

## THE CREDIBLE MODEL – at the Platelayer Symposium 2015 - Charles Cooper

When I had digested Mike's invitation, I had two thoughts:

The first was that talking to the Platelayers about credible models was very definitely serious coals to Newcastle.

The second is the saying that those who can – do -- and those who can't, teach.

My only qualification to stand before you and talk about a credible model is two-fold – I have seen a lot of layouts in my lifetime, and to paraphrase an old dictum – I may not be that good at modelling, but I know what I like when I see it, and I also know what puts me right off.

But I suppose I owe you an explanation of how I got to “the Credible Model” in the first place. It was an invitation from NMRA to give a talk on how research of the prototype can benefit and enhance the model.

I was not asked on the basis of my modelling skills, but on the basis of research I had conducted here in Ontario on the real thing, and how this might benefit modellers.

That invitation, flattering as it was, got me to thinking about our hobby – how we got into it and why we do what we do, and what the real satisfactions are. There is nothing special about that – I am sure we have all done that.

As I see it, there are two parts to what constitutes a “Credible Model”:

- 1. Our associations**
- 2. Our sensory perception of what looks reasonable.**

**1. Let's deal with our associations first.** This is essentially the influence of the prototype. That can happen in many subtle ways, and that prototypical flavour in the model can legitimately range all the way from just a foot bridge that looks familiar in an otherwise freelance layout, to an exact replica scale model of the Wensleydale Railway. I pick the Wensleydale Railway as an example – one does not need to have actually travelled on the line – if you have just been to the Yorkshire Dales, that will suffice. And if you haven't, to have watched and related to a few episodes of the Herriot “All Creatures Great and Small” will also do the trick.

Let me make it clear right now that this presentation is not advocacy that your modelling must represent the prototype in order to qualify as railway modelling – far from it.

What I do suggest to you is the proposition that our modelling is intertwined with our memories and experience of the prototype, and when we see something of what we remember in a model, it warms us to that model – in our mind's eye, it gives it a touch of credibility.

Let me tell you the story of one of my memory lanes, and then you can go to work on yours, and I defy you to tell me I don't have a point.

One of my earliest memories is going with my grandparents on their annual holiday to Whitby before 1939. I still have the picture, with me on the donkey, and my granddad who financed all my toy trains, holding the reins. My grandparents lived in Huddersfield, and in those days for holiday week the railway laid on specials to whichever seaside resort. Our train went from Huddersfield to Whitby without any need to change, and I swear to you I remember the vista of the North Yorkshire moors as if it were yesterday, but wondering of course how long it would be before I got to my bucket and spade. I remember the smell of coal and oil, and the outside massive brass handle on the door of our compartment carriage, and that long broad leather strap and the notches in it that would let one raise or lower the compartment door window, and how I

would look out and get a cinder in my eye. Whenever I see an LMS compartment carriage now, that's the image that flutters through my memory lane repository.

Am I ringing any bells anywhere?

My point is that somewhere the feel and recollection of the prototype is at the core of all our modelling.

Aside from the associations, it is also a given that for a realistic model layout of whatever design, the general railway prototype ought to be observed and followed to the best of the modeller's ability. As an exaggerated example to make this point – no North American baggage carts on an English country station platform.

Now let me just read to you an extract from a forum chat I happened to pick up while I was rummaging around on the internet for information for this talk, that encapsulates relation to the real thing, creativity, planning, and the acceptance of the reality of compromise:

It's from someone who calls himself "Yorkrail":

Morning all, I'm new to the forums, and I'm about to attempt to build my first layout. When I was younger my Dad built a layout so I've always enjoyed model railways and have a vague idea of what I'd like to do.

Firstly I'll explain what kind of space I'm looking at. I've recently moved into a cottage near York, about 30 miles from the start of the North York Moors Railway at Pickering. Running around 3 sides of my living room I have a small dado rail near the ceiling (I think he is talking about a plate rail), about 7 and a half feet from the ground, and it's about 3 inches wide, due to the ceiling I can't build any of the buildings higher than about 5-6 inches. I've cut some wood to size to fit on the dado rail, and in the corners I've made kind of a triangle shape, so I have a little more room in these areas. Overall space is limited, there isn't room for double tracks (other than the fiddle yard) and I'm having to compromise with the stations, ultimately at the end of the day I don't want the layout to look too busy. Although N gauge might work better, I have lots of 00 gauge left over from my younger days plus I've bought all the track.

History Time! The NYMR is 18 miles long, there are 6 stations: Pickering (Terminus), Levisham, Newton Dale Halt, Goathland, Grosmont and Whitby (Terminus). The line was closed in 1965, then reopened in 1973 by the usual mix of volunteers, donations etc. It's featured in Harry Potter, Heartbeat etc. Apparently it's the busiest steam heritage line in the world (well, according to wikipedia anyway!).

Although I'd love to fit all the stations into my layout, it will look too crowded. I think having open space between the stations will give it the rugged look of the Moors. I've picked Pickering, Goathland and Whitby as the three stations I'll be including, I think whichever way I look at it, it makes sense to have the two end stations (Pickering / Whitby), and Goathland seems to be the most recognisable (Harry Potter!), I'd love to include Grosmont station as well but I just don't have the space, instead I've included Grosmont tunnel.

My plans are

**Fiddle Yard:** I can squeeze double tracks into the fiddle yard, and I'll be building it on its own small section of wood so I can switch the fiddle yard around, so both tracks can be lined up with the main track.

**Pickering Station:** Always liked this building, luckily the station building seems narrow so I should just fit the building into the small space. I can't fit a bridge in unfortunately, and I'll only be able to fit in the one platform.

**Goathland Station:** I believe this station model is available to buy. Again, I can't fit in the other

platform or the bridge and I'm having to build it on a bit of a bend, a bit of a compromise but it should look good. Hopefully I can squeeze the signal box in too.

**Engine Shed/Sidings:** On both sides of Goathland station there are sidings/sheds, so I've managed to squeeze in a 3 track engine shed.

**Scenery/Moorland:** Using flexitrack I'll be weaving the track a little here through trees/moorland to give it the right character.

**Grosmont Tunnel:** I'm not sure how many tunnels there are on the NYMR but this seems to be the one that stands out, again in real life the tunnel isn't curved but as long as I get the right feel it should look fine. I'm hoping to fit in the River Esk running under the track here after the tunnel exit, it all depends if I have the room.

**Whitby Station:** I think the facade on Whitby station looks lovely, and will be a fitting end to my layout. The station won't be to scale but the end facade should make it instantly recognisable. The facade on the side of the station where the platform is won't be viewable. My final compromise, one platform instead of two.

One final note to make, it won't be DCC operated, just manual, again this is due to space and lack of finance. I only have one area with a few sets of points in anyway so it should be fine.

So, wish me luck!

Wow. Whoever "Yorkrail" is, he sure has imagination, determination and an instinctive understanding of the art of compromise and something that promises to look credible.

## 2. Our sensory perception of what looks reasonable.

Determining when we have a "credible model" When do we know that?

I believe there is personal modelling holy grail – it is the search for something that says – yes – that satisfies me – I think it's the main reason why artists destroy paintings they can't live with, and why modellers build new layouts – until we recognize that "yes, I can live with that". And then we go on looking at it and we say – ah that bit is still not quite right. As a recent and topical example of that I would commend the article *Simple Scenic Changes for Realism* by our member David Knight in the recent March edition of Coupling.

So why do some model layouts look real, and why are we dissatisfied with others? While our visual perception is prepared to make some allowances, it balks when it is asked to push its acceptance factor beyond a certain point. There is an acceptance threshold in all of us.

If a good model has to "look right", for me, these are the major points I look for:

### Visual perception or Congruity

We all know that a model is a model - it's not the real thing, and we accept the fact that any model is a compromise in every way. With that as "a given", the eye then scans the scene and runs a comparison with what the memory has stored about the real thing. During this process, some allowances will be made by most of us for the knowledge that what the eye sees is not the real thing, but a representation of the real thing. The degree of this allowance will admittedly depend on the critical threshold of the beholder. Chances are that to a six-year old, a train running round and round without any scenery at all, will be completely real because the child's very active imagination is supplying everything that the average adult eye demands to see. On the other hand, for a seasoned modeller who has built his hundredth item of rolling stock from scratch, every rivet may count. Most of us are somewhere in-between, but chances are that we will pinpoint some aspects of a layout that "grate" - somehow not real. This could be an absence of familiar features that ought to be there, or it could be an incongruous dimension or a texture, and so forth.

And this sense of what fits is not "one size fits all", nor is it that one rule prevails:

A simple example – if you are looking at a Hornby-Dublo three-rail layout, you'll likely be quite happy to see some Superquick kits, Britains trees and a few Dinky or Corgi toys. Yes? OK layout.

Now you are looking at a scratchbuilt P4 layout. Will a Superquick kit jar? I think it will. Not because it's a Superquick kit – those are good kits – it's just that they are all over the place, and when we look at a P4 layout, we are expecting something unique.

In other words our perception of what's credible is weighed in the context of what we are looking at – it's an instinctive process – like a camera that automatically adjusts for focus.

### **Defined Boundaries**

Since a model is a model, it has to end at a defined edge. In the background, the edge is often extended into a vertical backdrop. A backdrop, to be effective, requires a sense of colour and perspective, as well as some artistic ability if it is to be painted. In the foreground, wherever the landscaping is above or below track level, a properly cut-to-the-contour vertical (usually masonite) panel will define the edge of the model. In the foreground, it is in order for roads, (non-operational) tracks, yards, fields and meadows, to end at the edge of the model without any kind of vertical shield.

To hide the improbable - continuous operation layouts of any design (circular, oval, "dog bone", figure-eight, multiple figure-eight, reversing loop) will seek to hide the curve(s) to avoid the appearance of trains chasing their brake vans (unless you are looking at a toy train). Freely admit the necessary boundaries of the model. Think of it as a stage set.

### **Perspective**

The importance of perspective increases in proportion to the amount of geography represented by the model. A part of a layout that is elevated, or is otherwise intended to be at some distance or in the background, must appear to be at a distance. A good way to achieve this is to reduce the scale of the structures involved, and to ensure that any backdrop acknowledges the necessity for perspective. - the smaller the scale in relation to the size of the layout, or in the case of any multi-tier layout, the greater is the need for the proper treatment of perspective.

### **Texture and Colour**

With structures, be careful how you juxtapose plastic models with cardboard or balsa models. Preferably stick to one medium. If it's a toy train, better to stick with tin.

Colouring the landscaping should not be attempted with paint at full strength and a brush, or the result will be a ghastly daub. A sieve for powdering on landscape materials and a syringe of diluted paint for rock faces work well for proper texture.

Kitbashed or scratch-built motive power and rolling stock should be painted with an air brush and carefully lettered. Matte colours and a little weathering are in order for structures.

### **Super-detailing**

I would not concur with the proposition that "super detailed modelling kills most of the fun in railway modelling". On the contrary – it's a very important component of "the credible model".

Too little detail does not let the model come to life, but granted, too much may detract from the overall impression that the model is trying to make. Scale plays a part. For instance, experienced modellers in 4 mm scale and up may "weather" their motive power and rolling stock, but in N and Z scales, weathering may detract from the fine detail of the equipment in those scales.

As another example, many layouts include roadways, but an excessive attention to road signs, traffic lights, and so forth, is likely to be at the expense of, or will detract from, the detail that should be bestowed on the railway-related infrastructure. Too much detail can swamp the

viewer's ability to grasp the essence of the model - a good model is a representation, not necessarily a minutely-detailed imitation. A good model is not a photograph, it's impressionist art.

One last thought here – if you get the amount of detail right – the viewer will be so entranced with everything that there is to see, it won't really matter whether there is actually a train running or not.

### **Too much railway**

When planning a layout, resist the temptation to jam in as much track as possible. Allow the layout to breathe. Less is better. For a successful layout there has to be room for other activities that represent the modelled community around your railway - there is not just the station, but a water tower, a goods depot, a platelayer's hut - there are trees, the road leading to the station, some people, road vehicles - even some abandoned track. An abandoned roadbed is very prototypical today, and is proof of the determination to resist laying track on every available inch of space.

A related rule is not to plan too big - better to start modest and do it well than to have a vast expanse of layout (even if you have the space, lucky person) and make a sloppy, obviously rushed model.

### **Tracklaying**

The appearance of many a promising layout has been spoiled by indifferent tracklaying and poor or non-existent ballasting. "Dog-legs" not only look unsightly, but are a hazard to good operation. Track that is not in good alignment is also very noticeable. And it only takes a few moments to slide spare sleepers under the track at joints, in order to preserve the continuity of the prototype. Of course at a show, our built-in acuity sensor forgives missing sleepers where one module adjoins another. Another example of how we process things in context. Ballast is also an important component of the "acceptance threshold".

### **Conclusion**

In closing, I just want to say that our hobby is an outlet for creativity, in some cases actually an art form, all liberally seasoned with Memory Lane.

And one last thought that I saw in a Platelayer newsletter somewhere

If you're not having fun, you're not doing it right.

Thank you all.