

Note: adobe acrobat reader, preferably a modern LCD calibrated monitor of 22"~24", at an ambience of very subdued room lighting with no distraction from glare as background or white border and zoom the downloaded PDF to 300% are recommended as the viewing conditions for this Document. Zoom the Doc. for a better judgement of image comparison. I have intentionally restrained applying local correction or sharpness on images.

Introducing my innovative technique called "pregrading" for the first time in the industry. My intension is frame wise optimisation with auto image processing that I have devised. In this process all the frames of a movie footage are extracted as individual images and treated with optimal tonal correction as we do for images in professional still photography and merge them back into a movie, video. Hence it assures maintaining high quality is and makes further correction easier at Grading.

But for this demonstration, many of the images used here are already been enhanced [graded] and I have left only with an option to treat them as original which are placed on the left side of this document. The comparative images on right side proves feasibility of some more improvisation with better quality as I have and speaks about the efficiency of the process.

Most of the images here are only an extract from sources like Blu-ray or downloaded. The image below is an extraction from DVD of "chennai express" with the purpose just to show how my technique is capable to regain back some tonal quality to an image which already has become poor quality perhaps due to transfer steps. Indian movie expected with more brightness, saturation in general leads to compromise on the nuances of tonal quality and becomes a limiting factor for any subsequent correction. To add to this the Grading application with slider based tools have limits even though following HSV on mode to edit. I have hence accommodated more of images of Hollywood movies and enhanced the colour and contrast nominally to suit our taste/ preference.

To be said that the purpose of this document is not to compare or question the high standards of talents and resources of grading facility, where originals are derived. Conversely they are some of the best image I have located but here I only like to show how I could improvise them.



An un-manipulated Raw image contains all information except that they would look very dull due to low contrast [gamma] at capture. The following image captured with "Red-Dragon" movie camera at ISO: 3200 is technically a perfect image though we need to improvise it to look visually appealing. This raw image is edited without the camera profile provided. But a camera manufacturer could only be expected to provide a generic correction. It's merely the gut feeling that could guide us finally.

Sometimes it would be surprising that an image appears to be requiring simple correction, though it actually needs a big effort like the here added picture of grandma, than the following an 'optimally exposed' a Raw image with 'Red-Dragon' camera, that looks as if high skill is required.

'optimally exposed'- an over exposure by 1-2 stops but without clipping the highlight by making use of latitude, so that shadows are lifted up subjecting to less noise and availing more bits to define tonal values better, although at ISO 3200.



This image is a frame extracted from the animation film Rango like the other subsequent two images of still photography sets an example of superior quality. These images allow a room for further correction with my auto image enhancement process that could apply only the necessary correction apart from producing an output that has a 3D look.



The three images below show how the intended pattern of lighting is enhanced with our edit, apart from improved tonal quality and colour maintained. It can be noticed in all our edits the highlights are drawn in to prevent from getting burned at the same time not compromising the dark tones become too dark.



An inspection of extracted images of a movie, reveals more facts that mere file size doesn't necessarily reciprocate to quality of a content in Blu-ray. I had instances of strange encounter that extracted images from 'MEN IN BLACK 3' or even the digital remaster of 'The exorcist' were better on the merits of sharpness, tones and responding to better edit than recent movies for example 'AVATAR'. I have come to know 'MEN IN BLACK 3' was shot with conventional film stock. I should say that the beauty of tonal range of "MEN IN BLACK 3" simply reminds me the days of "Fuji velvia 50" film of recent past. [Request not to be taken as a specific remark on some one]



One of the reason why captured on film looks natural is that our visual perception of light value (colour) is logarithmic in manner similar to film and display of CRT monitor but the digital camera and LED monitors have linear attribute. As the Present day production cameras are claimed to deliver a still photography like results. I am in a way just pursuing to add that film like attributes. The following images from digital remaster of all time favourite horror movie "The Exorcist" as we know is originally shot on film media. The tonal range was nicely preserved in film that leave more room for manipulation with today's digital tools at improvisation.



The distraction from centre of interest caused due to bright blue colour pillow, the brightness of lampshade which are prying for equal attention, they are subdued by mere global edit.

Frame extract from Hollywood movie generally tends to look little dull and unsharp than Indian counterpart. This could be due to a non-destructive image process routine perhaps adopted as a policy or theme of these movies arguer such subtle edit. They seems prefer naturalness that differ from ours. Or to look at in another perspective it could be an outcome of modern digital camera at image capture adopts a more and shallower curve function inorder to accommodate broader Dynamic rage. Here starts ones conception to extend on treating what is natural and the edit limits to differ so that different interpretation are imposed to an image.



Only a slight boost of brightness in order to enliven these images, but involves more than few steps of edit.



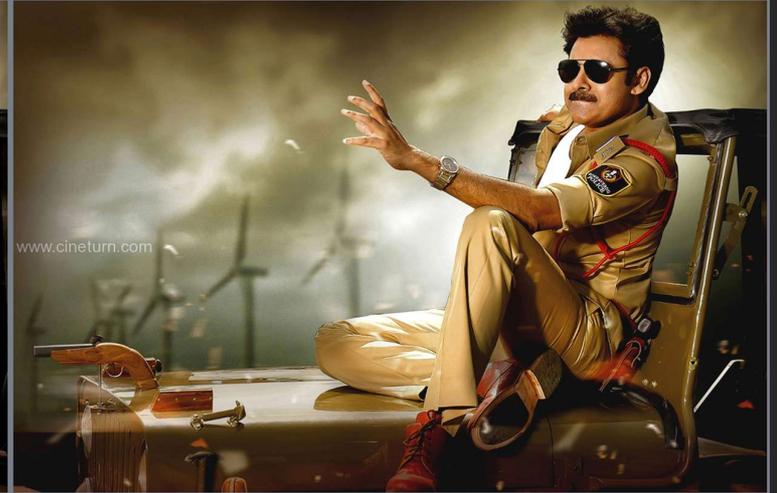


not High res or an HDR. I wish I could find an explanation as to why an image like this so alive and surgically clean don't have place in a movie.



reduced contrast and saturation and by pulling down the highlights, creates right ambiance to support the story. the background recedes further back.





Lucky movie goer with feeble heart, a movie don't use an image so alive, imagine this emerald python in 3D movie, Words are not suffice....