

**SPATIOTEMPORAL DEVELOPMENT
OF NATIVE RESIDENTS IN A
TRANSITIONAL SOCIETY
THROUGH THE EXAMPLE OF THE
CZECH REPUBLIC**

**Hungarian Regional Science Association 15th Annual Meeting
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OBJECTIVE AND STRUCTURE OF THE CONTRIBUTION

- the main objective is to assess how the structure of native residents in the Czech Republic has changed during the transition period
 - to evaluate general trends in the development of the structure
 - to identify spatial patterns of the structure
 - spatial clustering of similar values; local pockets of instability
- structure of the presentation
 - methodological and theoretical frames
 - who are natives?
 - importance of natives?
 - applied methods
 - results
 - conclusions




THEORETICAL AND METHODOLOGICAL BACKGROUND

native resident

- somebody who was born at particular place, region, country etc. and remains there throughout his life

important cultural phenomenon in each population

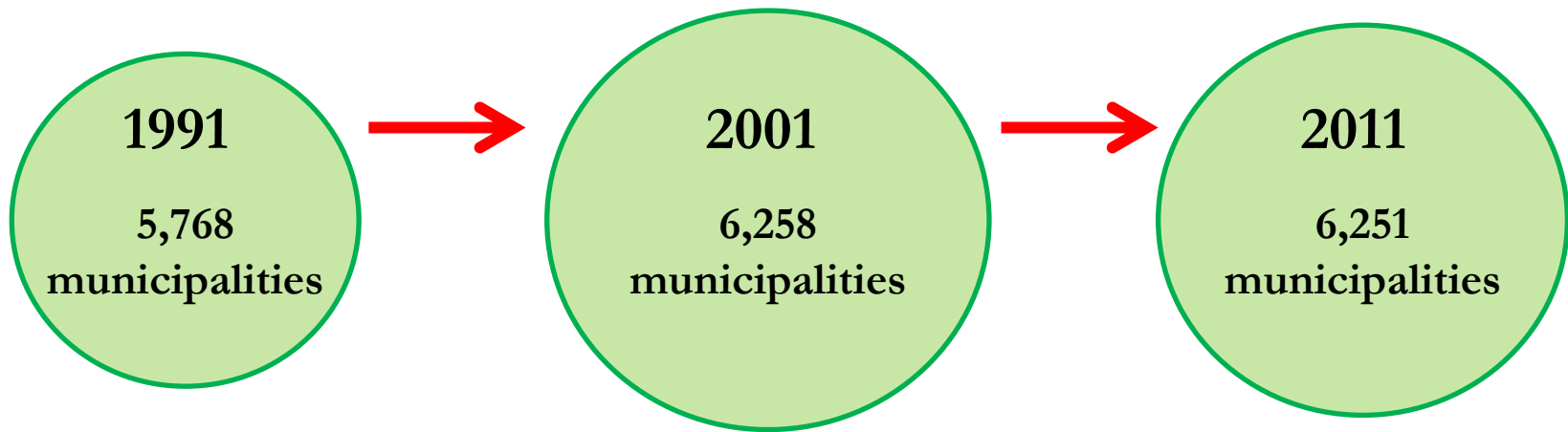
- direct relationship with spatial identification
 - principles suggested by Breakwell (1992)
 - spatial dimension of these principles (Gustafson, 2001)
 - native residents as an important aspect of the further development of spatial entities (municipalities, regions)
 - non-rigid entity: emphasis on the role of the mechanism of power
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METHODS

data regarding natives has been collected by CZSO since 1991

1) preparation of data

- development of administrative structure
data for *basic settlement units* had to be used
- census 2011
 - preliminary results (permanent residence) X final results (usual residence)



2) data analysis

- conducted for 6,251 municipalities
- usage of GIS

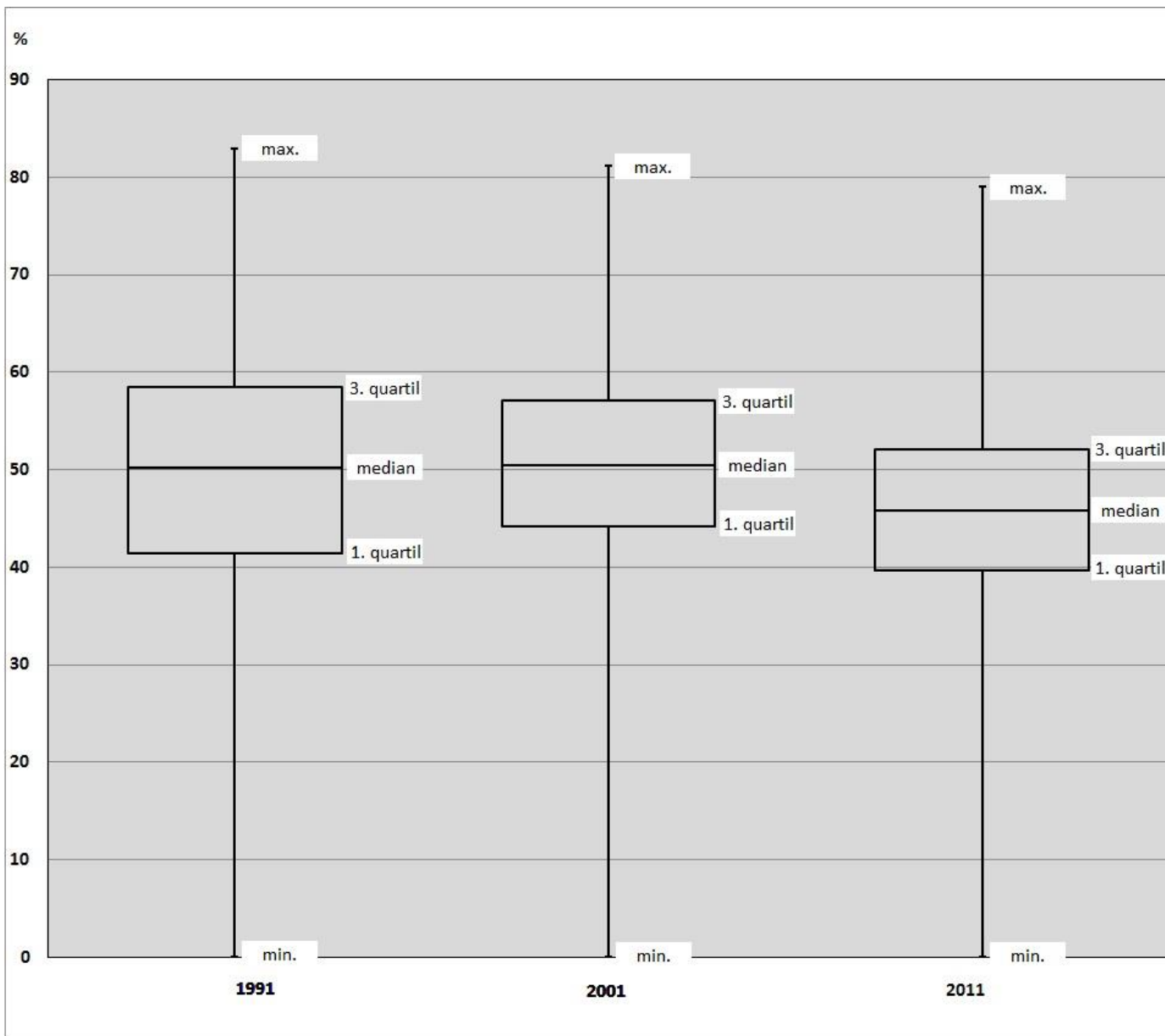


METHODS

- aspatial methods of analysis
 - does not respect spatial information inherent in the data
 - statistical techniques such as plot box and histogram
- spatial methods of analysis
 - Moran's I
 - global spatial autocorrelation: spatial pattern throughout the region under study
 - LISA
 - *Local Indicator of Spatial Autocorrelation* (Anselin, 1995)
 - pockets of instability/local clusters
 - four variants of statistically significant spacial associations



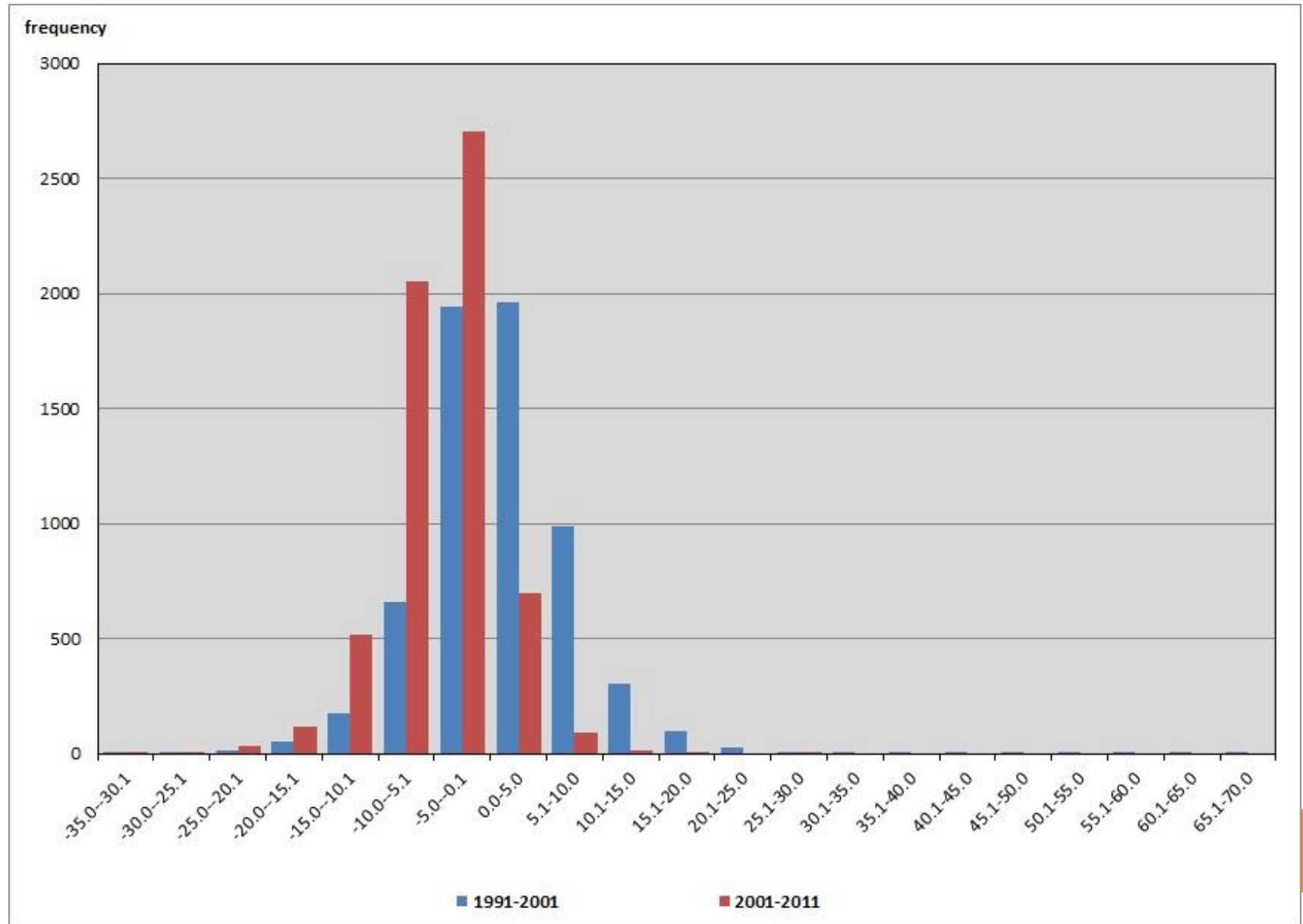
SHARE OF NATIVE RESIDENTS IN THE POPULATION OF MUNICIPALITIES OF THE CZECH REPUBLIC IN DIFFERENT YEARS



Source: Růžková et al., 1995; Škrabal et al., 2005, 2013; authors' own processing.

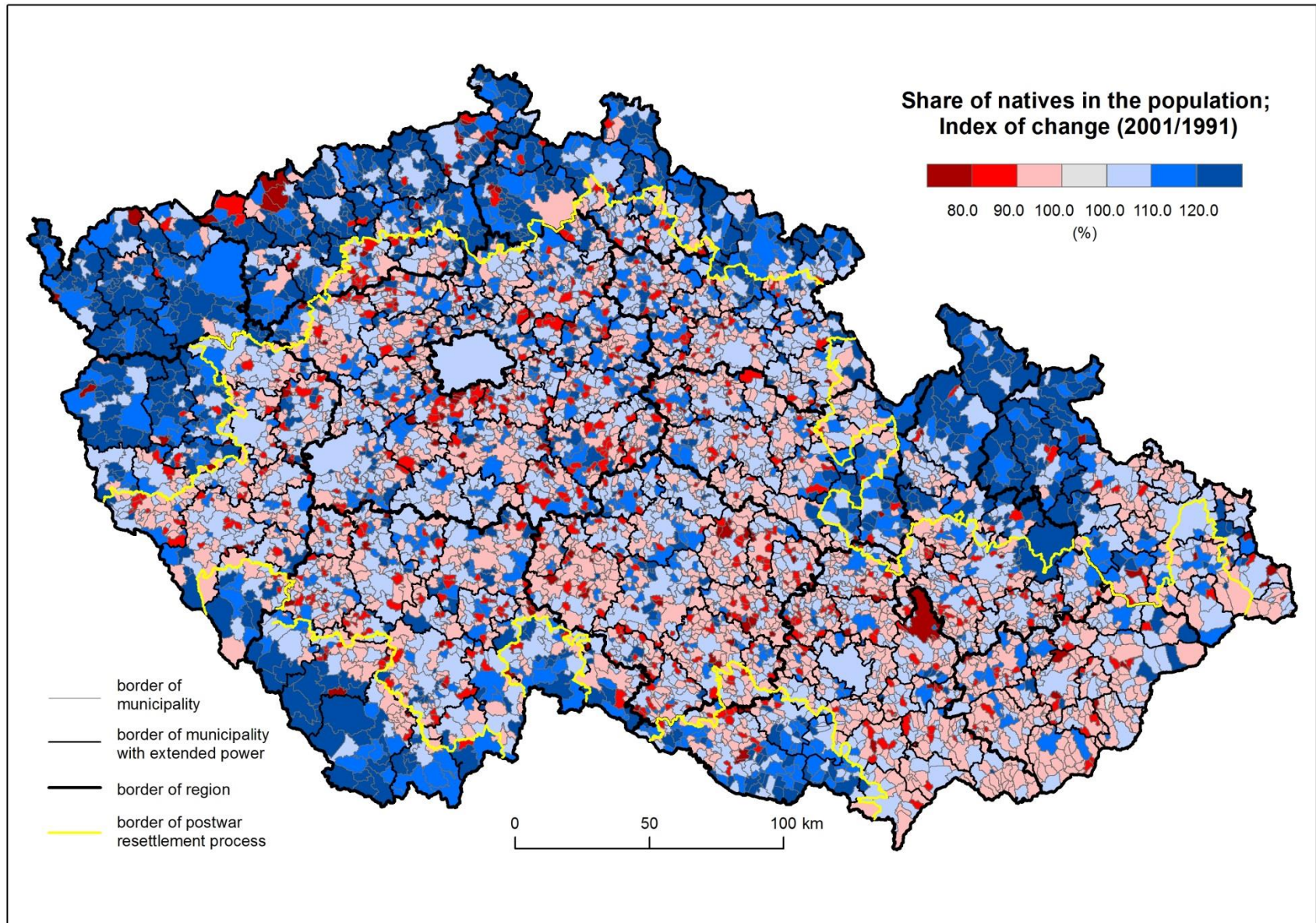


MUNICIPALITIES ACCORDING TO DIFFERENCES IN THE PROPORTION OF NATIVE RESIDENTS IN THEIR POPULATION WITHIN TWO INTER-CENSUS PERIODS

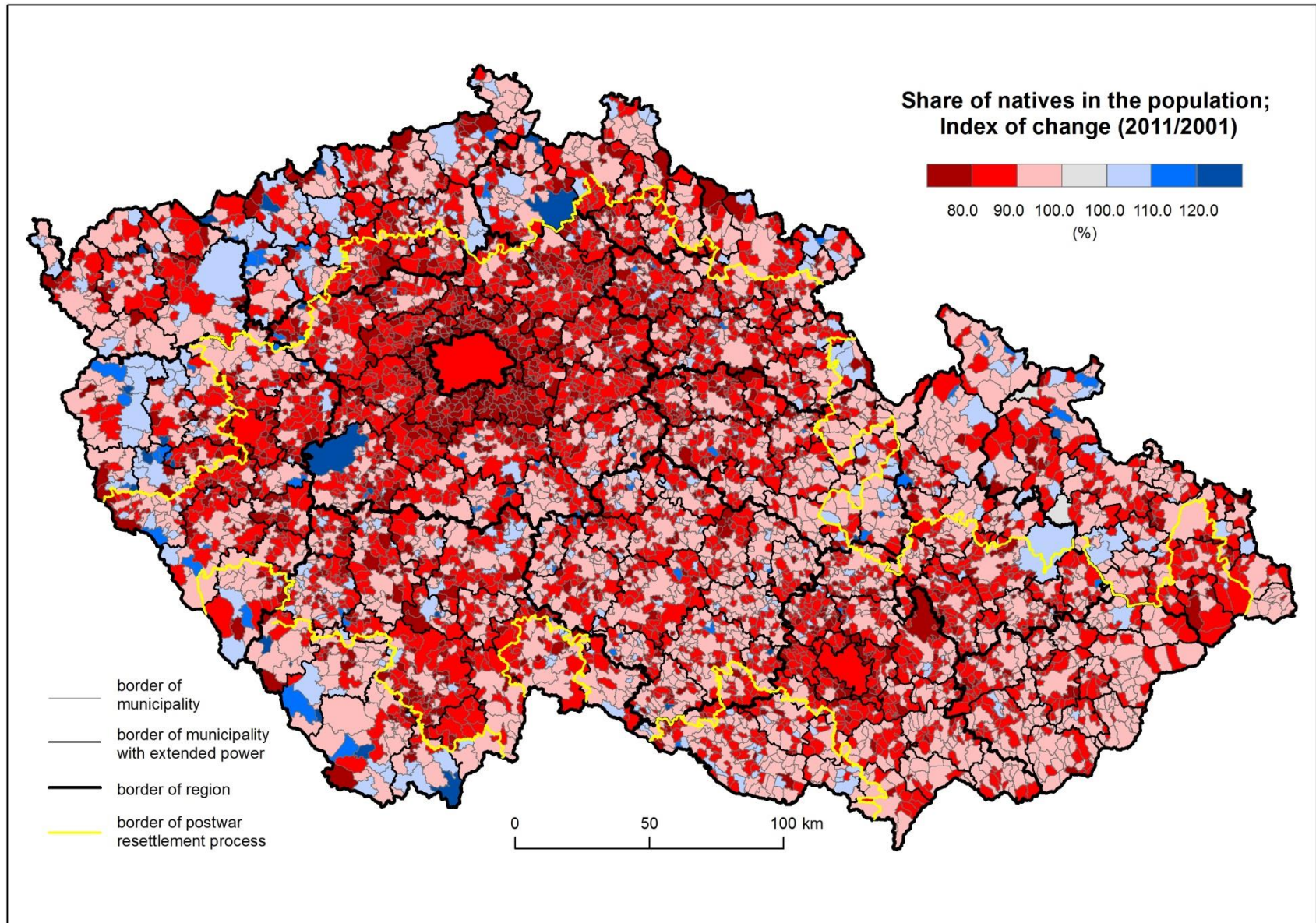


Source: Růžková et al., 1995; Škrabal et al., 2005, 2013; authors' own processing.

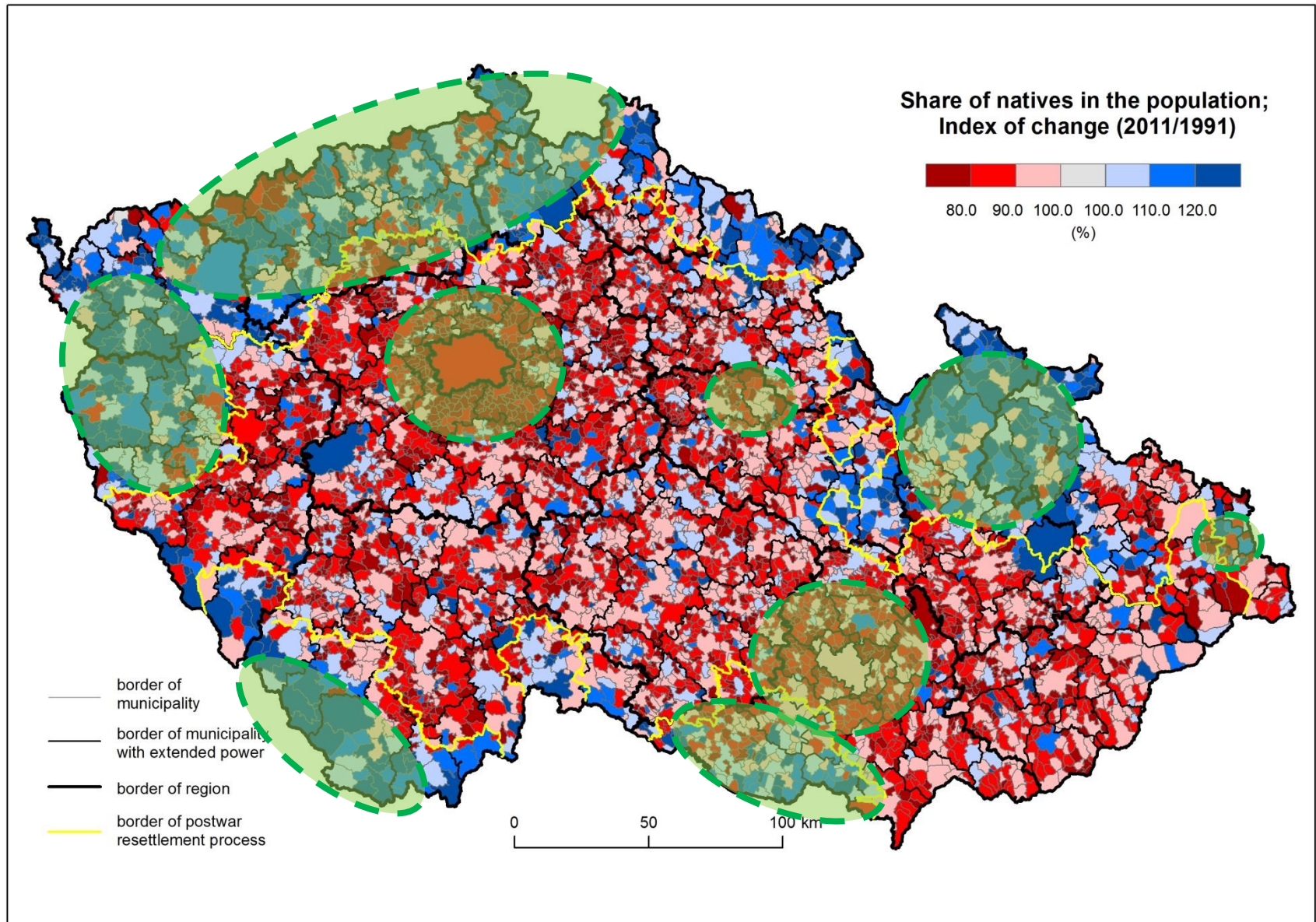
DYNAMICS – THE LAST DECADE OF 20TH CENTURY



DYNAMICS – THE FIRST DECADE OF 21TH CENTURY



DYNAMICS – THE ENTIRE POST COMMUNIST PERIOD



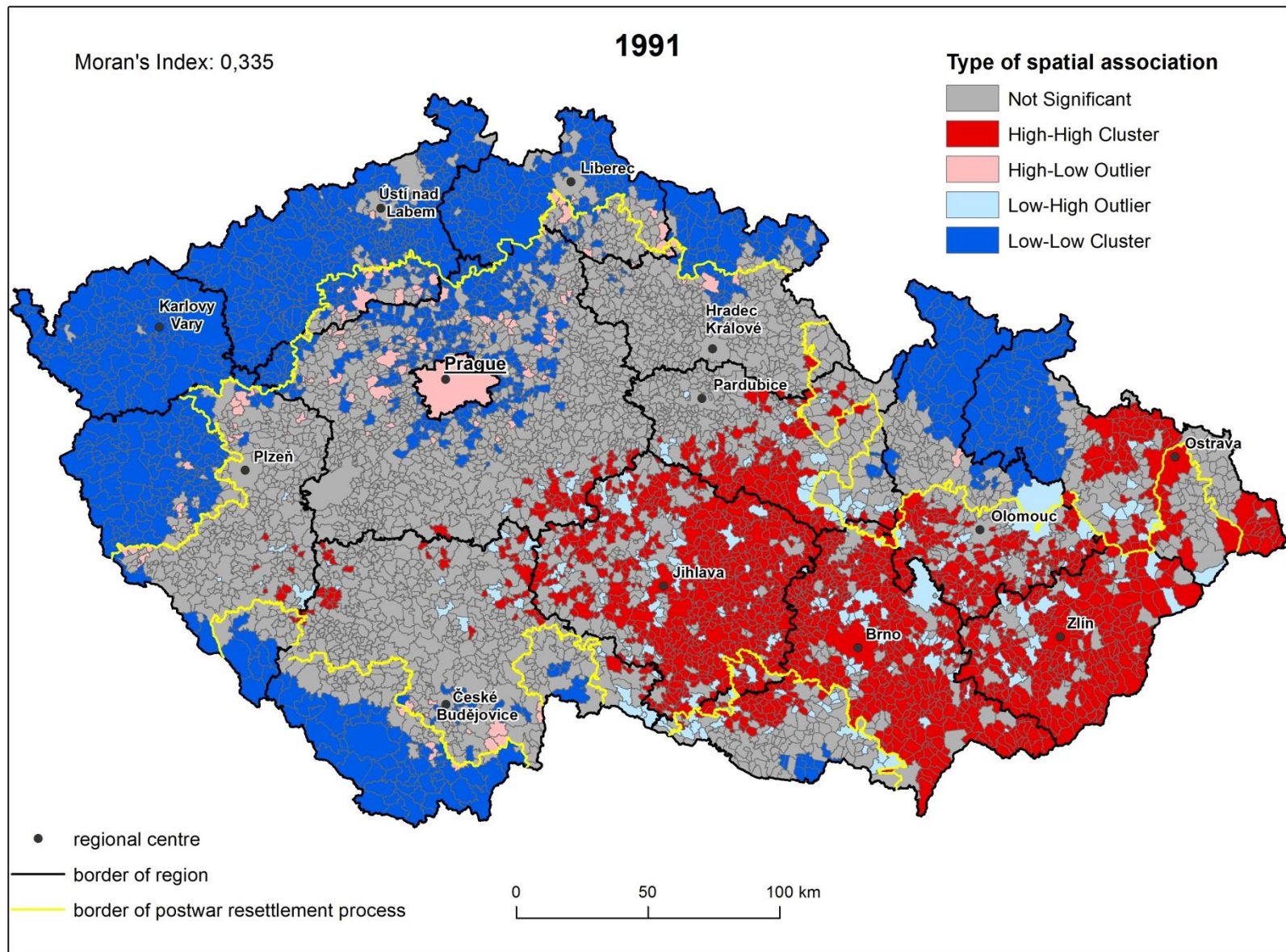
THE HIGHEST DECREASE/INCREASE IN PROPORTION OF NATIVES; CZECH MICRO REGIONS

rank	administrative district of MEP	2011 – 1991 (percentage point)	rank	administrative district of MEP	2011 – 1991 (percentage point)
1.	Lysá nad Labem	-12,97	197.	Sokolov	5,81
2.	Černošice	-12,38	198.	Mikulov	5,90
3.	Říčany	-12,13	199.	Stříbro	5,97
4.	Brandýs nad Labem-Stará Boleslav	-9,94	200.	Tachov	6,10
5.	Šlapanice	-9,30	201.	Rýmařov	7,13
6.	Prague	-8,88	202.	Havířov	7,83
7.	Židlochovice	-8,67	203.	Rumburk	7,96
8.	Holice	-8,09	204.	Bílina	8,94
9.	Kladno	-7,63	205.	Litvínov	9,83
10.	Rosice	-7,29	206.	Kadaň	10,31

Source: CZSO; own processing.

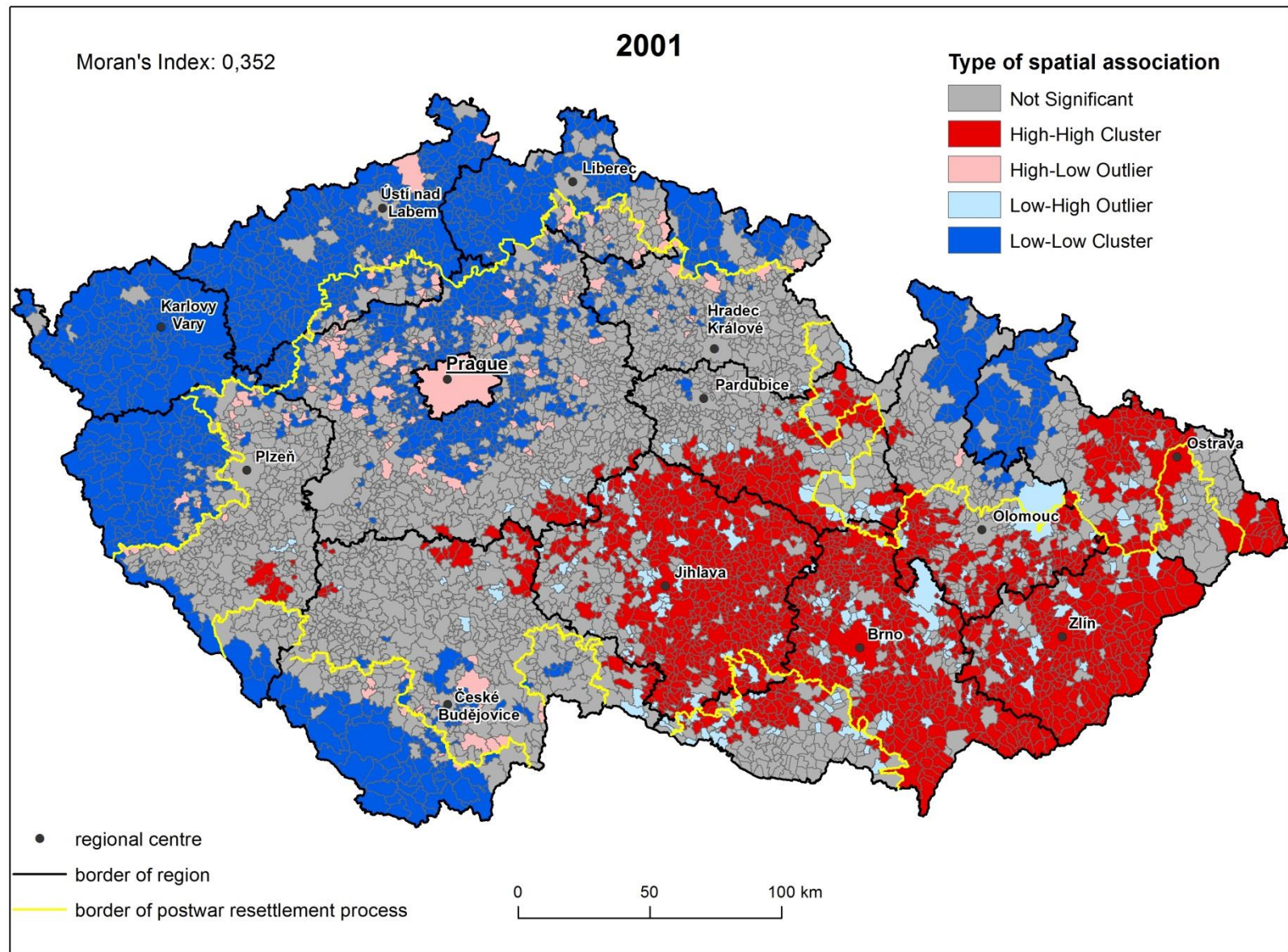


SPATIAL PATTERNS OF NATIVE RESIDENTS' STRUCTURE IN THE CZECH REPUBLIC IN 1991



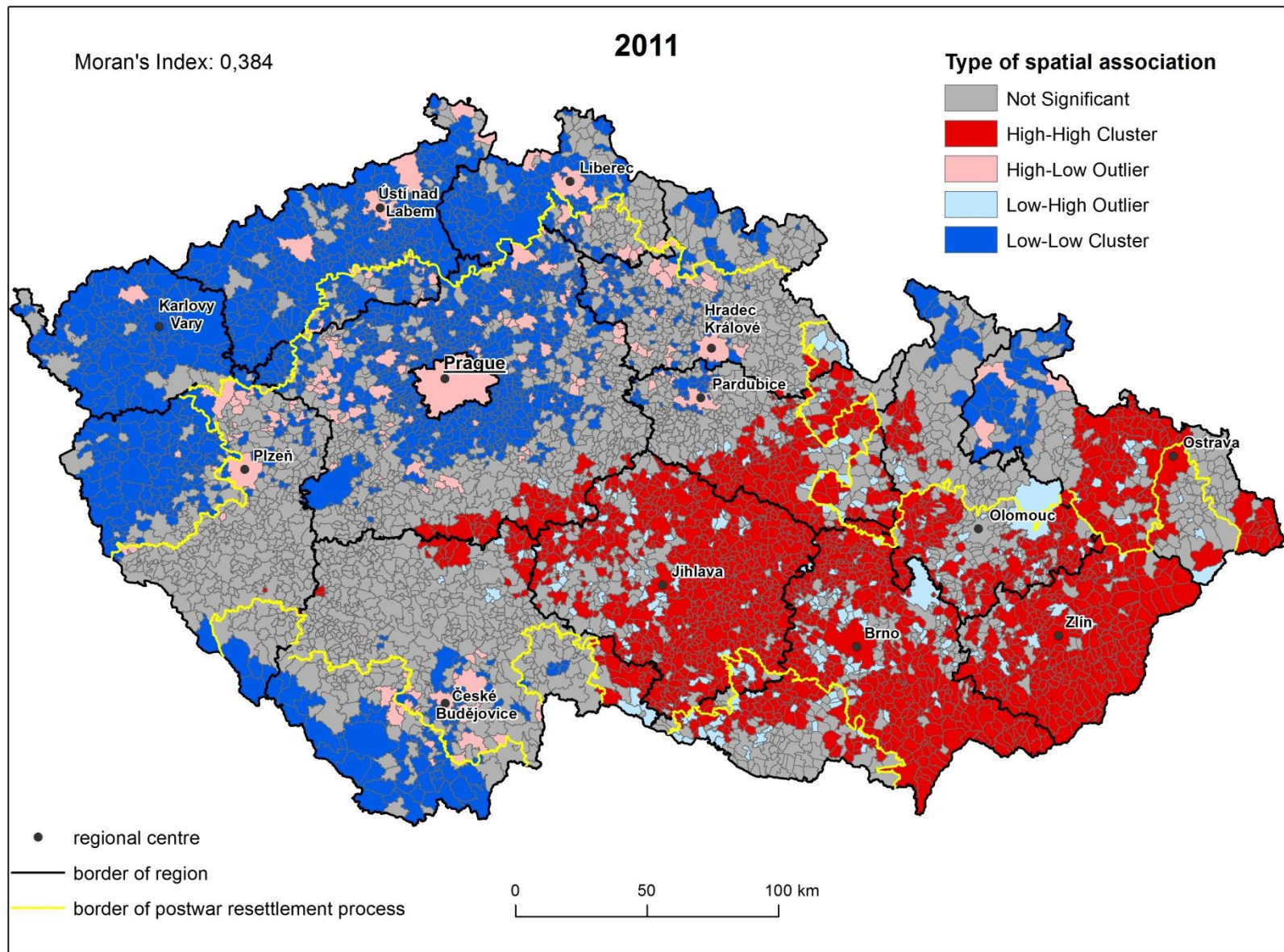
Source: CZSO, 2014; Růžková et al., 1995; Škrabal et al., 2005, 2013. Author's own processing.

SPATIAL PATTERNS OF NATIVE RESIDENTS' STRUCTURE IN THE CZECH REPUBLIC IN 2001



Source: CZSO, 2014; Růžková et al., 1995; Škrabal et al., 2005, 2013. Author's own processing.

SPATIAL PATTERNS OF NATIVE RESIDENTS' STRUCTURE IN THE CZECH REPUBLIC IN 2011



Source: CZSO, 2014; Růžková et al., 1995; Škrabal et al., 2005, 2013. Author's own processing.

CONCLUSIONS

- spatial patterns
 - statistically significant clustering tendencies
 - very sharp west-east dichotomy
 - country has been experiencing important changes
 - different developments in the two decades
 - gradual decrease in the proportion of native residents
 - the continuous levelling – level of municipalities
 - proposed reasons of development
 - postwar resettlement
 - higher spatial mobility
 - metropolisation, residential suburbanization, emigration from peripheral regions
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