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Accessibiltity, Spatial Organisation and Demography in Switzerland through 1850 to 2000: First Results

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Introduction

Project: “Development of the Transit Transport System and its Impact on Spatial Development in Switzerland”

within COST 340 ”Towards a European Intermodal Transport Network: Lessons from History”

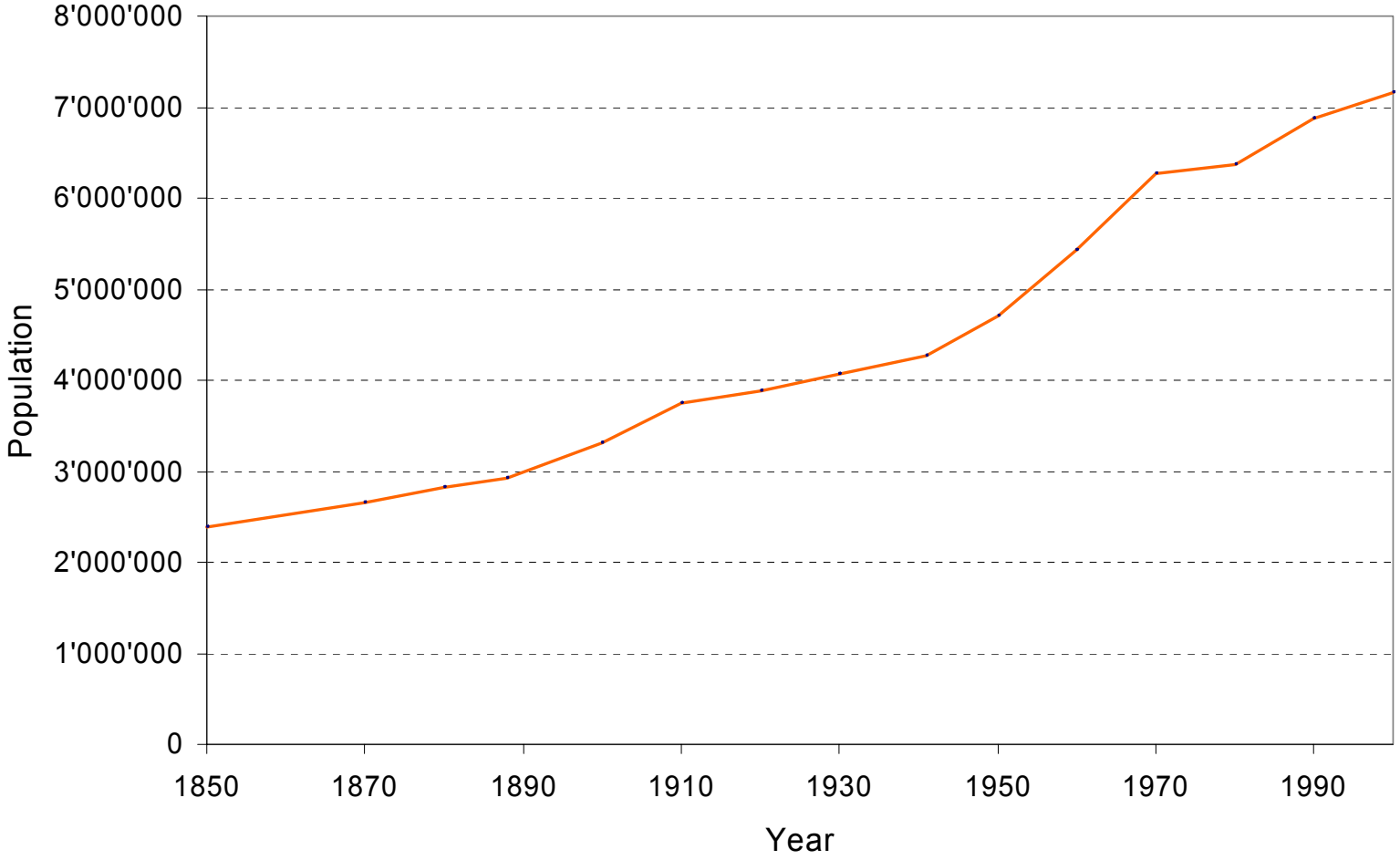
Goal

General statements about the population its development and its spatial distribution in Switzerland

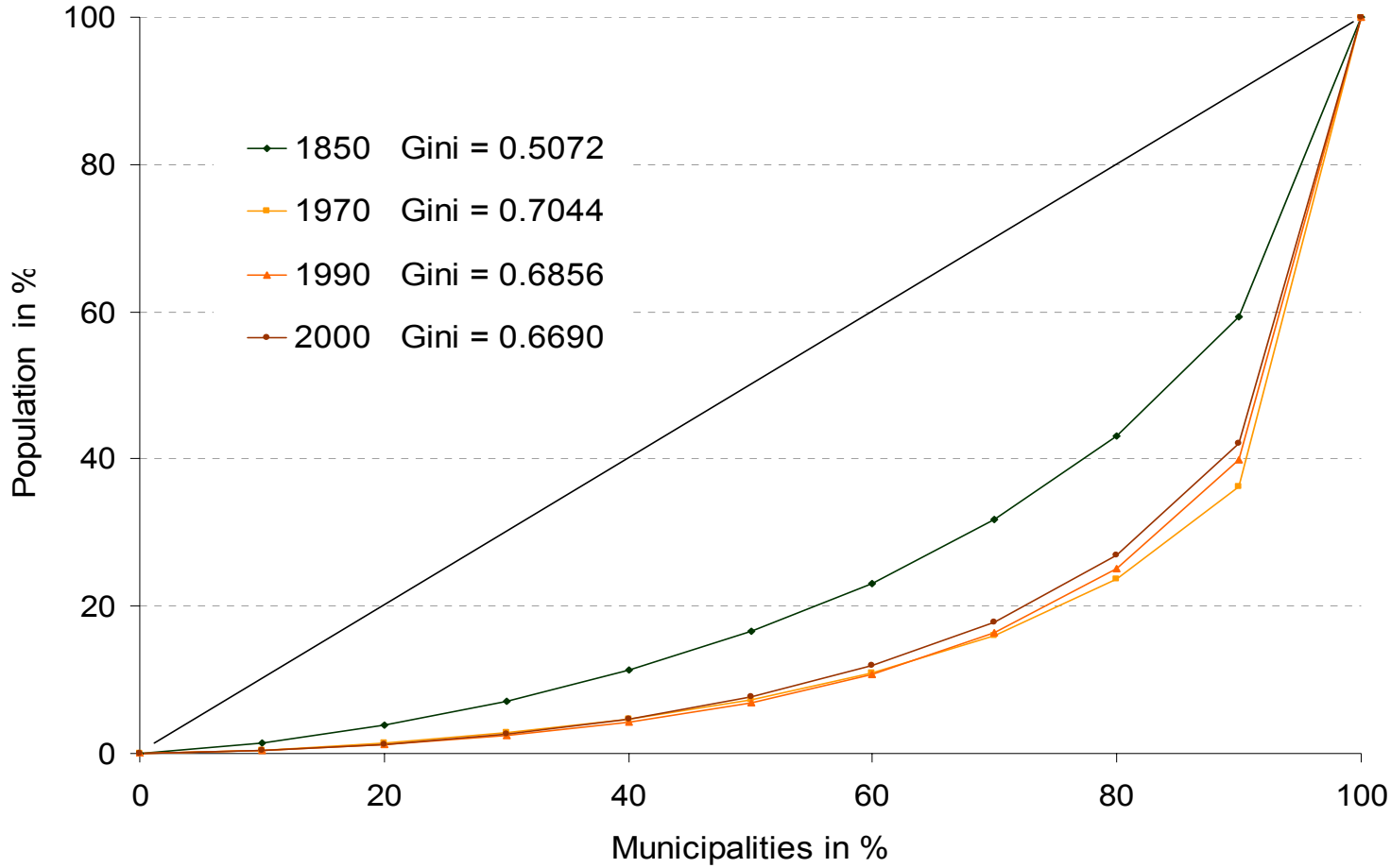
Following questions are of interest:

- When did the population grow?
- How did the population grow?
- Where did the population grow?
- The role of accessibility

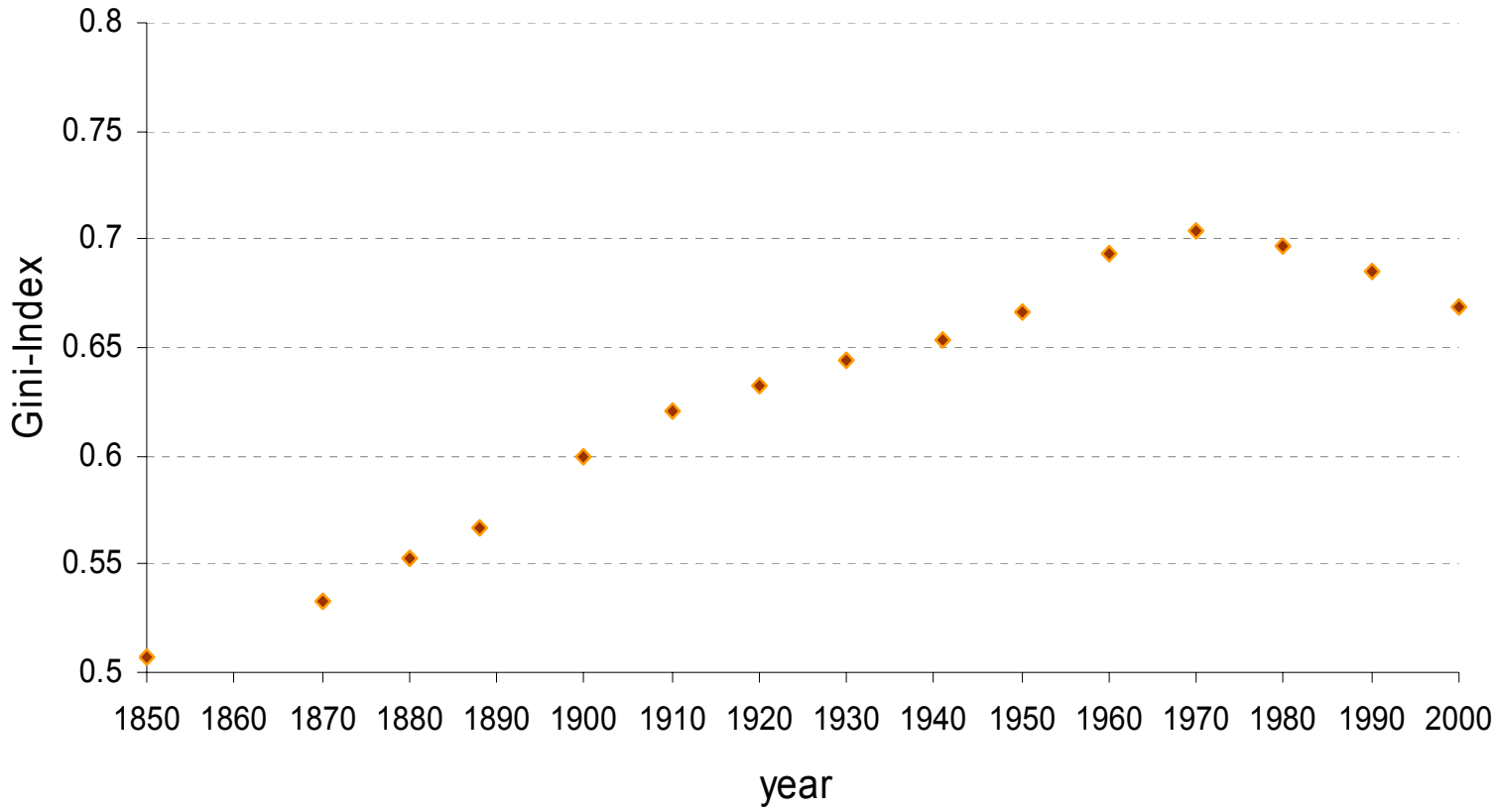
Population development in Switzerland



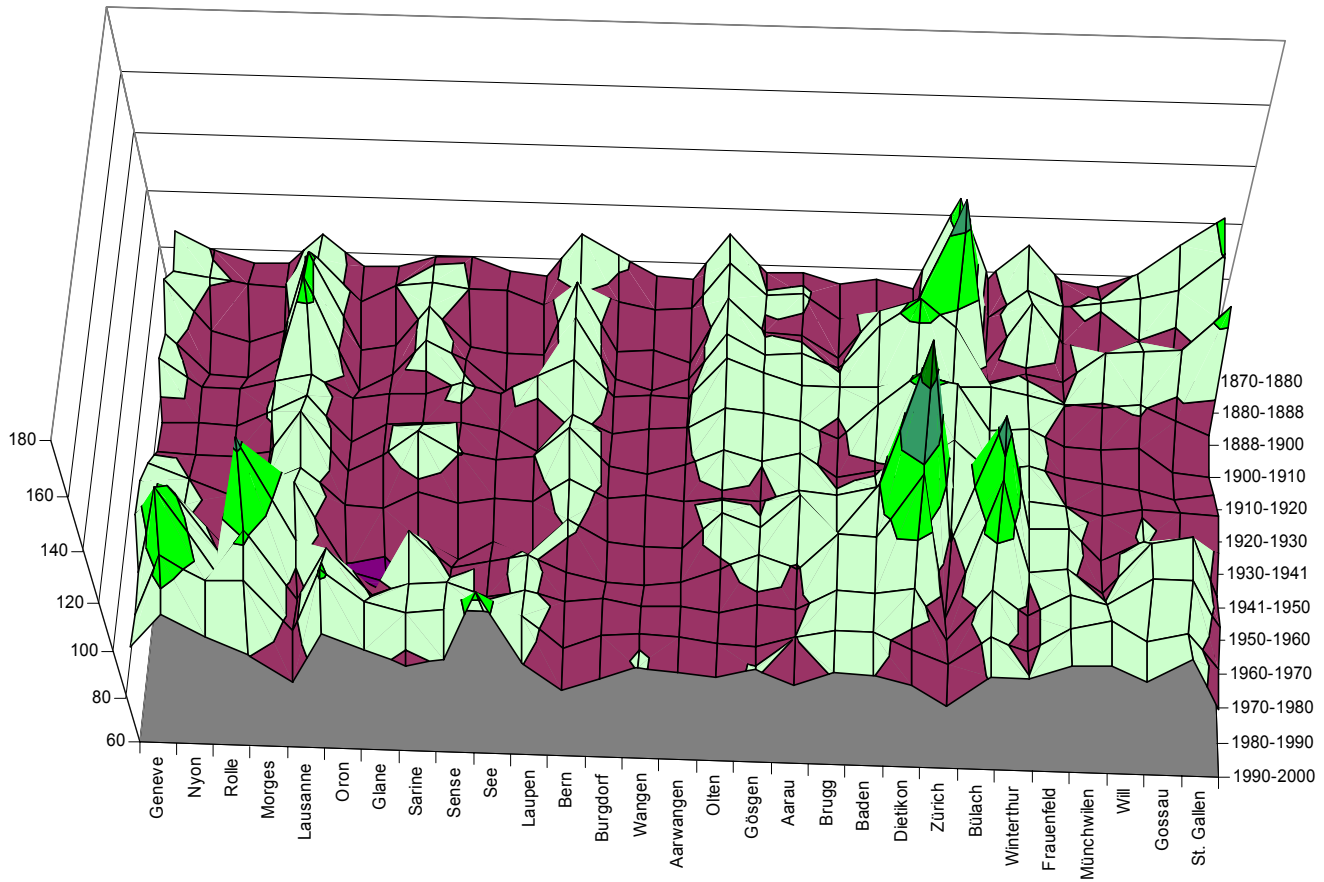
Lorenz curves based on municipal population size



Development of the Gini index of the municipalities



Longitudinal axis Mittelland



Accessibility

Accessibility is defined as (Geurs and Ritsema van Eck, 2001):

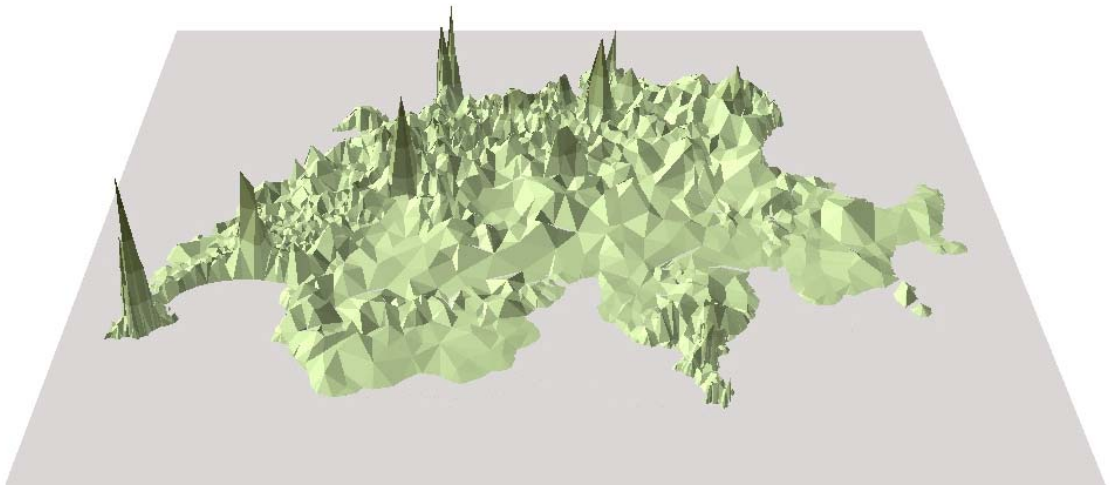
> …the extent to which the land-use transport system enables [groups of] individuals or goods to reach activities or destinations by means of a [combination of] transport mode[s].

Potential Accessibility

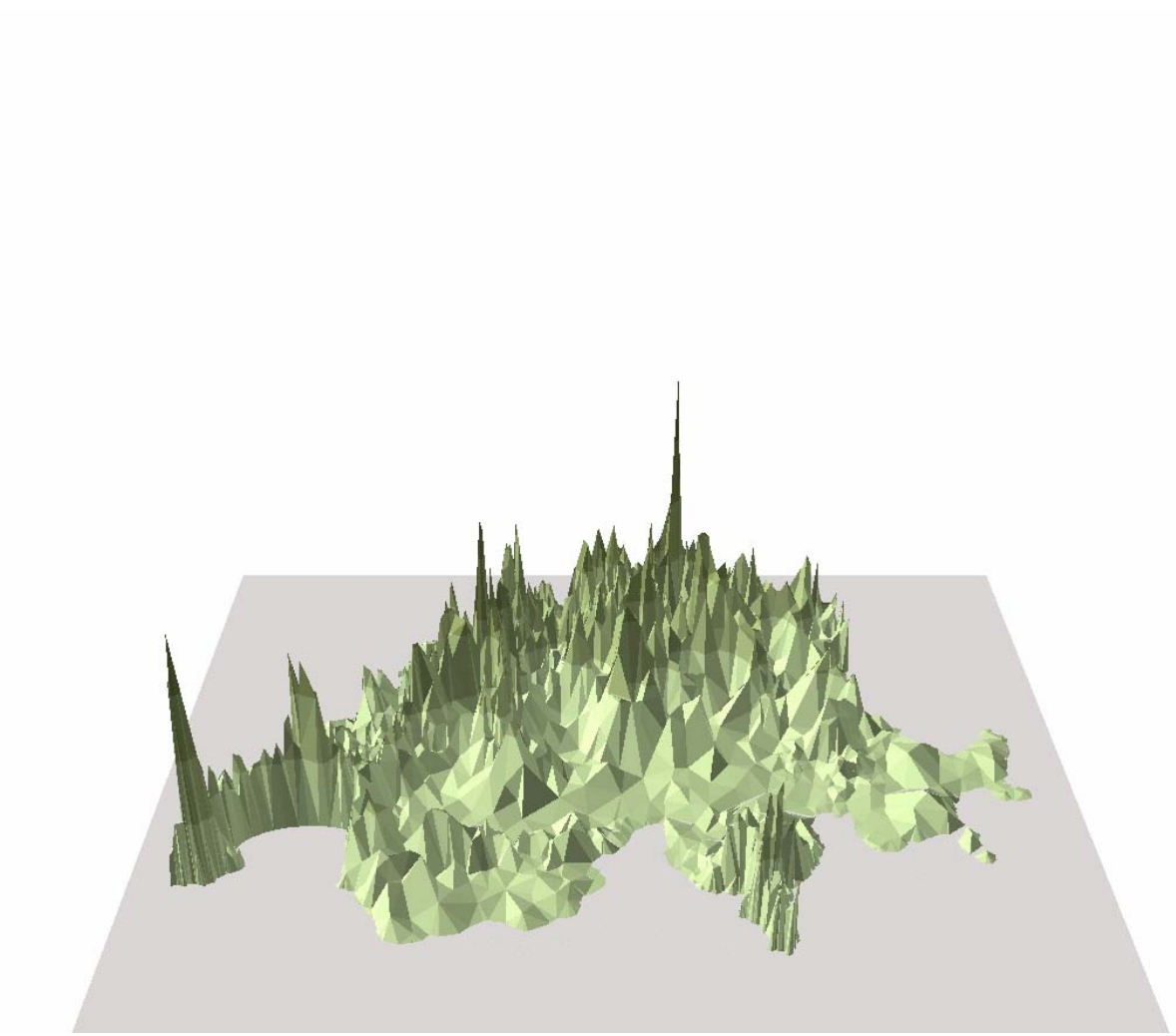
$$AccPop_i = \sum_{j=1}^{j=2903} A_j * \exp(-\beta * c_{ij})$$

$AccPop_i$	accessibility to people living in municipality, *i*
A_j	the number of residents of municipality, *j*
c_{ij}	travel time by private vehicle between the municipality *i* and municipality, *j*
β	exponent

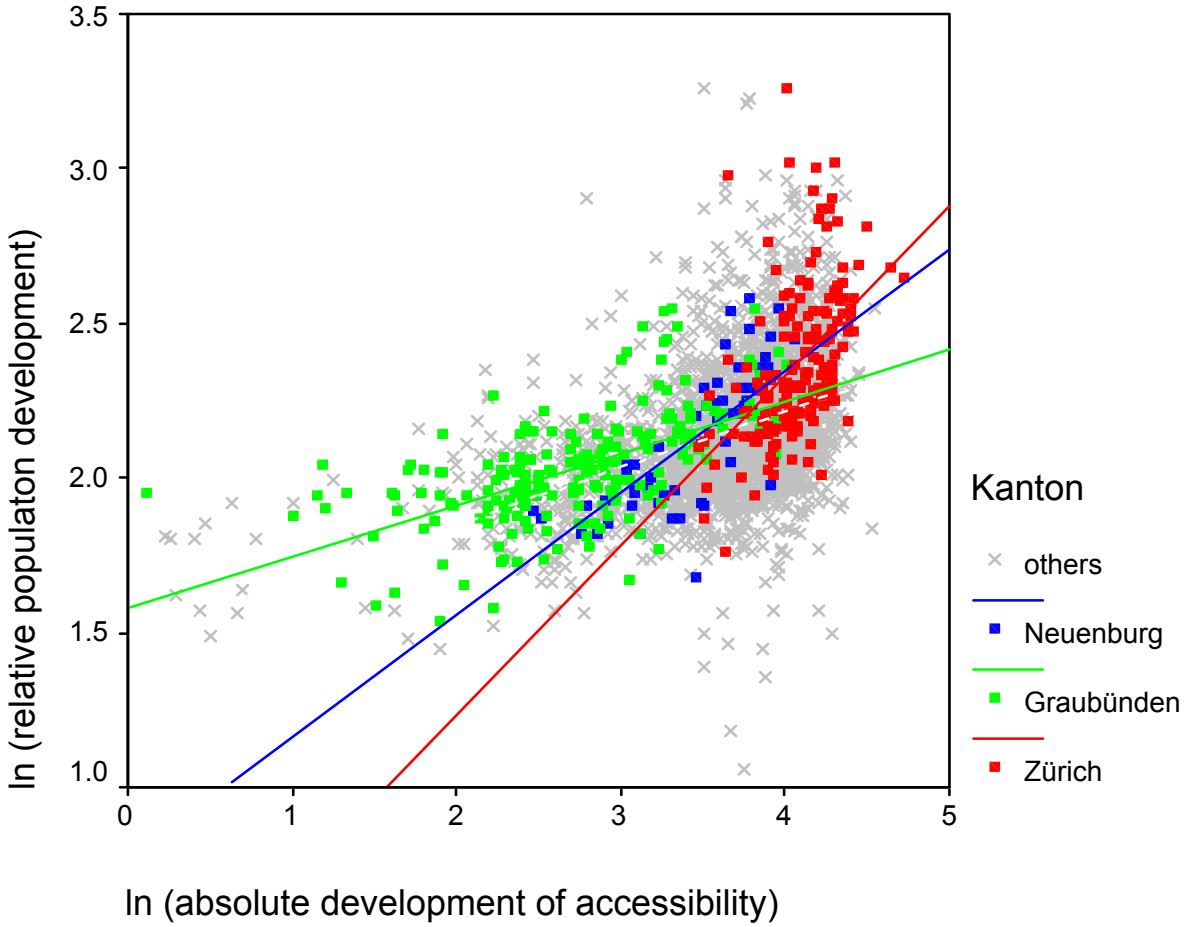
Absolute Accessibility for the Year 1950



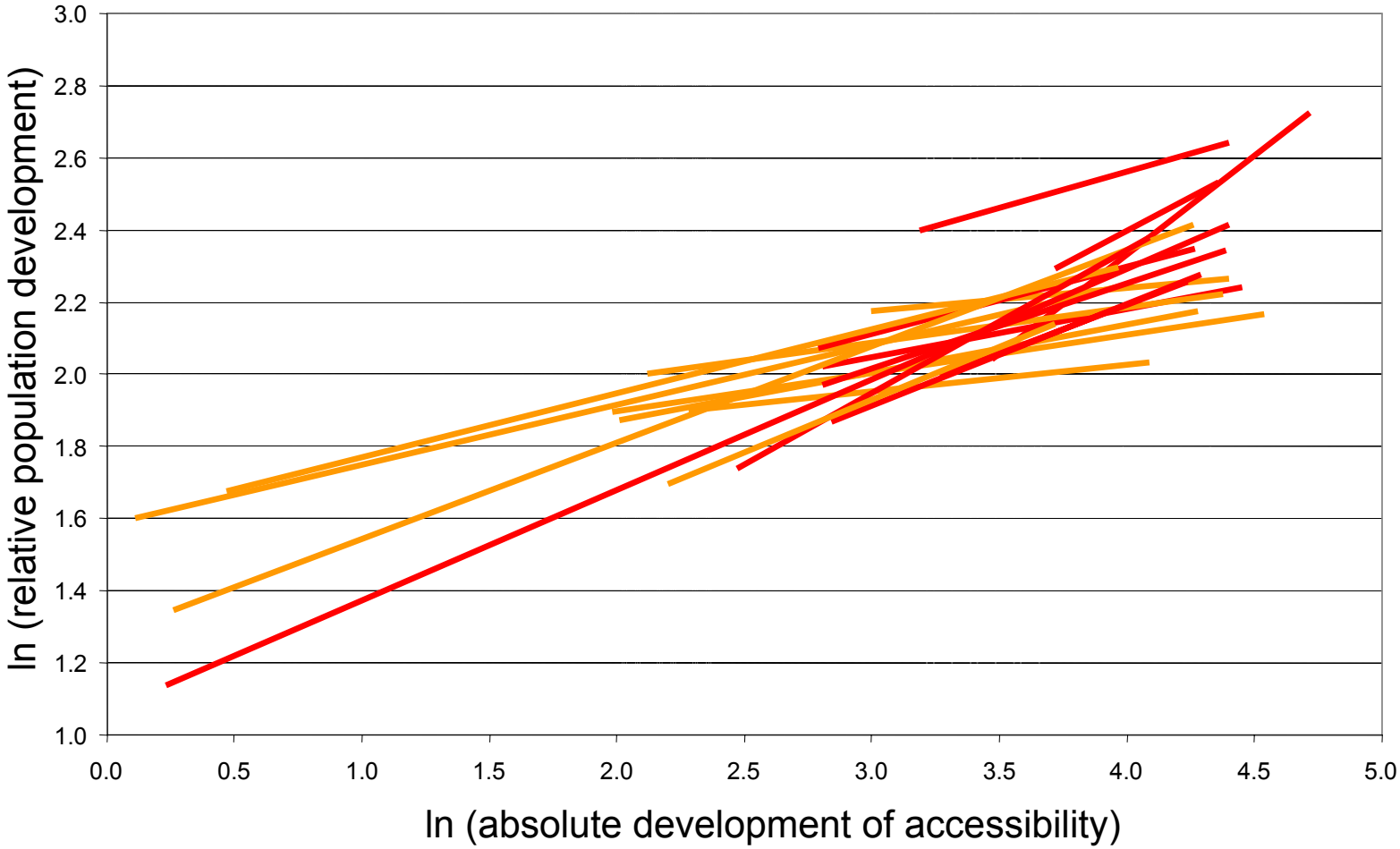
Absolute Accessibility for the Year 2000



Accessibility and population development (1950 - 2000)



Accessibility and population regression lines (all Kantone)



Accessiblitiy and population: Kantone

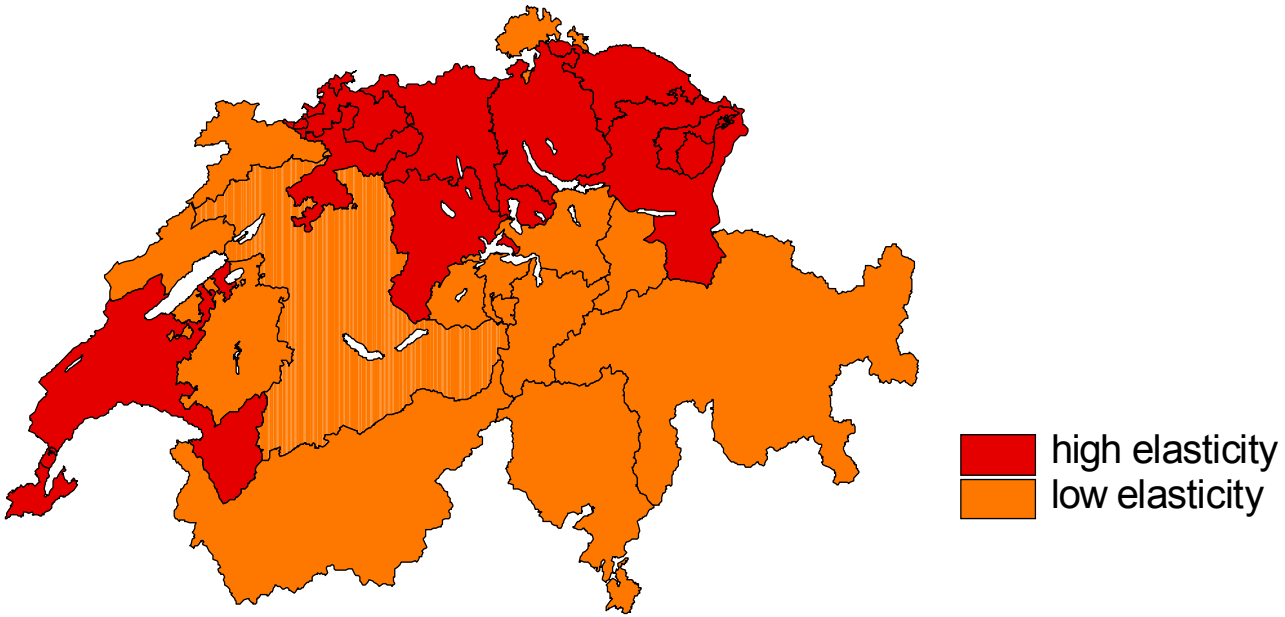
Kantone with a high elasticity (red):

ZH, LU, ZG, SO, BS+BL, AR+AI, SG, AG, TG, VD, GE

Kantone with a lower elasticity (orange):

BE, UR+NW+OW, SZ, GL, FR, SH, GR, TI, VS, NE, JU

Accessiblitiy and population: Kantone



Conclusion

- Tripling of population - but unequal patterns of growth
- The process of concentration was followed by a period of deconcentration from 1970 onwards
- Only the agglomerations and the regions of the Mittelland show this deconcentration. Alpine regions were not affected by those benefits
- The process of deconcentration lead to a spread out and a growing together of the different agglomerations in the Mittelland

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