Project 1 for Data Visualization ST 2019

Color Measurements

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Date:

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# Abstract

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# Introduction

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“College writing often involves integrating information from published sources into your own writing in order to add credibility and authority–this process is essential to research and the production of new knowledge.” [1]

## Possible Questions

Similarity in 3 steps:

1. for all squares and position circles
2. without the position circles
3. without the color at the border, just the skin colors

Is there a intra sheet inter color card dispersion?

How similar is each color to the master color?

* Try different visualizations – what works, what not?

How similar is each card to the master color card?

How similar is a card to each other card from the same sheet?

How similar is a card to each other card from every sheet?

Are the cards more similar to the master color card than to other cards?

Is it possible to find a limit value for similarity to declare color cards that should be rejected?

* The histogram from today
* <https://wisotop.de/farbabstand-farben-vergleichen.php>

# Materials and Methods

## Dataset 1

## Dataset 2

## Package data.table

fread

## Package colorscience

deltaE2000 – Distance

Source: http://zschuessler.github.io/DeltaE/learn/

## Package tcR

cosine.similarity

Histogram / Boxplot / ….

https://wisotop.de/farbabstand-farben-vergleichen.php

# Results

## Result 1

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## Result 2

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# Discussion

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# Conclusion

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# References

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| [1] | F. N. Last Name, "Quoting and Paraphrasing," 13 May 2019. [Online]. Available: https://writing.wisc.edu/handbook/assignments/quotingsources/. |