White Star Buff:

The case for more than one formulation of the color

Of all the debates relating to Titanic's appearance, the question of the color of her funnels reigns supreme as the most controversial. This particular color has come to be known in the greater Titanic Community as "White Star Buff" (WSB). Funnel colors of shipping lines were their signature colors and aided in their identification. Many funnel colors were duplicated among the many shipping lines. The color applied to White Star Line's funnels was indicated on their rigging plans simply as "buff". Buff was a very common color applied to ships of the era. The buff which was used on White Star ships was different from the common buff of the time. The WSB color has been interpreted a number of ways. These representations vary enough that in this article I will try to reconcile the reasons for the variations.

Until relatively recently, our notion of the nature of WSB was formed almost entirely by period paintings of White Star Line ships. I am well aware of the limitations of using reproductions of period paintings. My purpose in using these is not to identify any specific color or colors. I am using these paintings with all their limitations to examine whether there are any consistencies across their entire spectrum. For the Olympic class of ships, we have a few contemporary Titanic paintings but the majority were paintings of her older sister, Olympic. I believe that as we will see, if we had confined ourselves to early Olympic paintings or of other earlier WSL ships, we would have a more consistent view of the color of WSB. If we look at the paintings of early Olympic (Fig. 1a, b, &c), we see a certain consistency of color. The color has a yellow component and a bit of red which can give it a slight orange cast.

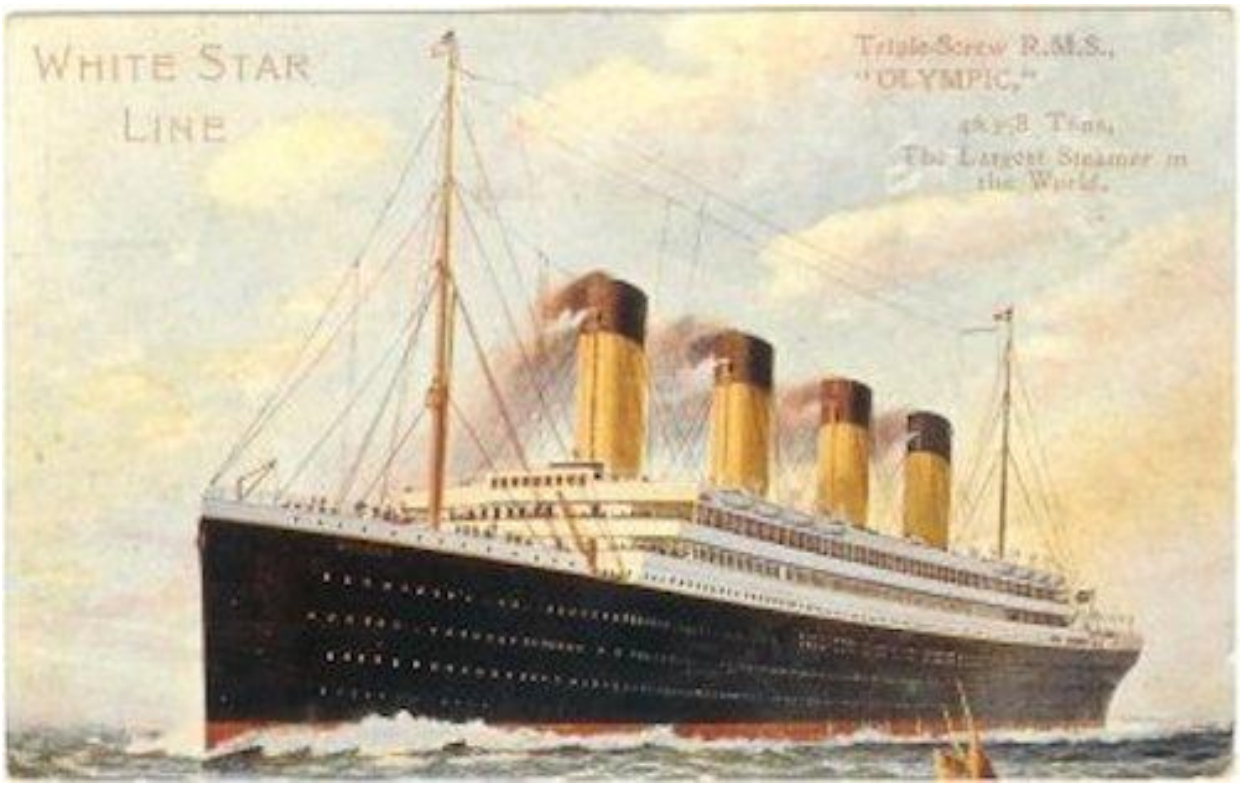


Figure 1a

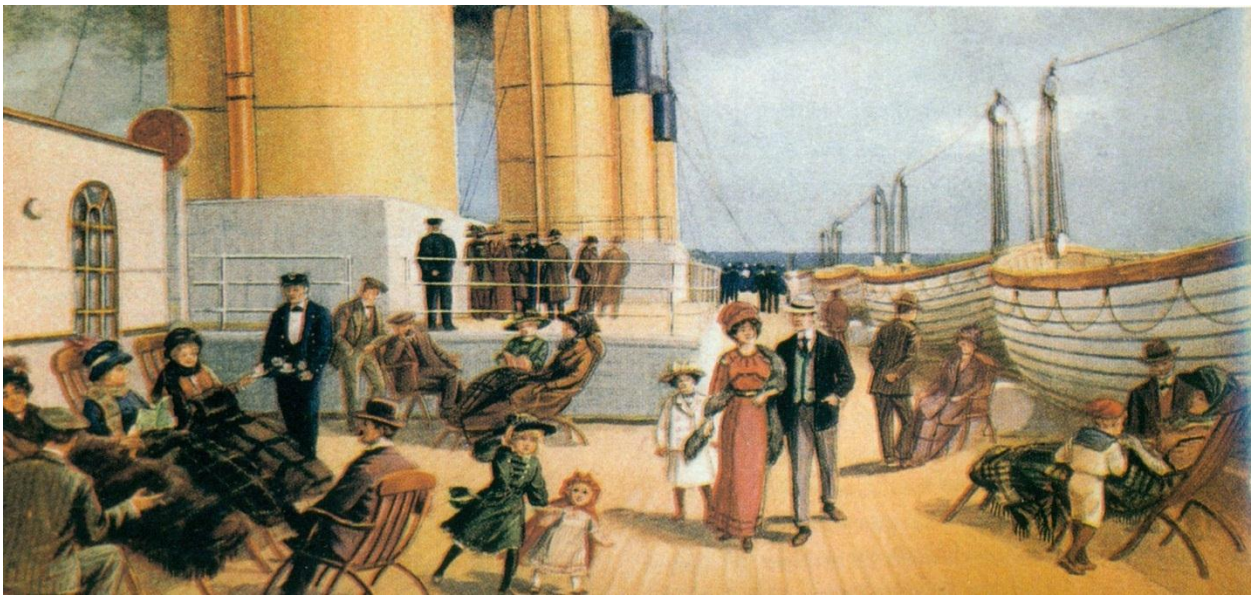


Figure 1b

Figure 1c

The next group of paintings (Fig. 2a, b, &c) depict Olympic in her later career in the early to latter 1920's and early 1930's.

Figure 2a

Figure 2b

Figure 2c

The color shift is noticeable. Gone are the yellow hues which are replaced by a light "pinkish beige". These later Olympic photos can be identified by the lowering of the sheer stripe. This happened in roughly 1921. Other decorative changes were made to Olympic during this period to give her a more modern appearance than her early Edwardian décor.

Within the last couple of years, a color photo surfaced from 1928 which was of Mauretania in the floating dry dock at Southampton. For Titanic fans, this seemed to be a real find because in the background was RMS Olympic. This is the only known color photo of an Olympic class ship. The cropped area showing Olympic is shown in Fig. 3.

Figure 3

The distance of Olympic in the photo prevents a detailed examination. Titanic experts initially tried to explain this photo away because of some of the legitimate shortcomings of this photo. The major shock of this photo was that it didn't jibe with previous notions of WSB. But the longer this photo has been around, the more its accuracy has been appreciated. What is striking about the photo is first, the lightness of the shade. Beyond that, there doesn't seem to be much of any yellow or orange cast as was seen in early Olympic paintings. What is seen is the more pink hue seen in the later Olympic paintings.

There have been some photos of WSL ships after the merger of WSL and Cunard. There has been speculation that WSB changed again after the merger of WSL and Cunard. This speculation may prove to be correct, but this is not an avenue of research that I will be pursuing

in this article. What I am trying to narrow down is the appearance of WSB and the time of Titanic. A complete history of WSB is beyond the scope of this article.

Starting in 1884 the shipping line of Shaw, Savill, and Albion (SSA) ran a joint service to New Zealand with White Star Line (WSL). SSA chartered a number of ships from WSL, including Coptic, Doric, and Ionic. The livery of SSA was buff funnels with black smoke bands, white superstructure, black hull, and a white sheer stripe. The only difference was the white stripe of SSA as opposed to WSL's which was yellow. With SSA having many of its fleet built at H&W and its partnership with WSL, there is a high probability that the buff color used on both lines was the same in the years before about 1921. After 1921 we see the first change in WSL's buff to a much lighter color which is lighter than the buff of SSA ships seen in later color photos. In SSA I believe we have a unique opportunity to view the early formulation of WSB because a number of its ships continued well into the era of color photography. Even though we have photos of SSA ships taken as late as the 1960's, the color is the orangish yellow hued shade of the early WSB formulation. We don't know if SSA adopted the changes made to WSB in approximately 1921 but we do know that the later color photo appearance is that of the early WSB color. In Fig. 4a, b, & c, we see several examples of SSA ships.

Figure 4a

Figure 4b

Figure 4c

To gauge the relative lightness or darkness of the difference in early and late WSB, we can't use black and white photos of WSB as it appeared in Titanic or early Olympic photos. The reason why we can't is because early black and white film recorded colors with a red content much darker on the grayscale. Bright red would appear identical to black. This is the primary reason that paintings and models of Titanic are often given a darker than actual shade. WSB seen in the early black and white film is misinterpreted by the modeler and the painter as being darker when in reality the film is reflecting a red component in the color. Since we believe that SSA used this early formula of WSB, we can compare the appearance of how each of the formulations of WSB appeared on later black and white film which did not distort the grayscale value of red. The photos of Olympic we will examine are from 1928 when the black and white film had been improved. We know this because even the later formula of WSB had a significant

red content which would look dark on early black and white film. However, we see the WSB appearing very light. Fig. 5a&b shows how the later formulation of WSB in 1928 appears both in color and black and white.

Figure 5a

Figure 5b

Fig. 6a & b shows a color and a black and white photo of the SSA ship Northern Star. The black and white photo shows a funnel grayscale shade that is darker than the black and white photo of later Olympic. These two sets of photos illustrate the differences between early and late formulations of WSB.

Figure 6a

Figure 6b

While I believe there is a solid case for the difference in the formulations of early and late WSB, there is another influence which has affected the portrayal of WSB. This other influence is the inclusion of distinctly brown tones of varying degrees in portrayals of WSB. I say portrayals because we can't find these brown hues in the actual photos of the early WSB shown in SSA color photos.

So from where does the brown hued influence originate? Since the brown hued period illustrations are very much in the minority, I believe that some illustrations of WSB were influenced by what artists knew of the more common shade of buff. The BS 381c color chart shows colors which were in use in mercantile applications in the early part of the 20th century. In Fig. 7 we see two samples from this color chart. They are "light buff" and "middle buff". In these two samples we can see the brown hues which were a part of the buff colors commonly used in this period.

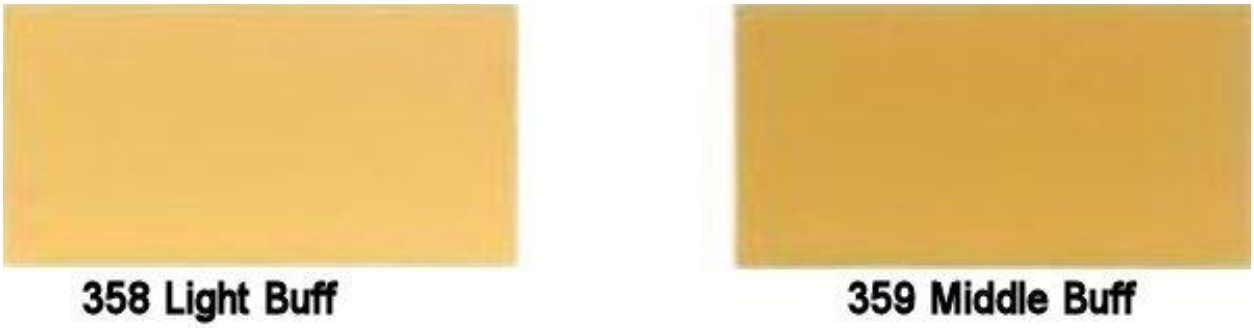


Figure 7

It is possible that a few artists never actually saw WSB in person but rather worked from a black and white photo and were told that the funnels were “buff” but used the common shades of buff rather than the unique shade of WSB. Fig. 8 shows one of these illustrations with a funnel color containing these brown hues

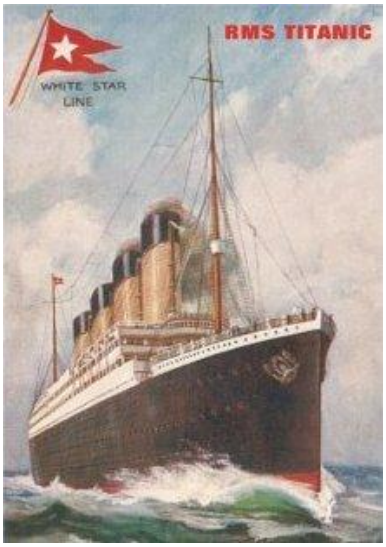


Figure 8

Some later, more modern models of WSL ships (Fig 9) were made with this brown influence which just doesn’t have support from the historical record of the early formulation of WSB. A published passenger recollection of the later formulation of WSB refers to a pinkish hue and a tan color. The color of this later formulation was quite light and was like a pinkish beige as can be seen in the color photo of Olympic. While this color may have been an influence in the period paintings with a brown hue, it is probably more likely that the brown hues in commonly used buff formulations were a larger influence. Whatever the influence, we see almost no brown hue in either the 1928 Olympic photo or the various SSA color photos.

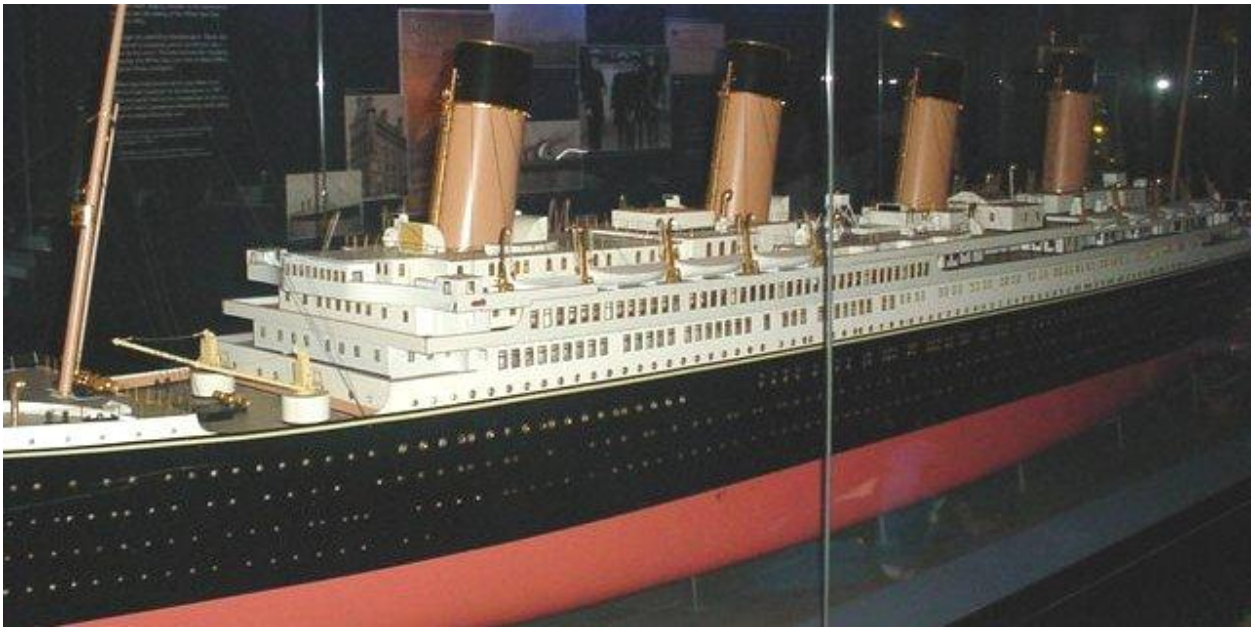


Figure 9

Another major influence on the erroneous representations of early WSB in paintings and models is the yellow component. To be sure, early WSB has some yellow component but it is very different from that represented in numerous early paintings. I believe the source of this error may have come from the yellow used on ships' funnels in this era. Yellow was a very popular color for ships' funnels but it was not the bright yellow we usually think of today. It is more the color of yellow ochre. In the BS 381c color chart, it is represented as "golden yellow" (Fig. 10).

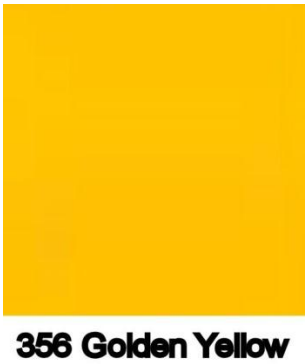
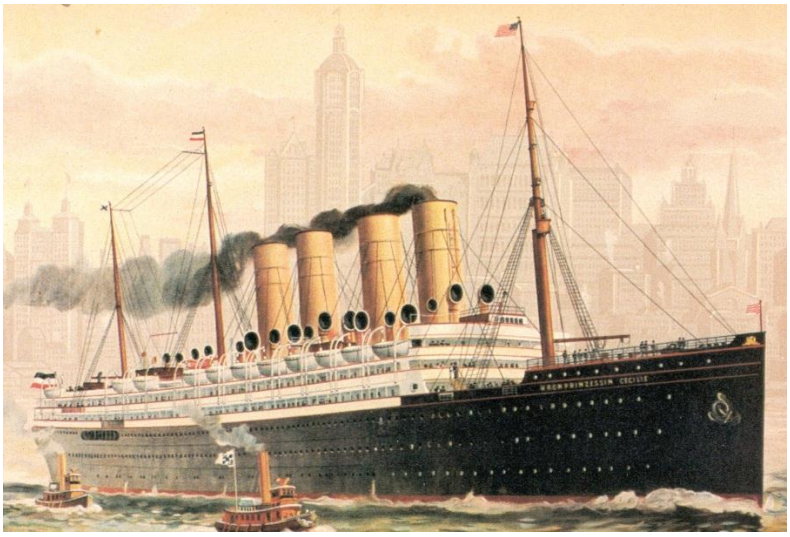


Figure 10

It is a warmer yellow with some red and brown content. Figure 11 shows a period painting of Kronzprinzessin Cecilie with yellow funnels. It is easy to see how this particular shade of yellow

had an influence on the early representations of the unique early formulation of WSB. The spectrum of early WSB would tend toward this yellow on one end and toward a much



warmer, orangeish color on the other end. The true shade would be somewhere in the middle of that spectrum.

This article was not written to try to define what color WSB is. The question which I have mainly been pursuing is: Why do we see the considerable variation of colors of WSB? The examination of this question has produced some answers to the question of what is the color of WSB merely as a byproduct of the investigation. In considering the arguments made here, the reader may be reticent to accept such a major shift in our understanding of WSB. That would be a prudent stance to take initially. However, this article compels the reader to justify his choice of WSB for his model or rendering. The easy choice which most make is to just say that some well know Titanic authority says it should be this or that color, so that's good enough for me. For those who also want to know *why* certain colors are chosen, this article leads you to ask questions about your color choice. If you hold to the notion that there is only one color for WSB, then when you make any choice of color for WSB, you have to reject at least some solid evidence which contradicts your choice. Is all the evidence which you would have to reject, unreliable? I would submit that it probably isn't.

There is a problem solving paradigm known as Occam's Razor. It states that the simplest answer *that explains the facts* is usually the right one. The key phrase is "that explains the facts". Simply dismissing evidence which contradicts one's choice of WSB isn't explaining the facts. Where the notion of an early and a later formulation of WSB more closely fits Occam's Razor is that it gives a more complete explanation of where the different colors of WSB come from and why some of the colors need to be eliminated depending on the date of the representation of WSB.

In conclusion, I believe that the evidence supports the notion that the shade of WSB used at the time of Titanic was changed by WSL early in the 1920's. I also believe the evidence supports the observation that the formulation of WSB used by SSA is probably our truest representation of the early formulation of WSB. As with all color photos, there are variations among the color photos of WSB in SSA ships. The common thread among these variations is that the WSB in these photos has a yellow and an orange component but no brown or pink component. There is a range of shades for the early formulation of WSB which would be close to accurate having varying amounts of yellow content and orange content. Fig. 12 represents what I personally would choose as the closest representation of early WSB. This was sampled from areas of actual color photos of SSA ships.

Figure12

Fig. 13 represents what I believe is a close representation of later WSB after about 1921 but before the merger of WSL with Cunard. It was produced by sampling from the color image of Olympic's funnels.

Figure 13

I can't claim that these are the exclusive shades of these formulations but I believe they are somewhere in the middle of the range of these shades of WSB. The important thing is that one shouldn't choose any shade because someone else thinks it's the best. You should choose the color which research evidence gives the greatest support.

As one evaluates this article, it is possible that they could find a painting or a photo which they believe is an exception to almost any argument made here and as such, invalidates the premise of the article. In evaluating WSB, we are presented with a wide array of widely varying colors. If one looks at all the colors individually and in isolation, he will find himself mired in confusion precisely because of the wide spectrum of colors which have represented WSB. I believe that examining this evidence is much like looking at the posters which used to be on display in malls. If you just looked at it, there was no discernible pattern. It just looked like a lot of shapes. But if you relaxed your eyes and focused beyond the surface of the poster, a pattern emerged. I believe it is only when one steps back and looks at where the different color influences of WSB originated that a pattern begins to emerge. I have attempted to make the case that the pattern which emerges supports the notion that there was an early formulation of WSB and at least one later formulation which originated around 1921. Since discussions of color have a large subjective component, it is impossible to be categorical about individual colors. This article was not written to solicit comments. It represents my perceptions and opinions on the matter of WSB after having looked at samples over a 30 year period. It will no doubt conflict with other peoples' opinions. It was not my intent to establish a benchmark for early or late WSB. The reader can evaluate the evidence and decide for himself.