcomings, and lacks certain desirable elements

I wish I could have included. In spite of that, I'm happy with it. Changes have occurred and that can be a good thing if they're motivated by a desire to improve the my craftsmanship. However, I have no plans to trash it and start over.

I've given up on the premise behind the dream layout idea. Dreams sometimes come true but more often they won't without hard work and sacrifice and, even when they do, things aren't always as we imagined they would be. I'd much rather have a real, but imperfect layout I can work on now. Wouldn't you?

I don't consider the I&W to be my "dream layout" because I now understand there is no such thing.

Ponder

While I have stated numerous times that I disagree with a lot of what is accepted as normal layout design practice, that doesn't mean it's bad for everyone. The purpose here is to shine the light into the dark corners and ask questions that few, in my view, seem to be asking. Whether you agree or not doesn't matter; it's the quality of the questions asked that determine the quality of the answers found. Ponder the following:

1. Is this a layout worth building-for me?

Long term enjoyment often comes from finding and meeting our own challenges rather than following someone else's ideas about the hobby. Ask what really draws you to this hobby? What are the best ways to express or satisfy that aspect? Conventional ideas



might help or just get in the way of finding better solutions.

2. What commitment am I willing to make?

Do you really understand what will be required to fully realize a so-called dream or lifetime layout? It isn't just the time or space required. How willing are you to invest time and effort in learning new skills like how to do ongoing research, scratchbuilding or handlaying track? What about wiring and other control issues? Lastly, what happens to it all if you change jobs, you just lose interest or when you can no longer participate in the hobby due to age, a prolonged illness or death?

3. What crossroad have I reached in the hobby?

Frustration can open us to new possibilities we may not have considered before. It can also confirm the wisdom of a prior choice and take it in a new direction. Understanding that we provide the deeper meaning for the hobby may provide greater clarity about what you want from it, or what type of layout you might build.

4. Frustration can be fuel.

Reaching the point of walking away from a problem can be the beginning of the answer we're looking for. Why is this? Because all bets are off at this point. We're willing to consider alternatives that seemed far fetched before.

5. Know thyself.

Said The Oracle. Until I understood how I approached the hobby



in terms of my own temperament, my efforts to fit another's mold or ideas doomed me to repeated failure. Once I found the conviction to follow my own path, my satisfaction level with the hobby increased greatly. Following a conventional path may or may not be right for you. It's a choice you have to make for yourself.

6. If a scale becomes too hard to work in, don't be afraid to switch.

Some years ago, I realized that HO scale was no longer a good choice for me. In spite of having a ton of stuff, I switched to quarter-inch scale and P48 and never regretted the decision.

7. Tough choices have to be made

Working with a large modeling scale in a modest space means making tough choices about what to include. Sometimes it

meansgiving up a critical feature to make a better scene. In spite of rhetoric to the contrary, you can't have it all if a realistic scene is your goal.

8. Freelancing isn't a cure-all.

The concept behind freelancing promises that you can mash up a bunch of separate elements and it'll all work out and look good. Well maybe. There is plausible freelancing and there is wishful thinking.

Including the Cedar Grove feed mill on my layout was plausible. I was able to faithfully carry over enough features of the prototype and its setting into the modeled scene to make it believable. The shingle plant as I was going to model it was wishful thinking.

The compromises involved were far too many and too severe, stretching the credibility of the model beyond reason. It simply would have been a caricature of the plant rather than a plausible representation. It had to go, or the entire layout would have suffered and I wouldn't have been happy. Don't be afraid to make the tough calls. You may lose a cherished feature, but the layout will likely be the better for it. Think big picture.

9. It's so easy to get distracted in the design process.

Maybe it's just me. In many of my layout designs I found it easy to go off in different directions with schemes that had nothing to do with my prototype. A feature here, another there and next thing you

know, nothing is recognizable compared to what you thought you were doing. It should be simple, but it often isn't. How do you handle these situations? Focus.

10. You can always make changes to a "finished" scene.

Even though I merely made cosmetic changes to the scenery and ballast in the yard, I could have relaid the two tracks if they had bothered me enough to warrant the work involved. Sometimes major changes need to be made, other times a simpler approach will work. How do you decide? If you look at some feature and feel disgusted or irritated every time, change it. Otherwise consider less drastic alternatives first.

Focus.



3095

3095
GP40-2

SAND FILL



The Essentials

We've all seen forum posts from some modeler sweating over the design/redesign of his first, second, third, tenth layout. When I read something like this I wonder to myself about what's going on. Why is this person struggling so? Why is he, or she, suffering through so many dead ends and false starts with the hobby?

Could it be the modeler hasn't clarified what is essential about railroading for him?

A quick story. In 1963, my parents bought their first house. It was less than one hundred feet from a double track PRR secondary mainline and less than forty feet from a siding that served a Thoroseal Inc. batch plant. From the front door and living room windows I could watch trains going through town. It became a family joke that every time an airhorn sounded for the crossings in town, I would bolt from a chair to the front door or window to see what was coming. Every time!

For each of us who practice and enjoy this hobby, there is something that draws us to it. Something draws us to the tracks, to the sight and sounds of a train time and again. I dare say that it's as individual as the person experiencing it. I've written at length about my

fascination with the siding that ran along the side street next to the house. For me, it wasn't just the texture of the track but also the accessibility of this siding. The sight of a loco and handful of cars slowly trundling along, rocking to and fro, with the sounds of squealing flanges, creaking rail and ties underscored by the rhythmic throb of the engine, was simple to grasp. Being there time after time, I got to know some of the regular crews and even managed to snag a cab ride up and down the siding once. Coupled with a preference for a visually oriented understanding of the world, these images and experiences left indelible impressions that have fueled my tastes in the hobby ever since.

Slow, deliberate train operations form the basis for the “essential why” of the hobby for me.

I don't have to focus exclusively on branchline themes. Images of trains in any type of slow deliberate motion have a similar impact. Consider how a deep understanding of this essential quality of railroading has impacted my choices in a layout.

What are your essential qualities for prototype railroading? Something draws you to trains. Does your layout strongly reflect

this aspect? How might you change your layout if you knew and thoroughly understood what truly draws you to railroading and deliberately focused the design around that? Would this knowledge make such an impact for you or does all this sound like a bunch of hooey?

I realize I'm only speaking to a handful of people here. However, many if not most modelers seek something from this hobby, yet few it seems, ever probe deeply into what it might actually be. Is it because we've been conditioned to think these soft issues don't matter, or because no one ever discusses them out loud? (Except here for one place. There are others I'm certain.) Would you take advantage of the knowledge if someone did? Would your views about the hobby and what it could become for you change?

I believe model railroading can be so much more than the passive entertainment or the accumulation of stuff as it is often presented. I believe a person's practice of the hobby can rise to the level of true craft and even art when done with focus, skill and intention. I also believe many of us are trying to recreate something intangible with our layouts, be it a memory or something else that brings us joy and satisfaction. What if we took time to think deeply about these things before the sawdust and flextrack started flying through the air? Could you more easily build a truly satisfying layout as a result? Would you?



The sight of a loco and handful of cars slowly trundling along, rocking to and fro, with the sounds of squealing flanges, creaking rail and ties underscored by the rhythmic throb of the engine, was simple to grasp.



Simplicity is under-rated.

Imagine:

It's been a brutal week at work with long hours, constant project revisions and little time to think. Finally, you're home. After making up lost time with the family, and knocking out some overdue household chores for the first half of the weekend, there's a modest slot of sweet, precious time for heading down to the basement.

What greets you at the bottom of the stairs?

A pile of wood scraps and sawdust on the floor along with tools, boxes and other stuff piled everywhere from the last work session- a month ago. A dozen half finished projects scream for your attention. Time is short, where do you even begin? Looking at all the chaos, you get the sense that maybe something smaller, simpler and more

manageable wouldn't be better. Afterall, this is supposed to be a hobby, not a job.

Simplicity is under appreciated

Small layouts are often treated as a compromised solution to having no layout, until that glorious day when all the stars and planets align, and you find yourself in possession of unlimited space, time, and resources for the "Dream layout." Time to wake up from dreaming, because for the majority of us that simply isn't going to happen. Constraints on available space, time and financial resources are and will always be a fact of life in this hobby.

Small layouts are often treated as a compromised solution to having no layout, until that glorious day when all the stars and planets align, and you find yourself in possession of unlimited space, time, and resources.

Over the years, I've started a host of large layouts and parroted the mainstream thinking that any space without track in it is essentially wasted space. Over time, I grew increasingly dissatisfied with it all. None of my basement filling pipedreams amounted to anything but landfill material, as one gave way to another when my enthusiasm waned or a "new" idea captured my fancy. The amount of wasted resources this scenario was producing became too much to tolerate.

I think the criticisms about small, simple layout designs are unfair. Until one has actual experience with designing, building and operating such a layout, the shortcomings leveled against them is likely to come from individual prejudice rather than empirical fact. I've been active in this hobby for a few decades and have had both large and small layouts. It's my experience that a small layout can be as satisfying as any.

The main criticism centers on the perceived lack of scope in a small layout. Regardless of the available space, one can't have it all and choices have to be made and priorities set. If the many hand wringing posts online offer any indication, making such decisions is apparently a lost skill.

Any creative person, such as a graphic designer or architect, will tell you that limitations and constraints are the fuel that powers creative solutions. Limitations force one to ask better questions* and arrive at better answers. The idea that creativity can only flourish when there are no boundaries is a myth the amateur clings to. A professional creator knows that making choices encourages one to examine

priorities more carefully. When you can't have it all, what is the most important?

Maybe such skill in choosing comes from a lifetime of experience with the hobby or the maturity of knowing what you actually want from it and enjoy about it. I feel that's been my truth in recent years. I've looked at the current thinking put forth in the popular magazines and said: "No thanks. I prefer a different path."

A close friend of mine, Trevor Marshall, just held his first impromptu operating session on his new Port Rowan S scale layout. Trevor's layout is modest in size and scope. The benchwork was built in October of 2011 and now, in early June of 2012, trains are running over handlaid track on at least a portion of the layout. Trevor's experience in the hobby is similar to mine in that he too has attempted the basement filling exercise multiple times and found the road to completion difficult. From reading his Port Rowan in S scale blog, this layout seems more in line with his preferences and desires.

A distinct advantage that Trevor found with a modest design was the ease of balancing family, work and other interests in his life with the hobby. It's an unspoken and unfortunate reality that, for some, this hobby can become an all consuming force in their lives. I've seen this in others and experienced it myself to varying degrees. A smaller layout with a more realistic set of expectations can help avoid this sad melodrama.

Know Thyself

Through our individual design efforts and soul searching with regard to what we truly wanted from the hobby, Trevor and I both discovered that railroad modeling offers multiple layers of interest for those who wish to explore them. We each have found layers that we might not have considered under the burdens imposed by the typical large project.

For example, Trevor has found many different aspects to the operations provided by the simple track plan at the town of Port Rowan. With just the bare essentials for getting the job done, he has to plan switching moves more thoughtfully in order to avoid wasted motions just as the Canadian National branch line crews did. Trevor has also found much satisfaction in slowing down the pace by realistically incorporating aspects of the work a train crew does routinely, such as locking and unlocking switches. Along similar lines, my own observation of prototype switching maneuvers reveals

It's an unspoken and unfortunate reality that, for some, this hobby can become an all consuming force in their lives.

that the locomotive will stand still as often as it's in motion. Waiting for the person on the ground to get in position, check paperwork, or walk a string of cars is a free way to greatly increase the perceived size of a small layout. Other modelers such as Lance Mindheim also make these points eloquently in their writings and by example.

The path Trevor and I chose won't be for everyone. Satisfying layouts do come in all shapes and sizes and levels of complexity. However, in this hobby one has to ask questions about time, resources and expectations that don't always have quick and easy answers. For those willing to challenge the "bigger is better" assumption, a smaller, simpler layout can be a satisfying journey along a right-of-way less traveled.

Satisfying layouts do come in all shapes and sizes and levels of complexity. However, in this hobby one has to ask questions about time, resources and expectations that don't always have quick and easy answers.

Ask Better Questions, Get Better Answers



I firmly believe that the quality of our understanding is directly related to the quality of the questions we ask.

I've been in this hobby in some manner for forty years. With that amount of experience, it's easy to think I know it all. This is stupid of course because I haven't even come close to learning it all. In fact, I've become more aware of how much I don't know about the hobby and prototype railroading. The deeper I go into writing and publishing, the more I appreciate the power of curiosity. Staying curious is a great defense against complacency and that dreaded condition modelers my age are prone to: Know-it-all-itis.

Recently, I've been doing research for an upcoming edition of *The Missing Conversation* that will look at prototype switching operations. In analyzing such operations, it's tempting to assume you know more than you do. Some aspects of switching are universal while others may be more complex than at first glance. So how to proceed?

When looking at a switching situation, we tend to focus on the track arrangement: how many tracks, turnouts are involved and so on. Of course we're thinking about how much space will it will take to

model this industry. Can I compress things? How much operational potential is here? These are legitimate concerns but I think they could be premature. Wouldn't you be in a much better position to answer these questions once you have a thorough understanding of what the railroad is doing at this location?

What has to happen here?

Typically, empties are exchanged for incoming loads. In some cases it's the opposite; loaded cars are pulled and replaced by empty cars. This is the basic premise of industrial switching operations and it can look simple on the surface but not always. In some cases, cars must be stored off-spot for a host of reasons. In my case study I discovered that some cars stored in this location are destined for another industry on the east side of town. I finally realized this after seeing the crew separate certain cars and then leave the area via a backing move down the main with the crew riding the "porch" on the end of the lead car to signal the engine in case of trouble. I've observed this more than once but didn't make the connection until recently. Why store them here instead of at the other industry? There's no room for them there. Plus, switching at the other plant requires use of the mainline. Sorting them out here keeps the main open.

Where will cars go?

Although every industry setting is different, I imagine the prototype looks at basic things like the following:

How much traffic does this industry generate?

How often does the plant need to be switched?

Who does the switching, a road crew or the plant via a trackmobile?

Where will inbound cars go before being spotted for processing?

Where will outbound cars go before pick-up?

Is a runaround move needed?

In model railroading we typically model industrial trackage based on space available. And one of two things usually happens: we stuff in



too much track or, rarely, we don't include enough (also think short sidings of only one or two car lengths). We seem to love turnouts, using far too many compared to the prototype. We want a dedicated track for this and a track for that. Unless the industry served requires dedicated trackage for certain car types or commodities that's not how a real railroad looks at industry trackage. Efficiency is the name of the game. They want the minimum amount of track required to do the work; so tracks will serve multiple functions where needed. When properly understood, this can work in our favor by providing more interesting operations and less crowded, more realistic scenes.

Can you avoid using the main?

The trackage at the plant I'm studying can be switched as a self-contained unit without fouling the mainline. All moves can be made as trailing point moves without doing a runaround. Cars that require a facing point move are drop switched (also called a flying switch) into position.

In this specific situation, it's easier on the ground crew and faster than doing the gyrations involved in running around blocks of cars constantly to cherry pick a single car out. Our models don't coast like the prototype, so a different solution or procedure would be required on a layout. The crew only use the main for entering or leaving or, on occasion, to pull a very long cut of cars for classification. The main line is protected by a derail since the yard trackage is slightly elevated. After the engine enters the yard trackage, the derail is reset and the crew is free to move as needed.

How much time will this take?

As much as it takes is the simple answer. While working, no one gets in a hurry. Bad things happen on the railroad when people get in a rush. While watching, I've been surprised by how much time the engine waits for a crewmember on the ground to get in position to do his work. Since this job originates out of Fort Wayne IN, which is over a hundred miles away by railroad, crews will often be exchanged because one has outlawed on their time. This adds another layer of interest for modelers. How often does a model crew outlaw on work time? Hmm.

Lance Mindheim among others, has been encouraging more realistic, slower paced operations for some time. I now watch these operations with a notepad close by to record observations. This not only helps in article research, but I also have the knowledge to draw from when it's time to operate the I&W. As Yogi Berra is reported to have said: "You can see a lot by just looking."

"You can see a lot by just looking."



Freedom Layout defined

A freedom layout: 1. A layout sized no bigger than required to provide ongoing interest and modeling challenges. 2. One that fits into your life instead of taking over your life in the process of building it; one that leaves you free of the nagging pressure to finish it.

That's my unofficial "official" definition for what I'm going to call a small focused layout now. I've written a lot on this subject because it interests me deeply. I really don't care if someone wants to fill their house from basement to attic with benchwork, track and trains. Nor do I really care what scale you work in or the standards used. It's your hobby and your choices. This is a guru-free zone.

However, I do think it's time to ask serious questions about where this hobby is going or might go. Like it or not the times and individual lifestyles have changed and will continue changing, which will impact this hobby of ours in ways we might not imagine.

Lots of people are content to bury their head in the sand and claim everything is just rosy in model train land with high green signals all around. I'd rather look the coming changes in the eye and figure out their implications. In my opinion, it's the only way the hobby is going to move forward and survive.

So, a "freedom layout" is my concept for a different way of looking at the layout design process and what the hobby means to us individually. It's a mindset and a goal. Time to have this conversation don't you think?

I really don't care if someone wants to fill their house from basement to attic with benchwork, track and trains. Nor do I really care what scale you work in or the standards used. It's your hobby and your choices.

What makes it a Freedom Layout?



What makes a freedom layout? Lots of folks would prefer clear rules and guidelines so they know they're doing it right. It would be simple to codify the concept by publishing **The Ten Rules For Building a Freedom Layout** and saying it's a layout of a certain size and operating format in this or that scale.

I have no intention of doing that. I'm well aware that if the concept spreads, others will want to put their own opinion and interpretation onto it and there's not much I can do to stop that. However, laying down a bunch of rules and regulations about what is and isn't a freedom layout is an insult to your intelligence and a disservice to your hobby enjoyment as well. We already have enough rules and self-appointed hobby police to enforce them.

In the simplest terms, the concept behind a freedom layout really refers to a state of mind more than the physical layout. My published definition is that *it's a layout big enough to be challenging but no bigger. One that fits in to my life with out taking over my life.* This speaks about the qualities of a layout in place of the specifics of design or scale.

As an example, what makes the Indiana and Whitewater a freedom layout for me? The foremost aspect is that it satisfies my desires for this stage of my hobby practice. It is smaller than most layouts, especially for one built in quarter-inch to the foot scale. The size of it is only relevant because my criteria for a layout changed from wanting a large basement filling effort to preferring one smaller in size.

It's also a freedom layout in terms of the amount of detail I included. This is related to the scope of the scene I chose, and secondarily, the modeling scale. The single most important criteria I wanted for this layout was a focus on modeling the track to a very high level of detail and realism. My focus on a single scene of modest proportions made this more achievable. I let the track speak more clearly as a model by limiting the amount of it. Yes, the smaller layout size and larger modeling scale limited what I could include, but that proved beneficial instead of restrictive. If I had attempted this on the typical large layout, it would have become an overwhelming and dreary task.

The urge to take shortcuts, compromise quality and suffer burnout on one aspect of construction would have taken much of the joy away. In this case, it proved to be just the right amount of work. Enough to keep interest up without burning out over the thought I would never be done driving spikes. It freed me to enjoy the work instead of seeing it as work. When I finished the task, I felt the most

satisfying sense of accomplishment I've ever experienced.

In sum, you have a freedom layout when you have looked closely at what you really want from this hobby and made choices based on the answers you found as a result. If you can look at your unfinished layout without feeling any unpleasant, nagging pressure or guilt about finishing it in your lifetime, you have a freedom layout.

The single most important criteria I wanted for this layout was a focus on modeling the track to a very high level of detail and realism. My focus on a single scene of modest proportions made this more achievable.

Final Thoughts.

Reading these essays, it would be easy to assume that I'm totally against large basement size layouts in any scale. I'm not. Such layouts are no longer my personal choice but that shouldn't be taken to mean that I think they are wrong for everyone.

All I want to do with these thoughts is to provide a framework for asking questions that aren't being covered in the popular literature on layout design and the hobby in general. The status quo exists because people stopped questioning how we are doing things and why. My purpose with these guides and OST Publications is to bring this mindset back to the hobby.

Enjoy.



I wonder, in a hobby now dominated by ready-to-run products and an instant gratification culture, are we losing the art of getting good at things?

I strongly believe there are folks looking for an in-depth discussion about the hobby through the lens of doing your best and being inspired by others who are doing the same.

[The Missing Conversation](#) is a model railroad publication that speaks to this deeper, more thoughtful side of the hobby.

It is built on the following principles, which I consider foundational:

A scale model should be consistent from top to bottom, including the wheel profile and track gauge.

If the hobby is worth doing, it is worth doing well. Details matter.

Each volume consists of full editorial content without the visual distraction of ads (except for a house ad in the back). Published quarterly, *TMC* examines a single topic or theme per volume, such as layout design, craftsmanship or prototype operations. The articles are intended to challenge your assumptions and engage your mind about ways to become a better modeler.



TMC 05,

Switching: More Than Meets The Eye
54 page PDF, 24.2mb download

\$9.99



OST Publications
www.ostpubs.com

PO Box 297 Richmond IN 47375