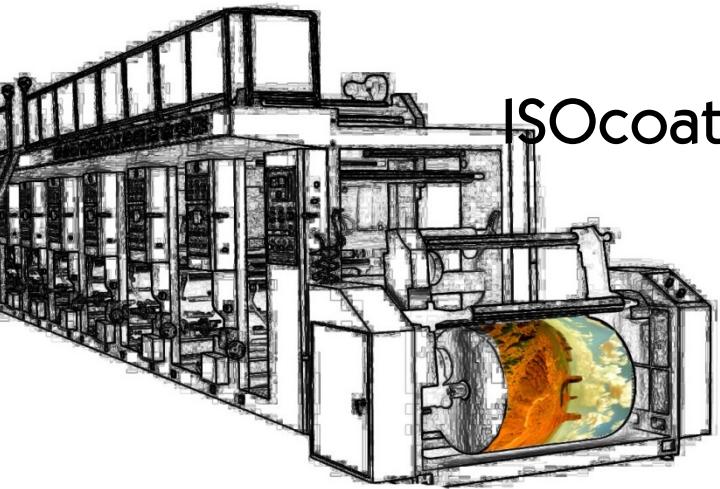


# References for color communication

Juergen Seitz, GMG, 2015/12/07





ISOcoatedV2

ISO

PSOuncoated

FOGRA51

Variables, variables...  
CRPC6

Every improvement of the accuracy  
of our quality measures, enlarges the

CRPC3

GRACoL2013

number of variables

... for more and more output channels

SWOP#5  
FOGRA39

PSR

... for more inking systems and pigments

CRPC5  
3664

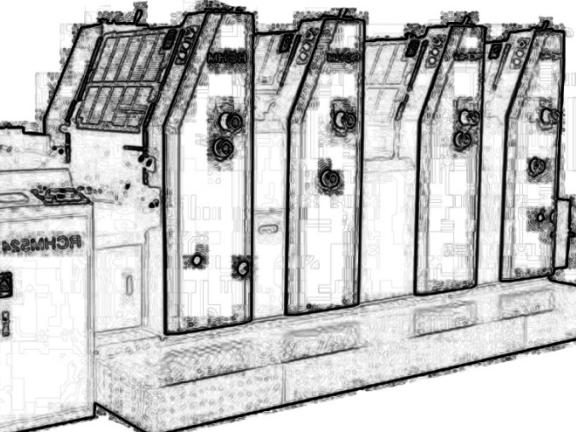
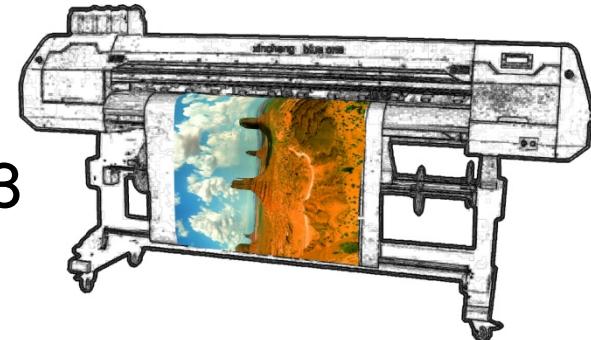
13655  
JapanColor

SNAP2007

12647

CMYK

FOGRA53



gmg<sup>color</sup>

GRACoL



## References for color communication

- ▼ We used to use physical references for color communication in the past?



## References for color communication

- ◀ ... and we still do!



## References for color communication

- ▼ ... and we are used to accept process specific differences or tolerances.

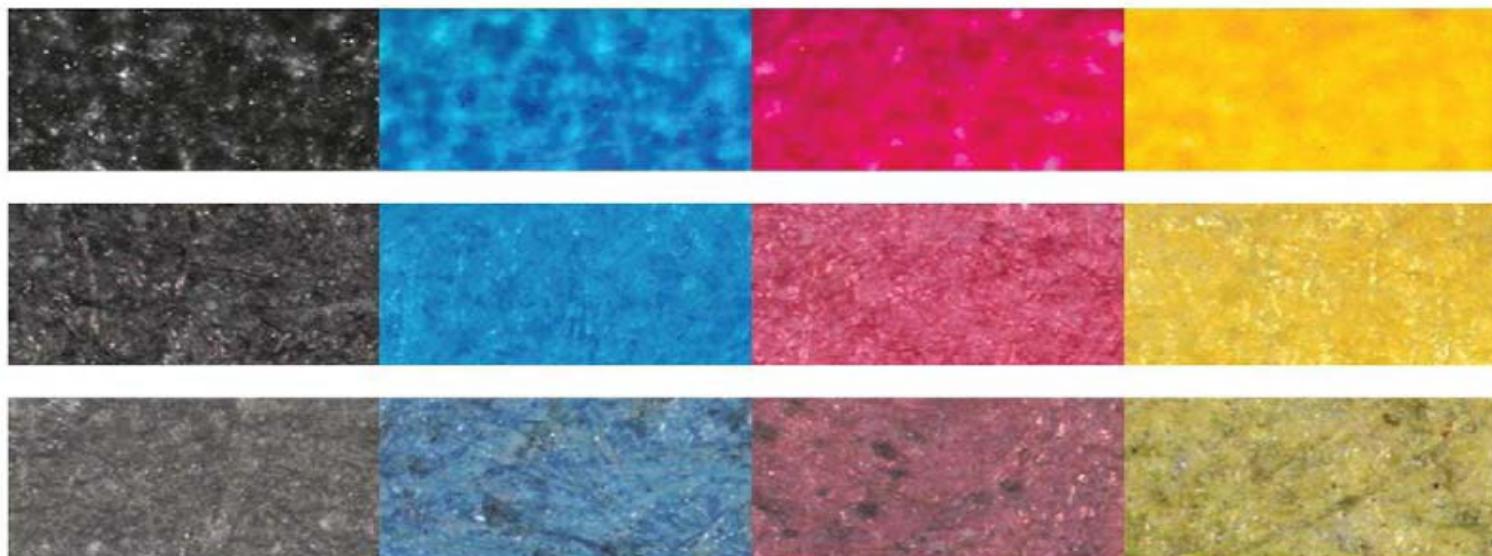


Abbildung A-135: Mikroskopaufnahmen von Primärfarben-Volltönen, die standardisiert auf Bilderdruckpapier (1), Naturpapier (2) und Zeitungspapier (3) gedruckt wurden.

Source: ProzessStandard Offsetdruck des bvdm, [www.prozess-standard.de](http://www.prozess-standard.de)

## References for color communication

- ▼ What is the color reference for an image in a digital workflow?

```
101100001101100011110110110001010000000111  
000101100001101100011110110110001010000000  
1100000110110001111011011000101000000011100  
011000111101101100010100000001110000110001  
000110110001111011011000101000000011100001  
011000011011000111101101100010100000001110  
011011000111101101100010100000001110000110  
110001111011011000101000000011100001100011  
1000101100001101100011110110111011000101000000  
11000001101100011110110111011000101000000011100  
100001101100011110110111011000101000000011100  
0011011000111101101110110001010000000111000011  
0110000110110001111011011101100010100000001110  
0010110000110110001111011011101100010100000001  
1000011011000111101101110110001010000000111000  
1100011110110111011000101000000011100001100011  
0011011000111101101110110001010000000111000011
```



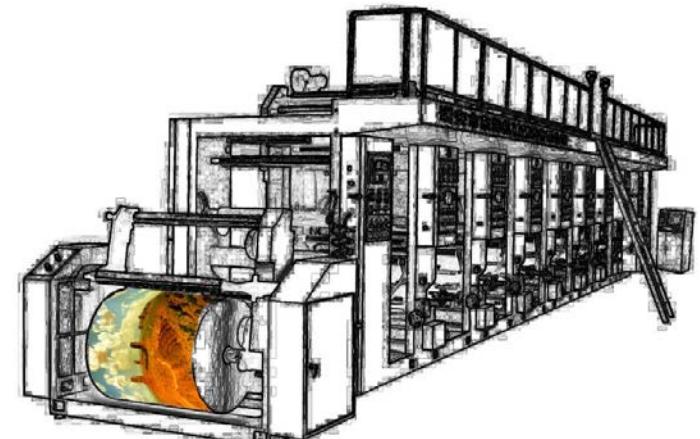
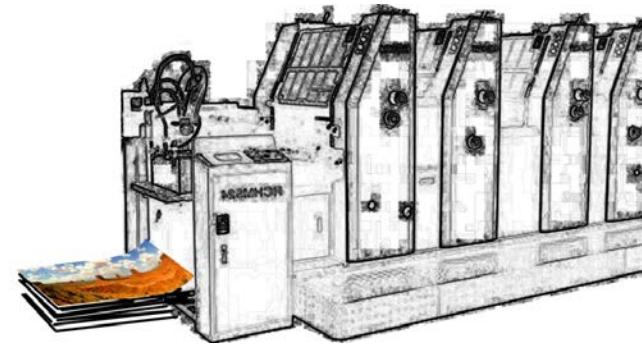
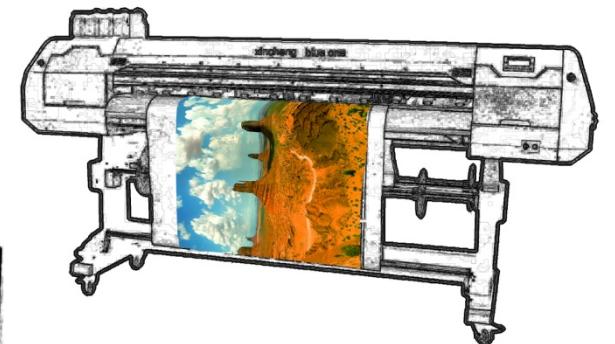
## References for color communication

- ▼ A digital proof is the most reliable tool to create physical color references.



## References for color communication

- ▶ ... for the many output options.



## References for color communication

- ▼ ... either as a relative reference



## References for color communication

- many use-cases take a proof just as a relative reference for a production.  
E.g. „FOGRA39-proof for everything“



## References for color communication

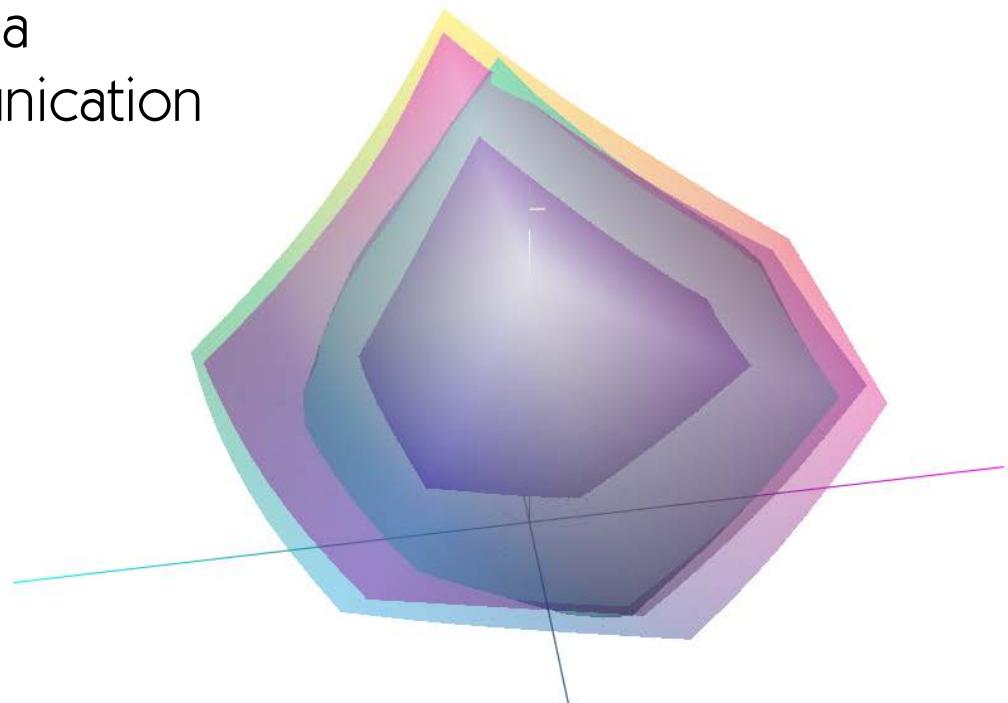
- ▼ ... or an absolute reference, where the printing process parameters and the substrate tint are considered accurately.



## References for color communication

### ◀ Tasks:

- Find a measure to describe the quality of a relative match
- Establish one (or 2?, or 3?) colorspace that covers most of the needs in a relative color communication





Wherever

a

color

goes



it

stays

that

color