Second teleconference of Common Colour Appearance Focus Group

Tuesday 23rd August 2016

W Craig Revie

Agenda

- Introductions and background,
- Review of the CIE R8-13 report (see attached),
- Proposal for CIE TC on Common Colour Appearance,
- Possible research methods or tools
  - Andreas Kraushaar / Philipp Tröster : Fogra research plans
  - Yasuki Yamauchi : Yamagata research plans
  - Greg High : Gjøvik research plans
  - Elena Fedorovskaya / Bob Chung : RIT research plans
  - John Seymour : suggested research methods and tools
  - David McDowell : why the CRPCs produce common colour appearance
  - Jack Holm : explanation of what Jack thinks could be achieved
  - Claas Bickeboeller : explanation of what Claas thinks could be achieved
  - Craig Revie: standardisation of assessment method

Introductions

First teleconference presentations and minutes

http://www.color.org/resources/commonappearance.xalter

Review of R8-13 report

Review of the R8-13 report – feedback to date

- Terminology – the term 'common colour appearance' may be confusing (Jack Holm)
    - The Reportership and TC Proposal both use this term and so I propose to keep it for the time being as that could be confusing
    - In section 2 a paragraph will be added summarising the concerns raised and will recommend that the Technical Committee tries to identify a better term ("preferred reproduction with similar colour appearance to other members in a set" has been proposed)
- What is not mentioned is the fact that for these data sets the tone reproduction curves used are based on the procedures defined in CGATS TR015 (David McDowell)
    - Further explanation will be added to 4.1 based on content of Dave's email
- Other feedback is expected from CIE national reviews – a revised version of the report will be circulated at the end of the review period
- Are there other points we should capture from the email thread?

Proposal for CIE TC on
Common Colour Appearance

CIE Technical Committee proposal: key dates

- 10-08-2016   Submission of CIE TC proposal

- 23-08-2016   Second teleconference on Common Colour Appearance

- 08-11-2016   Pre-TC meeting in San Diego (with remote access) followed by
  CIE Division 8 face-to-face meeting in San Diego

- Doodle poll   First formal meeting of the new CIE TC

- 09-01-2017   Meeting at NTNU (Gjøvik) including workshop (1 day)

- XX-04-2017   ICC Meeting in Tokyo with short visit to Yamagata

- Jun / Aug   Meeting at NTNU (Gjøvik) in conjunction with bi-annual symposium

CIE Technical Committee proposal details

Title

COMMON COLOUR APPEARANCE

Scope

To study and report on common colour appearance, including recommend assessment methods: that measure similarity of images on colour gamuts for output colour reproduction media.

NOTE   There are many factors affecting appearance including resolution, texture, fluorescence, illumination and gloss. Determining the relative contribution of each factor is difficult and may be impossible. In order to set an achievable goal for a CIE Technical Committee we propose to limit the scope to the assessment of printed images on substrates with approximately similar characteristics in a fixed viewing environment. The objective is to identify a colour conversion algorithm or algorithms which preserve colour appearance when images are reproduced on devices with different colour gamuts.

Although this scope is limited it will allow the most pressing use case of reproduction of images in a graphic arts environment to be addressed.

TC Participation (not yet confirmed)

- United Kingdom (GB): Phil Green, Craig Revie, Paul Sherfield

- Japan (JP): Yasuki Yamauchi, Po-Chieh Hung

- Germany (DE): Andreas Kraushaar, Philipp Tröster, Roman Byshko, Claas Bickeboeller

- Norway (NO): Greg High, Peter Nussbaum

- United States (US): Elena A. Fedorovskaya, Robert Chung

- China (CN): Ronnier Luo, Muhammad Safdar, Yuan Jiang Ping

- Korea (KR): Choon-Woo Kim

Work plan

- Phase 1
  - define and test assessment methods (all),
  - each participant conducts individual research activities,
  - results of research shared periodically (every six months).
  - active research projects: Yamagata University, Fogra, NTNU (Gjøvik), RIT, Zhejiang University
  - we should try to avoid duplicate research work

- Phase 2
  - develop a Common Colour Appearance metric and/or model for a well-defined subset, for example reflection prints.

- Phase 3
  - report writing

Impact metrics

- The best way to measure the effectiveness of our work would be through the number of standards (de facto or de jure) that build on it. This work has already been requested by ISO TC130 and ISO/IEC JTC1 SC28 as JWG14 would like to develop a standard based on this work.

Possible research methods or tools

- Andreas Kraushaar / Philipp Tröster : Fogra research plans

- Yasuki Yamauchi : Yamagata research plans

- Greg High : Gjøvik research plans

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- John Seymour : suggested research methods and tools

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- Claas Bickeboeller : explanation of what Claas thinks could be achieved

- Craig Revie: standardisation of assessment method

Discussion and suggestions for 'pre-TC' meeting in San Diego