

Lynton & Barnstaple Railway Liveries

Version 4

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Note: This document should be regarded as “work in progress”, intended as a guide for modellers. As explained in the text, the subject is complex, and there is room for diverse opinions on many points we will probably never know for certain after so many years. Readers are warmly invited to submit additional evidence to the exmoor-ng or L&B Modeling discussion groups. This document will be updated from time to time, as more evidence comes to light.

1. Introduction

The L&B was a rather small railway with limited fleet of rolling stock and a life of only 37 years, and it was extensively photographed. This perhaps suggests that it is feasible to understand the detail of the entire subject; however, there are many things we will never know for certain, and individuals must form their own opinion about certain points.

There were two phases of ownership, and several distinct liveries applied to L&B rolling stock and structures, making the subject surprisingly complicated for such a small railway.

This document briefly touches on the complex subject of the perception of colour, as well as considering the likely variation of colour between vehicles, and over time.

The document summarises the livery in the various phases of the L&B and, in the absence of contemporary colour photographs, illustrates each using the best available sources, in terms of research into liveries carried out by others, images of the L&B and photographs of surviving relics.

The document does not attempt to describe the liveries applied to L&B stock or buildings in the recent revival of a section of the line.

2. Resources

Various sources contain information relating to L&B liveries. These include:

- The various books about the Lynton & Barnstaple railway, containing descriptions of liveries and photographs.
- Various articles from the Lynton & Barnstaple Railway Magazine.
- HMRS Livery Register No. 3 – LSWR and Southern, L Tavender, HMRS, 1970.
- Railway Liveries – No. 1 Southern Railway, Brian Haresnape, Ian Allan, 1982. ISBN 0 7110 1203 2.
- Southern E-Mail Group www.semg.org.uk
- Historical Model Railway Society www.hmrs.org.uk
- Details of the LSWR pre-grouping paint scheme can be found at: www.stationcolours.info

3. Background

3.1. Paint

Paints at the time of the L&B were less stable and hard-wearing than today's. Locomotives and coaches had several coats of varnish, which darkened the base colour a little from the outset (particularly the ivory white on L&B coaches). In an exposed atmosphere, especially with salt-laden air, the paint finish will have deteriorated quickly and a cycle of repainting one vehicle at a time (perhaps mainly over the winter period) will have occurred. Therefore, at any time, a range of shades of colour and degrees of shininess could be expected from a selection of vehicles making up a particular train. Also, at any time, vehicles may have been more or less recently cleaned.

3.2. Repainting Procedures

The SR procedures for locomotives defined full repaints at major (Class A) overhauls, with repairs to the paint being carried out as necessary in between. The painting involved primer, several coats of paint, and several coats of varnish. The varnish gave a brownish colouration to the paint shade.

SR carriages were re-varnished at intervals of one to two years, with underlying paint replaced about every ten years. The full scheme amounted to about 12 coats.

SR freight stock was painted, but not varnished, so its appearance dulled and faded quickly in use.

These procedures will have been typical of "good practice" at the time, and the earlier L&B equivalents will have been generally similar, but perhaps not always enforced strictly, due to limited manpower and money in a small organisation.

3.3. Colour

The original L&B paint specifications will probably never be understood fully, and we are totally reliant on contemporary descriptions and hand-coloured images.

Many people have studied Southern Railway paint specifications, and debated at length about the actual shades, and the optimum way of recreating them today, either in the context of modelling or of railway preservation. The SR was keen on its public image, so tried to enforce a common style across its network. Whether this extended deep into North Devon, we can only speculate.

An additional possibility is that the L&B may have been used to trial non-standard or experimental shades, in the early days of the SR. The line may even have sourced paint locally for repainting rolling stock.

3.4. Perception of Colour

It is difficult to understand how another person sees colours, and it is safe to assume that no two people see colours in quite the same way.

The appearance of colours is also affected by lighting, sky conditions and the colour of surroundings.

3.5. Scale and Distance effects on Colour

It is generally accepted that perception of intensity of a colour depends on the size of the sample viewed; it is this effect that makes a colour that looked fine on a paint colour chart look wrong when applied to the walls of a room!

Whether this effect means that, for example, modellers should lighten colours according to scale, is a matter for personal preference; if they do, close-up photographs of the model may look wrong, but if they do not, rolling stock may look too intensely coloured in comparison with scenery painted “by eye”, and therefore lightened according to the normal viewing distance.

3.6. Interpreting livery details from photographs

There are, regrettably, no known colour photographs of the L&B, even though colour photographs of standard gauge SR scenes the time of the closure of the L&B do exist.

We are therefore left with sources of information that include contemporary colour photographs of SR standard gauge rolling stock, black and white photographs of the L&B, contemporary tinted photographs, contemporary paintings and L&B models painted by modellers who remembered the line.

Care is obviously needed in interpreting all these sources.

Study of non-L&B SR stock allows us to understand the general principles applied by the SR to the painting of stock. There are further unknowns involved with such photographs, however, such as the accuracy of the original early emulsion, and the stability of prints since the 1930s.

Great care should be taken with the colours shown on hand-tinted photographs, but frequently-occurring colours across a selection of contemporary hand-tinted images may be indicative of the real colours. In particular, the well-known “Peacock” series of postcards of the L&B, dating from the 1900s, are probably the most accurate; their design was approved by Charles Drewitt, the General Manager of the L&B at the time.

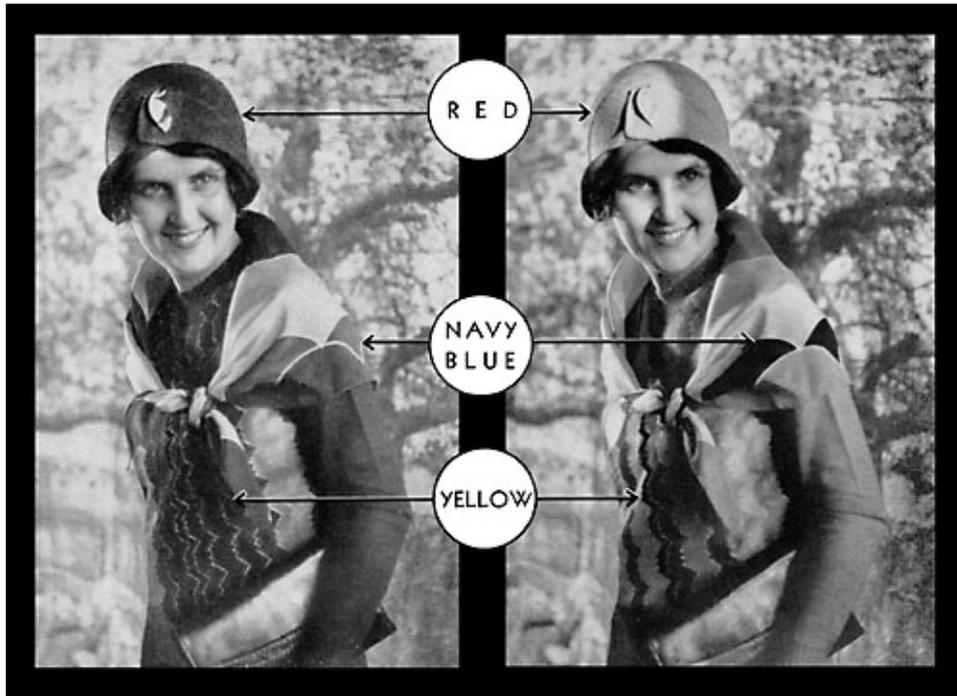
Black and white photographs are useful to show details of lining and lettering, and may indicate the detailed application of colours to particular stock.

Paintings and models by people who saw and remembered the line are another useful source of information. A particular mention must be made of the paintings of J E Hoyland; he visited the line many times during the 1920s and 30s, and from this detailed knowledge, and his artist’s eye, we probably have the most accurate colour images of the L&B at that period.

Finally, as far as locomotives are concerned, we know that manufacturers had “house colours”, and new locomotives *may* have been supplied in these colours.

Having tried to understand the colours used, we need to understand how the various colours were applied to a particular vehicle. A photograph of a freshly outshopped locomotive, in shiny new livery, obviously gives the best chance of understanding which of its parts is painted in which colour. However, several factors impede this process:

- The orthochromatic black and white films used before WW2 did not register tones as we would see them, or even as modern panchromatic films would register them; for example, red buffer beams can look virtually black. There is evidence from photographs that panchromatic film was occasionally used in SR days on the L&B, but most B&W photos were taken with orthochromatic film.



RANGE OF PANCHROMATIC FILM

RANGE OF ORDINARY FILM



From an early Kodak advertisement. The left hand picture is taken with orthochromatic film, the right hand one with panchromatic film

- The tone of horizontal surfaces in particular on a locomotive may be greatly affected by the lighting conditions at the time; under clear blue skies, a shiny black surface can take on a bluish shade, or can take on a shade from its surroundings. This effect even applies in colour photographs. Consider the colour of the cab roof and tank tops on this 7mm scale MW:



Quite clearly Maunsell green, like the tank sides.

Then consider this photo of the same loco (presumably not having been repainted between photo sessions...)



If you saw this picture first, you might well say the tank tops are black. So which is right?

- Only some surfaces of a locomotive would be regularly polished, and the layer of grime that accumulates on the others will dull the colours to give a more uniform tone in black and white, and make identification from images extremely difficult.
- Paints of the time faded with age and exposure to sunlight.

3.7. Conclusions

As a result of all the factors identified above, and in accordance with general opinion in the railway community, we can say that the variation in the colour of an item of rolling stock during its life was far greater than the subtleties between two paint shades we can purchase today; as a result, there is still room for personal preference in deciding the optimum shades for models.

Nevertheless, it would be desirable to apply the chosen colours correctly to L&B rolling stock. However, the non-standard nature of L&B rolling stock, the small numbers of vehicles, the remoteness of Pilton from Waterloo (or even from Eastleigh and the SR "style police"), and the limitations of photography (and perhaps also the particular colours used on the L&B), mean that there is room for different opinions about the livery. We may never be certain of all the details.

4. L&B Rolling Stock Liveries

The evolution of liveries used on L&B rolling stock is summarised on the following timeline:

Date	Manning Wardle locos	Baldwin loco	Passenger Coaches	Freight Wagons
1897-8	<u>As Delivered</u> Bright green lined in black with thin orange line. Frames darker, with thin lining (Perhaps MW house style)	<u>As Delivered</u> "Olive green and gold" according to Baldwin Co. records. Painted name on cab side.	<u>As Delivered</u> Terracotta sides and ends with ivory white upper side panels. Crests and gold lettering block-shaded in black.	<u>As Delivered</u> Light grey with black ironwork and white lettering.
????		Fabricated nameplate added		
????				Original brake vans repainted terracotta (?)
	<u>L&B livery</u> Dark holly green with thick black lining and a thin orange line. Dark red/brown chassis			
Before 1906		<u>L&B livery</u> As for MWs		
1908				Van 23 supplied in light grey
????				Original brake vans repainted light grey
192x			Some coaches painted uniform terracotta with simplified lettering	
1923 onwards	<u>Transitional 1</u> SR oval brass numberplates with black background on cab sides	<u>Transitional</u> SR oval brass numberplates added (black background)	<u>Transitional</u> Some coaches rumoured to be uniform dark green (similar to LSWR electric sets)	<u>Transitional</u> Certain wagons repainted in SR brown with small SR, retaining L&B numbers
192x onwards			<u>SR Livery</u> Coaches gradually repainted in lined	<u>SR Livery</u> All wagons gradually repainted

Date	Manning Wardle locos	Baldwin loco	Passenger Coaches	Freight Wagons
			SR green, and renumbered	in SR brown with large SR and renumbered
1925	<u>Lew</u> Lew delivered in lined olive green SR livery			
1927-8	<u>Transitional 2</u> Yeo and Exe (at least) repainted in Black and white lined ??? green without "Southern" or large numbers			
1927				Cranes and match truck delivered in mid grey/black with white lettering
1927				Howard wagons and vans delivered in SR brown livery
1929		<u>SR Livery</u> Returned from Eastleigh in lined Maunsell green SR livery		
192x	<u>SR Livery</u> Original MWs repainted in lined Maunsell green SR livery with "Southern" and cabside numbers. Brass number plate on rear of cab and background painted red.			
After 1931	E removed from painted numbers....	E retained on Lyn		

More detail of each of these steps in the evolution of L&B liveries is given in the following sections.

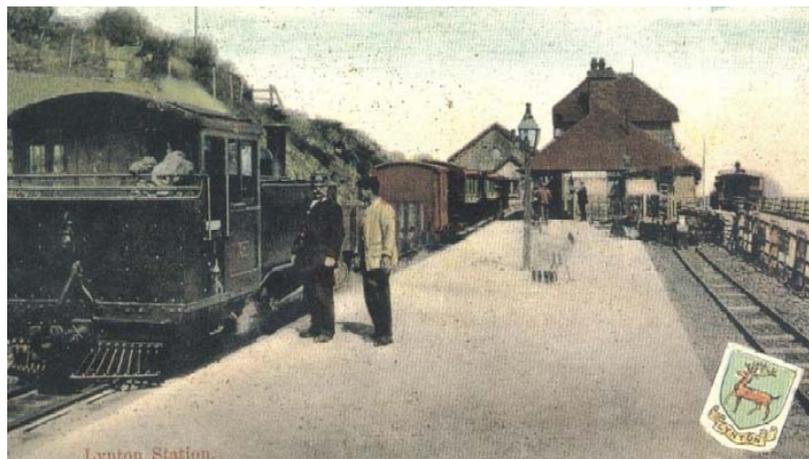
4.1. Independent Period (up to 1923)

Locomotives

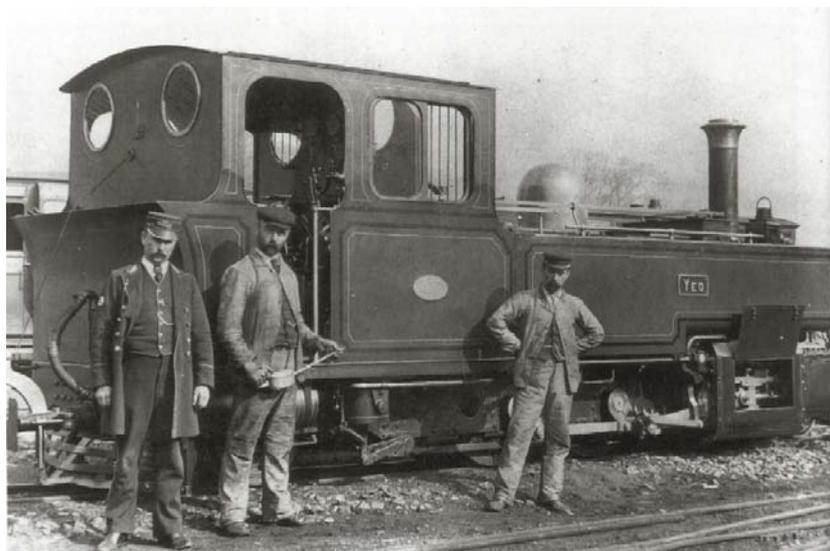
As delivered, Lyn was painted in very dark olive green, lined yellow, with the name painted (in yellow?) on the cabsides. Buffer beams were painted red – cowcatchers were a darker colour probably the same (unknown) colour as the frames:



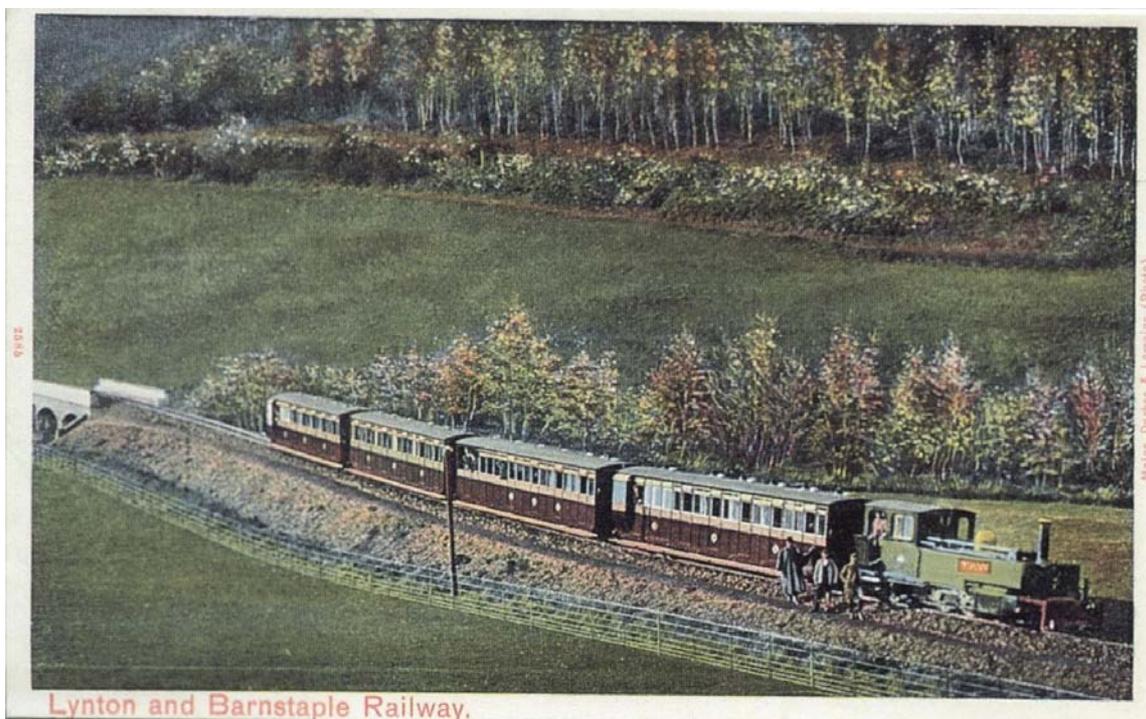
Brass nameplates were soon fabricated (not cast) at Pilton, and fixed to the cab sides. Presumably, a limited repaint took place at this time, if only to paint out "Lyn" on the cab sides:



The Manning Wardle locos were originally painted "bright green" (possibly the MW House Colour) lined in black with a separate thin orange line inside. Buffer beams were red in normal British fashion. Chimney caps were polished brass, rather than the more usual copper. The colour of the frames is not known; some people have speculated that they may have also been green (by reference to other MW outside-framed locos?), but photos suggest a darker colour lined with a similar orange line to the bodywork.

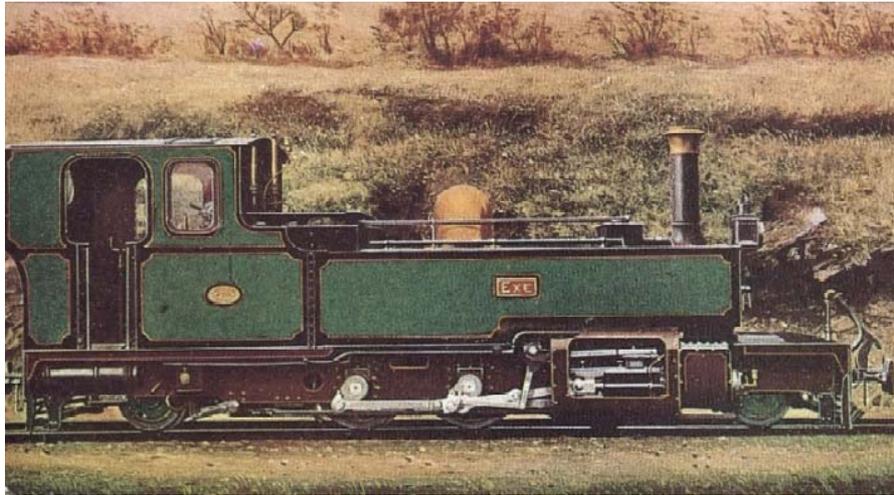


Yeo in original livery, shortly after delivery



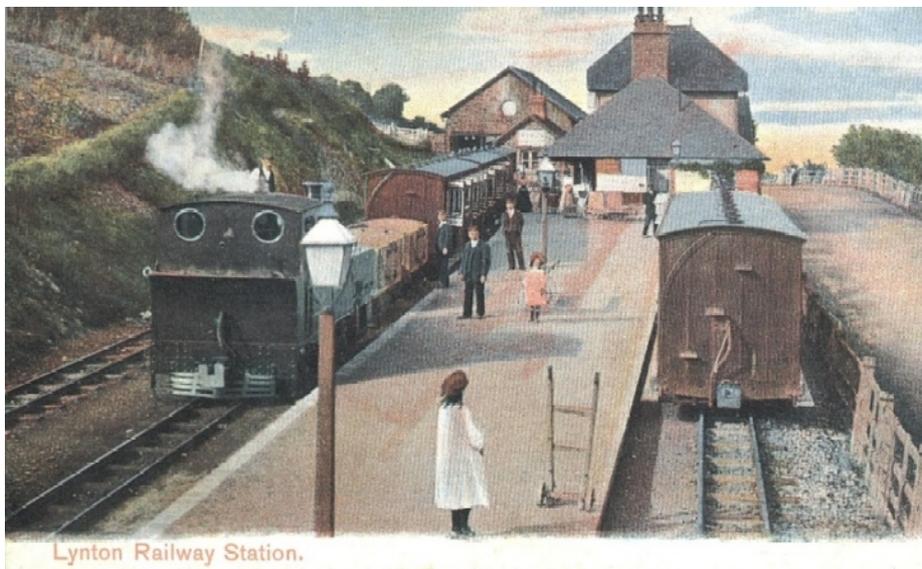
A MW loco and train in a - probably accurate - hand-tinted postcard from the opening of the line

By the end of the 1900s they were all in L&B livery - a dark holly green with thicker black lining relieved by a thin orange line, with a dark red/brown chassis and green wheel centres. Loco lamps were black in L&B days.



Carriages

The carriages were "terracotta" – in this case a sort of dark reddish brown - with ivory white upper panels. The ends were also terracotta. The coaches carried crests and were lettered in gilt, block-shaded black.



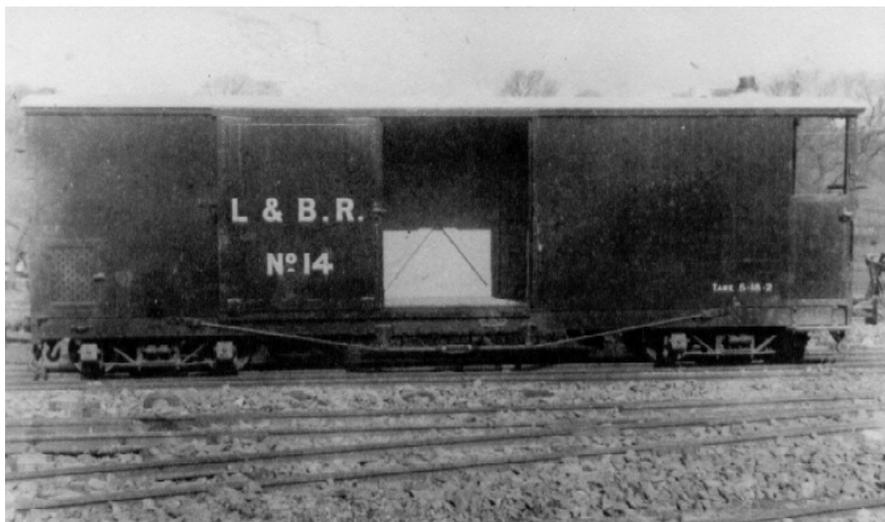
The background in the centre of this original L&B carriage crest shows the terra cotta shade

Goods Wagons

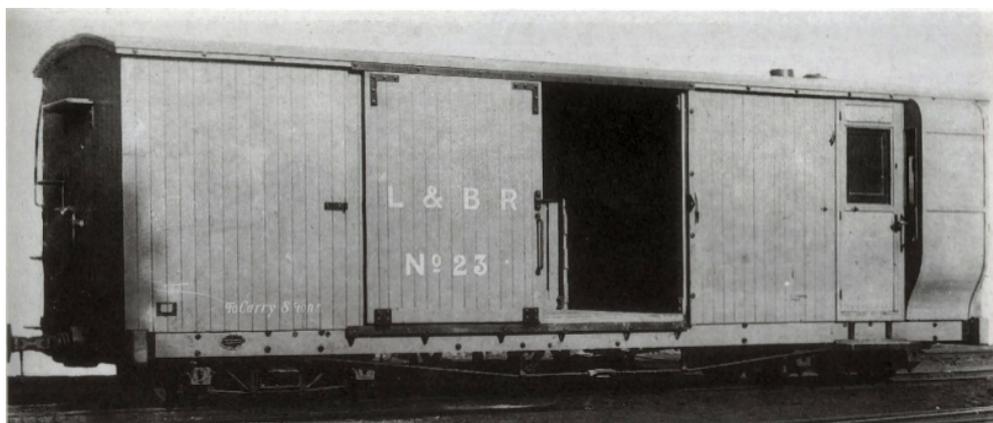
The goods stock was light grey with black ironwork and white lettering.



Although the works photograph of one of the original bogie brake vans shows a light grey livery, these vehicles were soon repainted in a darker colour – probably terracotta to match the coaches – perhaps because it was expected that they would be used primarily as luggage vans. Later, Van 23 arrived painted light grey, and the first two vehicles were repainted light grey at an unknown date.



An early photograph of Van No. 14 painted in a dark colour, probably terracotta



Van 23 on delivery, painted light grey with black ironwork

Van 23 survives, and the original timber in the interior is grey in appearance – like limewashed wood – suggesting that interiors may just have been treated in some way (perhaps with the “one coat of lead paint” referred to below).

The livery in this period is illustrated in the following painting by Jim Hoyland (N.B. the loco lamp should be black).



Towards the end of the independent period, some coaches were repainted in all-over brown, with simple lettering (colour unknown) replacing the earlier crests.



4.2. Southern Railway Period (1923 onwards)

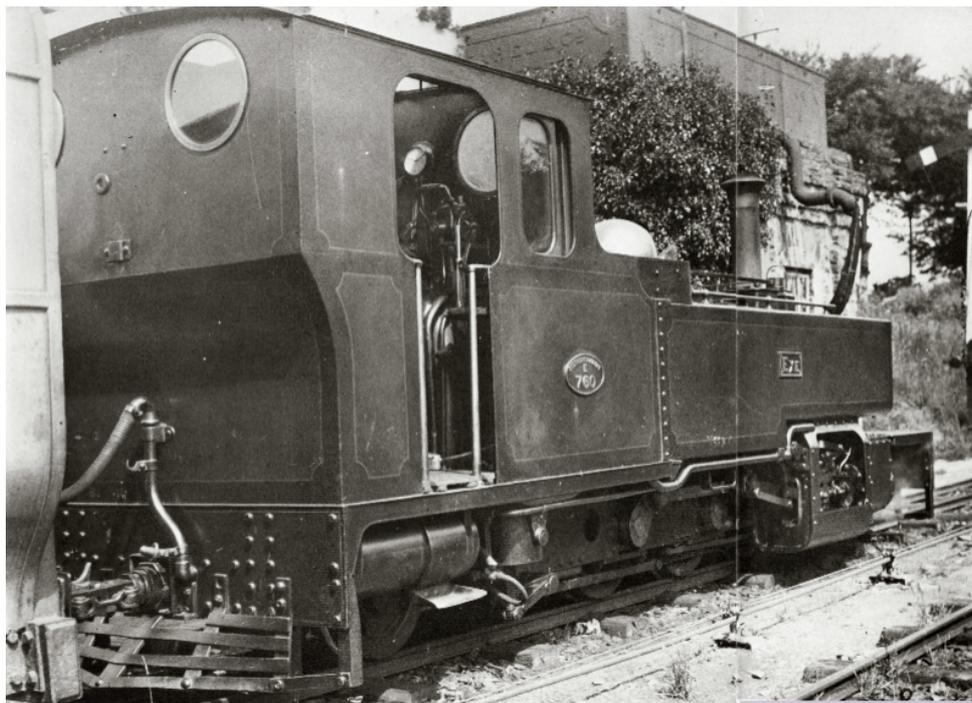
Although the Southern railway took over in 1923, stock remained in L&B livery for quite some time.

Stock was progressively repainted in more-or-less standard Southern colours, but there were some transitional arrangements.

Locomotives

Initially, the locos retained their L&B livery, but were fitted with oval cast brass Southern number plates on the cab sides, with a black background. On grouping, the SR acquired three overlapping sets of numbers, so they were distinguished by A, B and E prefixes (Ashford, Brighton and Eastleigh). By the

early 1930s, the Ashford engines were renumbered 1xxx and the Brighton engines 2xxx. At this point, the Eastleigh engines (including those on the L&B) just dropped the "E" from their numbers.



When "Lew" was delivered new in 1925, it was finished in a Urie green Southern livery with primrose yellow "Southern" and large numerals on the cab sides. The "E" prefix was used on the number, which was also painted on the buffer beams. The cast brass number plate was fixed to the rear of the cab and had a black background. The maker's plate was brass with black recessed lettering. The cab back sheet was unlined, and painted green according to an eye-witness.



During 1927 two of the locos, Exe and Yeo, were repainted in Maunsell green, with black lining edged with white on the inner edge, and black underframes, tank tops and cowcatchers, but with the nameplates still in the centre of the tanks, the numberplates on the cab sides and no "Southern" or large numerals. Comparison with standard-gauge SR loco livery would suggest that boiler, cab front and sandboxes would normally be lined green. Photographic evidence shows that no lining was applied to these areas, and some modellers interpret this to mean that these surfaces were black, whilst others paint them unlined green. Similarly, SR practice was for outside cylinder casings to be lined green; on the L&B, Lyn seemed to follow this practice, but the Manning Wardle engines all appear to have had black cylinders in SR livery.



Lyn returned from overhaul at Eastleigh in standard Southern livery with the "E" prefix on the number during 1929. Careful study of photographs is needed to determine whether, and exactly how, lining was applied to the timber-framed cab. The buffer beams carried "No. E762".

The SR painted the upper panels of locomotive cab interiors in dark stone.

Taw went straight from L&B livery to the later Southern livery – like Lew but in Maunsell green – late in 1929. The remaining locos were eventually brought into line with this style.

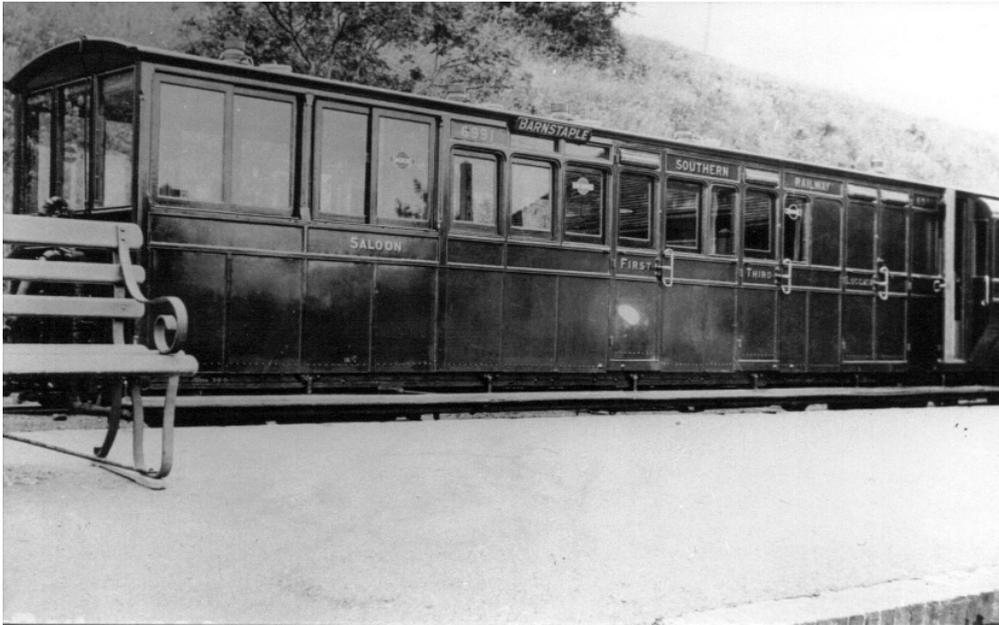
Loco lamps were painted red in the SR period, although a surviving lamp claimed to be from Lew seems (now) to be black all over.

The "E" prefix was not painted on Yeo, Exe or Taw, and was dropped from Lew at some stage, whereas Lyn retained the "E" right up to the end. The "E" remained (painted over) on all the cast plates which, in line with Eastleigh policy post-1930, were painted red.

Carriages

In 1923, the L&B carriage fleet would have been in a mixture of terra cotta and ivory, and all-over brown L&B livery. It is said that a few coaches were briefly painted in the dark green used on LSWR electric sets (which actually formed the basis of SR green anyway, so it may or may not have been a separate livery), but all were repainted in standard Southern carriage green, with waist panels lined out in black with thin yellow lines, with golden yellow lettering block-shaded with black. Coaches had black underframes and ends, apart from those with observation ends, which were green. The SR green at this time was prone to fading and developing a bluish tinge, and this will have been a problem in the strong seaside light in Devon.

SR carriage roofs were painted with white lead paint until the early 1930s. This meant that roofs started off looking white, but darkened with exposure to light and the smoke from locomotives. Contemporary sources say that mainline coach roofs darkened through cream and brown to dirty grey. Later in the 1930s, SR practice was to paint roofs light grey, but this may have begun after 1935. L&B photographs certainly show a wide variety of shades – even different shades on a single vehicle.



A newly-painted carriage in SR colours



A surviving L&B carriage door



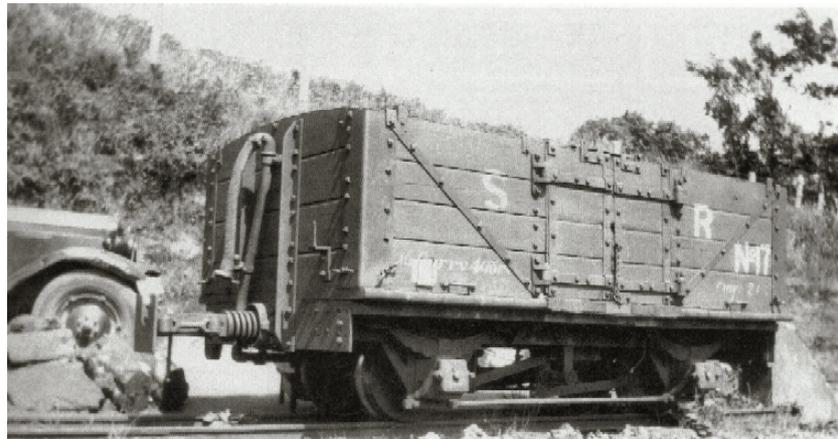
The variety of roof shades is apparent in this picture

Carriage destination boards were red with golden yellow lettering. The SR applied standard red Smoking and green No-smoking roundels to carriage windows. Tail lamps were painted red.

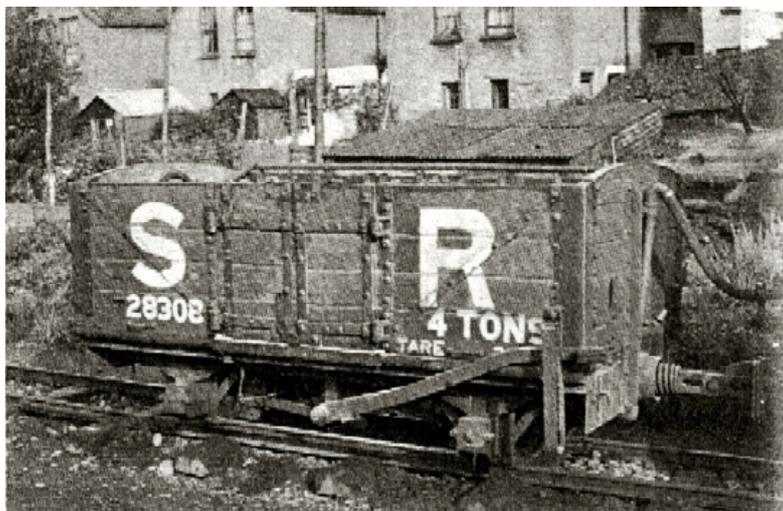
Goods Wagons

Existing goods stock was repainted in a dark brown which one observer has described as being almost black - like liquorice! The Howard vehicles of 1927 arriving in this livery. Wagons had white lettering.

Some items of stock retained their L&B numbers for a while after repainting, and can also be seen with small "SR".



Although SR goods stock bodies were theoretically all-over brown, there is a little photographic evidence of ironwork still being picked out in black (as in the independent days).



There were variations in the lettering of different goods vehicles of the same type (notably 4T van No. 47036, on which the position of the number and weight were reversed).

The colour of the interior of freight stock is not known. One source suggests the SR continued the LSWR practice painting the interior of open wagons with "one coat of lead paint", which probably means a grey colour. The Howard open wagons (at least) had horizontal steel strips fixed inside the body to indicate the maximum load of coal or sand. These strips were painted red.

There is no evidence that the ends of the goods brake vans were ever painted in the SR standard vermilion red, probably because the L&B ran fully fitted mixed trains, and any vehicle could legitimately find itself at the rear of a train, so the benefit on the main line of a signalman being able to observe a red end to a complete unfitted freight train would be meaningless on the L&B.

The Southern period livery is captured particularly well in this painting by Jim Hoyland.



5. L&B Structures

The colour of paintwork on station window frames and structures (lamp posts, etc.) in the independent period is not known, but was dark in shade. Station running-in boards were enamel, with white lettering on a dark blue background. Enamel poster header boards had dark blue lettering on a white background. The consensus from various tinted postcards of the period is that wooden buildings (e.g. signal boxes) were painted in a buff or stone colour. The exact shades will not be known now.

After 1923, stations and structures were gradually repainted in Southern colours. Station running-in boards were initially replaced by LSWR types with raised wooden letters, and then later with SR concrete signs with raised white lettering on a green background.

Southern policy on the painting of structures is said to have remained unchanged from 1923 to 1948. However, the usually well-informed sources on SR liveries all refer to a BR(S) specification which defines colours used from 1948 onwards, but seem to imply that the colours were applied in the same way as early as 1923.

My late father joined the SR as an apprentice in 1934. His SR models set in the 1930s, as well as my own personal recollection from my childhood in 1950s Kent and Surrey suggests to me that more rural stations were, even as late as the 1950s, painted in dark stone with window frames and details picked out in dark green, and window sashes white. So the Southern Region document may describe a brighter colour scheme that was applied to stations when they were re-branded "Southern Electric", following 750V d.c. electrification. Models of 1930s SR stations with Maunsell green stock and mid-chrome green station details certainly look wrong to me, although they look right with 1950s electric stock and steam stock in BR livery. It may be that the brighter green began to be introduced more widely later in the 1930s (along with malachite on rolling stock). The few colour photos of SR stations in the 1930s suggest a very grubby appearance indeed, with hardly any paint colour discernable at all!

The full SR paint scheme for buildings is complex (see Haresnape or SEMG), but if fully applied to the L&B would probably mean (at least on the exterior of structures):

Ref	Name	Modern Equivalent	Use
1	Light stone	BS381C shade 386 Champagne (BS381C shade 352 Pale Cream)	Roof and valence interiors, wooden gates and fences
1a	Dark stone	BS381C shade 358 Light Buff (BS381C shade 361 Light Stone)	Valence interiors, wooden walls, close boarded fences
2	White		Window sashes, level crossing gates, signal posts
3a	Mid chrome green	BS381C shade 221 Brilliant Green (BS N°3A Mid-Chrome Green)	Drain pipes, valence mouldings, columns, railings, window frames, doors, lamp posts, etc.
3	Dark green	BS381C shade 276 Lincoln Green (BS381C shade 282 Forest Green)	Poster board edges
4	Light green	BS381C shade 217 Sea Green (BS381C shade 216 Eau-de-nil)	Roofing steelwork under awnings and ornamental brackets (*)
8	Grey	BS381C shade 652 Dark Admiralty Grey (BS381C shade 693 Aircraft Grey)	Point levers, poster board centres, water tanks, ladders, signalbox walkways
6	Black		Metalwork on level crossing gates and signals
	Signs		Green and white, but red and white for warning signs (e.g. bridge weight

Ref	Name	Modern Equivalent	Use
			restrictions)

(*) Photographs showing the underside of the canopy at Barnstaple Town seem to suggest that this structure did not have light green – it seems to be two shades, presumably light stone and dark (or mid chrome) green.

Whether all former L&B structures were repainted by the SR in this “house style” is not known. Presumably structures like Lynton station would have been repainted fully when it was extended by the SR. Personally, I feel that more muted colours are probably more accurate for L&B buildings.

6. Conclusions

It will be clear from this document that there is some latitude for modellers to exercise their personal preferences in regard to the livery of L&B models, without *too much* fear of contradiction by “rivet counters”.

In researching the document, I realise that some details of my own models are probably wrong.

Any reader of this document who has actual evidence of different historical liveries to those described is most welcome to post a message on <http://groups.yahoo.com/group/exmoor-ng>. Discussions about modelling issues will be welcomed on http://groups.yahoo.com/group/lynton_and_barnstaple_modeling.

Bob Barnard