Analysis of Film Colors in a Digital Humanities Perspective

By Barbara Flueckiger

In just under 120 years of film history several hundred cinematic colour processes have emerged, many of which had their roots in nineteenth century still photography. To date, though, we still lack a comprehensive research publication that connects the technical foundations of these processes to their respective contemporary reception and their aesthetic or narrative uses.

Globally, the knowledge is there, but it is distributed in books, papers, in the holdings of archives and in the heads of their curators. Now more than ever, at the threshold of film's complete digital conversion, we need access to this knowledge in order to set up work-flows and standards that can help govern the digitization process of historical film material. With only a very few cinemas relying completely on analogue projection, with the major camera suppliers having cancelled the production of analogue technology, with Kodak having filed for Chapter 11 bankruptcy in February 2012, we have passed the tipping point already. Thus these are very urgent matters indeed.

To date, with some notable exceptions, (1) Film Studies as a discipline has barely reacted to this fundamental change. Yet it not only affects contemporary film production and distribution, but also our perception of the cinematic past. My research team and I became aware of this fact while we were working on an applied research project for the development of a scanning and semi-automatic restoration unit. Together with Franziska Heller I set out to develop an additional project (2) to investigate the changing perception of our cinematic past in the digital age. One of the most pressing topics in this regard is the perception and transformation of film colours as a result of their digitization.

To offer solid information, I have developed a database of historical film colours to document the various associated processes that have emerged in the course of film history. As of April 2012, this database consisted of 290 entries. It is being published online as an open access timeline that connects historical and bibliographical information with primary resources from several hundred original papers and more than 400 scanned frames provided by archives and scholars from all over the world.

This database has been conceived to serve as the starting point for a

more collaborative endeavour to gather and connect detailed information on each of these processes as well as further illustrative material, filmographies, and downloads of seminal texts. In addition, this platform would be supported by a system for the computer-assisted analysis of film colours in a digital humanities 2.0 tradition, with collaboration among scholars on a global scale. I have reflected on the methodological and epistemological foundations of this project in my 2011 article "Die Vermessung ästhetischer Erscheinungen" (The Measurement of Aesthetic Phenomena). (3)

Many renowned scholars from universities and archives have already contributed to the collection of material, among others Paolo Cherchi Usai from the George Eastman House, Nicola Mazzanti from the Cinémathèque Royale of Brussels, Laurent Mannoni of the Cinémathèque française, the Cineteca di Bologna, the Library of Congress, and many more.

We are currently working on a crowd-funding campaign to support the project with the necessary financial means.

The database may be accessed online here: http://zauberklang.ch/colorsys.php.

Endnotes:

(1) See, for example, Rodowick, David N. (2007): *The Virtual Life of Film*. Cambridge MA; London: Harvard University Press. Or Fossati, Giovanna (2009): *From Grain to Pixel*. *The Archival Life of Film in Transition*. Amsterdam: Amsterdam University Press.

(2) "Film History Re-mastered", see http://www.research-projects.uzh.ch/p15584.htm

(3) "Die Vermessung ästhetischer Erscheinungen" (The Measurement of Aesthetic Phenomena)" Zeitschrift für Medienwissenschaft, no. 5

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