CCA related works in Fujifilm and FujiXerox and subjective evaluation method
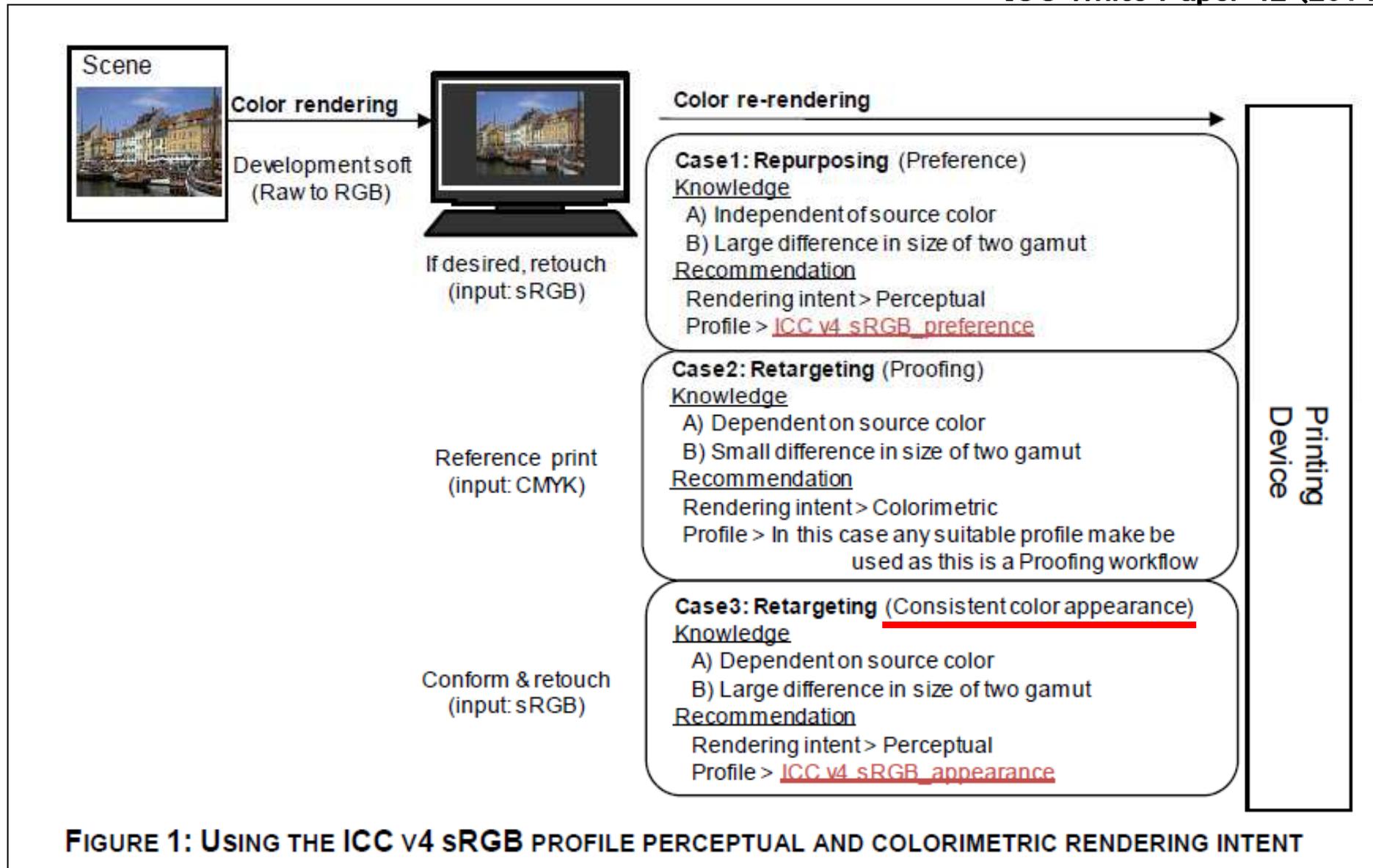
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Hirokazu KONDO, Fujifilm

Hitoshi OGATSU, FujiXerox

FUJiFILM

FUJI XEROX

"sRGB v4 Appearance" profile

Scene

Color rendering

Development soft
(Raw to RGB)

If desired, retouch
(input: sRGB)

Reference print
(input: CMYK)

Conform & retouch
(input: sRGB)

Color re-rendering

Case1: Repurposing (Preference)
Knowledge
  A) Independent of source color
  B) Large difference in size of two gamut
Recommendation
  Rendering intent > Perceptual
  Profile > ICC v4_sRGB_preference

Case2: Retargeting (Proofing)
Knowledge
  A) Dependent on source color
  B) Small difference in size of two gamut
Recommendation
  Rendering intent > Colorimetric
  Profile > In this case any suitable profile make be
                used as this is a Proofing workflow

Case3: Retargeting (Consistent color appearance)
Knowledge
  A) Dependent on source color
  B) Large difference in size of two gamut
Recommendation
  Rendering intent > Perceptual
  Profile > ICC v4_sRGB_appearance

Printing Device

FIGURE 1: USING THE ICC V4 SRGB PROFILE PERCEPTUAL AND COLORIMETRIC RENDERING INTENT

"sRGB v4 Appearance" profile

The goal of the Appearance Profile is to provide a 'consistent color appearance' between the image displayed on the monitor (original first visualization) and the printed output (second visualization). Consistent color appearance aims to achieve a consistent reproduction for the two visualizations by matching color and color tone for the entire area.

The 'consistent color appearance' reproduction objective is most useful when users wish to be able to:

- retouch the image on the display monitor,

- produce prints that have a similar look even when printed from different types of printing devices and

- print or view an image that looks similar to the image obtained by image capture or a scanning device that has been prepared for viewing on a display calibrated to sRGB.

FUJIFILM

FUJI XEROX

Kishimoto et al: "The Consistent Color Appearance based on the display-referred", PS1-44, AIC2015
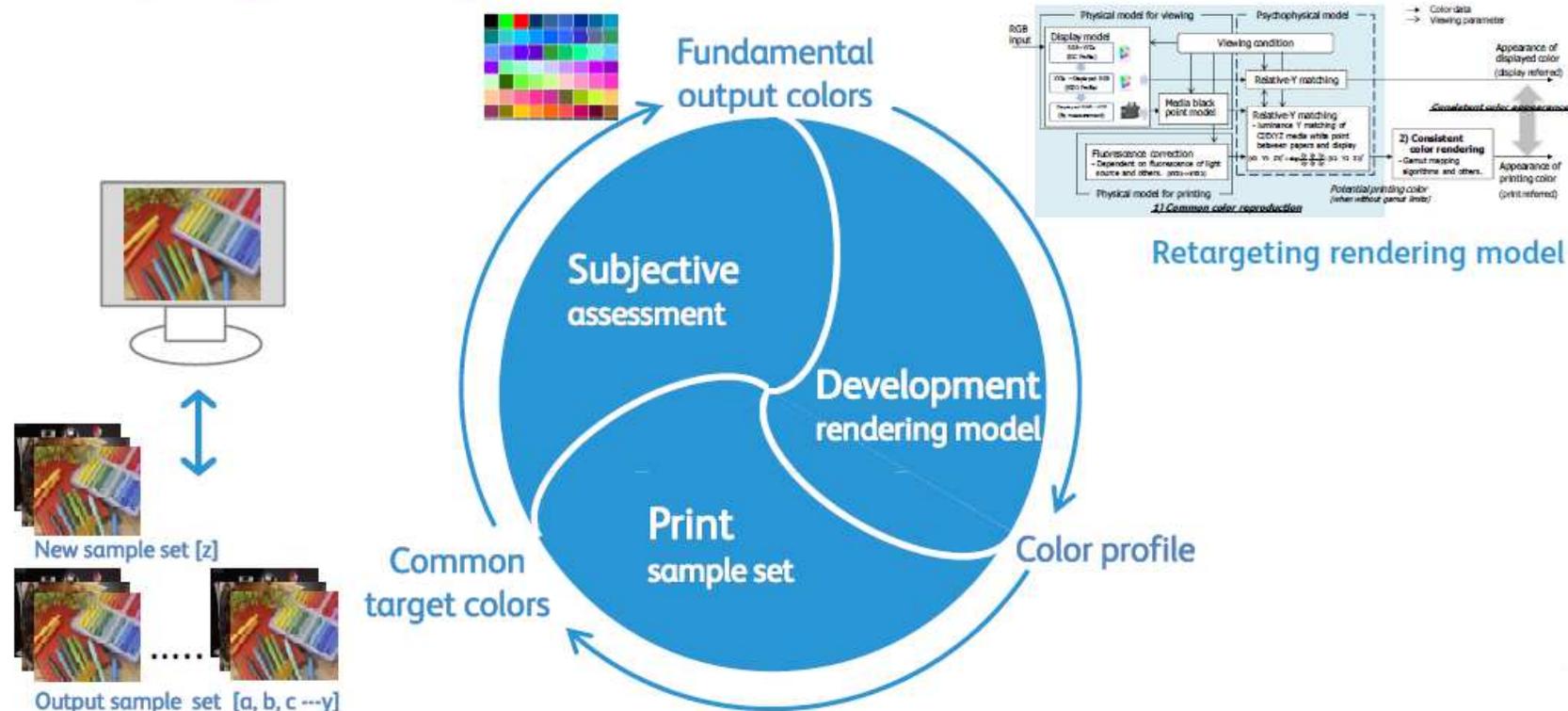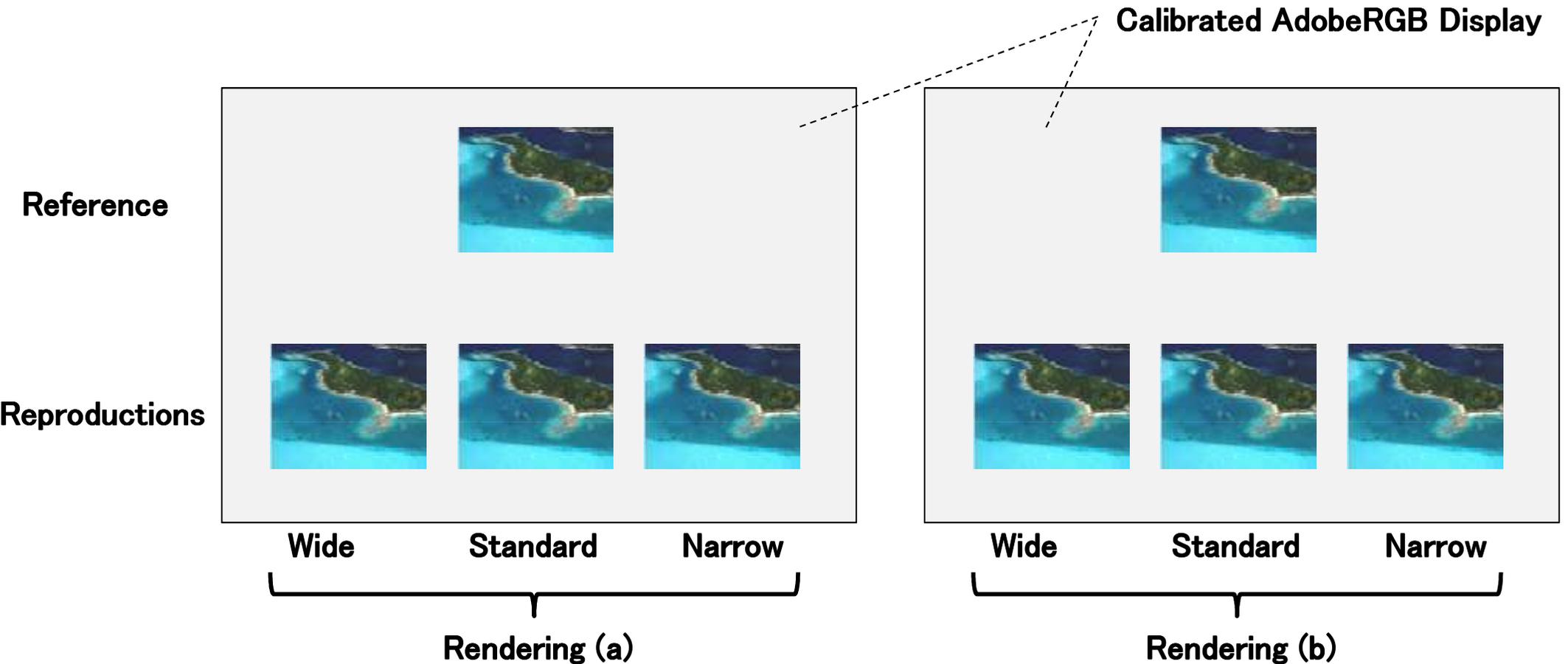
CCA based on display-referred
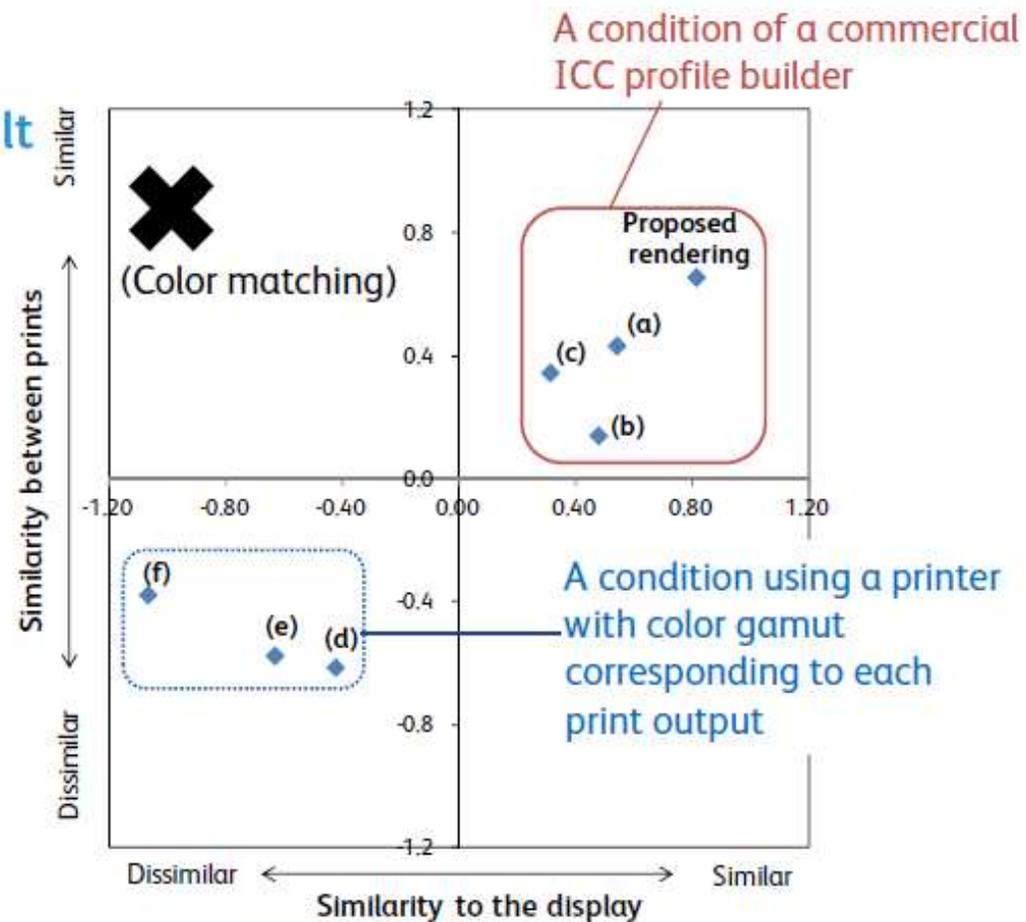
Subjective Evaluation of CCA on single medium

■ Evaluate CCA of some renderings in paired comparison method