



HafenCity University Hamburg

University Of The Built Environment And Metropolitan Development

Seminar GIT

Topic 2: Story Maps

Study program:

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1 Introduction

2 Choropleth maps

3 Basic color information

3.1 Human color perception

3.2 Color spaces

4 Criteria

4.1 Color distance

(Brychtová, 2015) (Brychtová & Çöltekin, 2017) (Sharma et al., 2005) (Brychtova & Coltekin, 2015) (Brychtová & Çötekin, 2017)

4.1.1 Equation

4.2 Number of classes

4.3 Further aspects

4.3.1 Spatial distance

4.3.2 Brightness of colors

5 Examples

6 Conclusion

Bibliography

- Brychtova, A., & Coltekin, A. (2015). Discriminating classes of sequential and qualitative colour schemes. *International Journal of Cartography*, 1(1), 62–78.
- Brychtová, A. (2015). Exploring the influence of colour distance and legend position on choropleth maps readability, 303–314.
- Brychtová, A., & Çöltekin, A. (2017). The effect of spatial distance on the discriminability of colors in maps. *Cartography and Geographic Information Science*, 44(3), 229–245.
- Brychtová, A., & Çötekin, A. (2017). Calculating colour distance on choropleth maps with sequential colours? a case study with colorbrewer 2.0. *KN-Journal of Cartography and Geographic Information*, 67(2), 53–60.
- Sharma, G., Wu, W., & Dalal, E. N. (2005). The CIEDE2000 color-difference formula: Implementation notes, supplementary test data, and mathematical observations. *Color Research & Application: Endorsed by Inter-Society Color Council, The Colour Group (Great Britain), Canadian Society for Color, Color Science Association of Japan, Dutch Society for the Study of Color, The Swedish Colour Centre Foundation, Colour Society of Australia, Centre Français de la Couleur*, 30(1), 21–30.