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Color and Look Forum-1

March 15, 2008

Discussion Summary (Technical, Practical and Creative issues)

March 15 marked the kickoff of the Color and Images Forums sponsored by Gamma & Density Co. - an effort initiated by cinematographers Ueli Steiger and Yuri Neyman to explore solutions and recommend best practices for cinematographers, colorists, producers, and all involved in the process of managing color and 'look' across production and post.

The inaugural session focused on identifying key topics that will be addressed in dedicated sessions to follow. The group intends to widen its participation to involve representatives of many perspectives, to build a common understanding and culture around image stewardship.

The three-hour discussion covered topics as diverse as pure technology, workflow practices, 'Moral Rights' to image ownership, changing roles, and current efforts underway to address look management across the entire production. A summary of the discussion follows.

TECHNICAL ISSUES: New technologies are brought to market and adopted without full understanding of workflow implications.

When new digital technologies are introduced, vendors (understandably) show amazing results – best-case examples of what CAN be achieved – often with enormous support and finessing that is rarely communicated. The implication, that ANYONE can achieve those results with the technology/their own resources alone, is misleading and gets many productions (of all sizes and budgets) into serious trouble, forcing major overspending to fix problems. Discussion points included:

- There is a cultural as well as practical issue. “Digital enchantment” has bred a lack of critical demand for real answers, real workflows, and real education before new technologies are put into practice.
- All participants in the color/look management workflow could benefit from education on both individual technologies and workflows combining them.
- Common scenario: Productions looking to save money execute all post processes – dailies grade, edit and final grade on a low-end system where the operator brings the image in wrong and/or changes the color without guidance -- irreversibly. In the end, the production is forced to live with compromised images or overextend its budget to fund a full DI.
- Nomenclature and definitions in this realm are of critical importance. People need quick answers and practical implementations -- not assumptions. Once production starts and you have made a mistaken assumption, your problem will be compounded.
- The change from film to HD/video dailies has created unforeseen consequences. The role of the dailies timer is disappearing and being handled by the telecine operator, and there seems to be a lack of

understanding and knowledge of all the things that can go wrong with digital dailies grading – from calibrating monitors and projectors to managing color spaces etc. The DP has to take a more active role in dailies grading and the time constraints do not allow for it.

- The change from group screenings (dailies, previews) to individual viewings means the loss of important venues for the director, producer, DP, and editor to discuss and understand intention.
- It was noted that many of the technical issues circle back to economics – technologies promise cost savings. If improperly executed, digital processes are often costing productions more in the final stages to fix problems created upstream.

PRACTICE ISSUES: A number of practical solutions were discussed as ways to address major issues.

- The ASC CDL is a new and an important translation tool for communicating the original color/look intention created DP on the set into the post workflow. The ASC CDL has been developed by members and contributors of the ASC Technology Committee to provide an industry 'standard' for cross-platform exchange of primary RGB color correction data using Offset (lift), Slope (gain), and Power (gamma) functions.
- It can track the look established WITH "on-set" color correction that carries through dailies, editorial, the DI and previews, and handles cross-platform data exchange. A fact sheet on the ASC CDL was distributed. ". It helps cinematographers create and communicate color/look across digital production and post.
- The production and post workflow on the film "State of Play," (DP Rodrigo Prieto (ASC, AMC) which is using the 3cP system with support for the ASC CDL, for now first time ever as a full cycle was discussed as a 'best practices' example in terms of both process and communication, as the post facility, DP, and technology provider met extensively to discuss how color decisions would be communicated and adhered to.
- Developing a set of reference images for every scene of a project and making it available to all participants in the color/look process is desired – digital or physical can work
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- Avid's support of the ASC CDL was viewed as a significant positive development. Cinematographers would like to foster adherence to the look described in the ASC CDL.
- The importance of correct, consistent monitor calibration across every screen in every process is fundamental to any digital color workflow, solution, or tool.

CREATIVE ISSUES: In a world of digital processes, who is, and who should be, the author of the image?

Digital workflows are changing the roles of the cinematographer, colorist, dailies timer, telecine operator, editor, VFX artist, etc – and creating new roles. With all of the opportunities to affect color and look across the process, who is – or should be -- the author of the image? Discussion points included:

- With all of the different people/workflows involved in the process, cinematographers are concerned about how (and if) the looks they create on set will end up in the final product.
- Cinematographers participate as much in the DI as the shoot, and they are typically not compensated for their DI work – which can consume several weeks.
- If cinematographers aren't available to participate in the DI, (how) are their intentions protected/carried through to the final product?
- There are infinite examples of using a DI to do what wouldn't have been possible before –it has brought great things to cinematography. If trust and collaboration are working properly, it is all very positive.

- Editors have tools to change and create color and look decisions and they are often expected to do so. Those changes can be permanent and may not follow the look created on-set/in dailies, so the intention is lost prior to the DI and final product. Should editors be responsible for keeping color consistent with the DPs/director's intention? Or re-author the look to serve the story?
- VFX artists often have to change color to account for green-screen shots, blend VFX etc. Should artists be responsible for keeping color consistent with the DPs/director's intention? Or re-author the look to serve the effect?
- What is the role of the post supervisor in 'stewarding' the image and protecting intention? The producer?
- Are there parallels between the screenwriter/editor and cinematographer/colorist in the 'authoring' question?
- In some areas of Europe cinematographers have a "Moral Right" ("droit moral") clause in their contracts, guaranteeing them control over the film image, like a director's cut. Is that a model we can explore here in the US?

As the discussion closed, participants agreed universally that managing the color and 'look' process needs to be a holistic undertaking involving everyone who has an opportunity to change the image. Forum hosts Yuri Neyman and Ueli Steiger committed to working with the Forum participants to pull from the range of topics discussed to develop agendas for future sessions.

Anyone wishing to participate in the Gamma & Density Color and Look Forums or get on the Forum distribution list is encouraged to contact ...

In Attendance:

Directors of Photography: Affonso Beato, Bill Bennett, Curtis Clark (Chair of ASC Technology Commeette), Dan Coplan, Yuri Neyman, Sacha Riviere, Ueli Steiger, and also

Dylan Carter, Director of Nonlinear Workflow, Ascent Media, Los Angeles

Bob Currier, CTO, Gamma & Density Co., Los Angeles

Karl Kresser, President, Cine Gear Expo, Los Angeles

Mark Sawicki, Custom Film Effects, Burbank

Jon Witmer, Editor, American Cinematographer Magazine, Hollywood