Beyond the local marriage market:

The influence of mass communication and mass transport on geographical homogamy

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Research Questions

1. Can the decrease in geographical homogamy over time, be explained by mass transport and mass communication?

2. Did mass transport and mass communication decrease the relationship between social background and geographical homogamy?

Change in geographical homogamy

In the 19th/20th century there is decreasing geographical homogamy. How can we explain this?

- reasoning 1: Kalmijn: more economic resources, similar cultural resources
  mass communication brings about a more universal culture, making it easier for elites to find marriage partners nearby

- reasoning 2:
  mass transport increases the marriage market for those from the lower strata and allows them to find a partner outside the local area

Hypotheses on geographical homogamy

1. Less homogamy in contexts with more mass communication
2. Less homogamy in contexts with more mass transport
3. Mass communication decreases the association between social background and homogamy
4. Mass transport decreases the association between social background and homogamy

Data

- Dutch province of Overijssel, all born after 1808, married before 1922
- 31,787 marriages
- 4,315 contexts (44 municipalities and 100 years)

Variables

- Dependent variables:
  - Geographical homogamy (dummy)
  - Geographical homogamy (distance in km)

- Independent variables:
  - status of father's of groom / bride (HIS-CAM)
  - Year of marriage
  - Post office
  - Train or tram station

- Control variables:
  - Age at marriage
  - Population size of municipality of birth

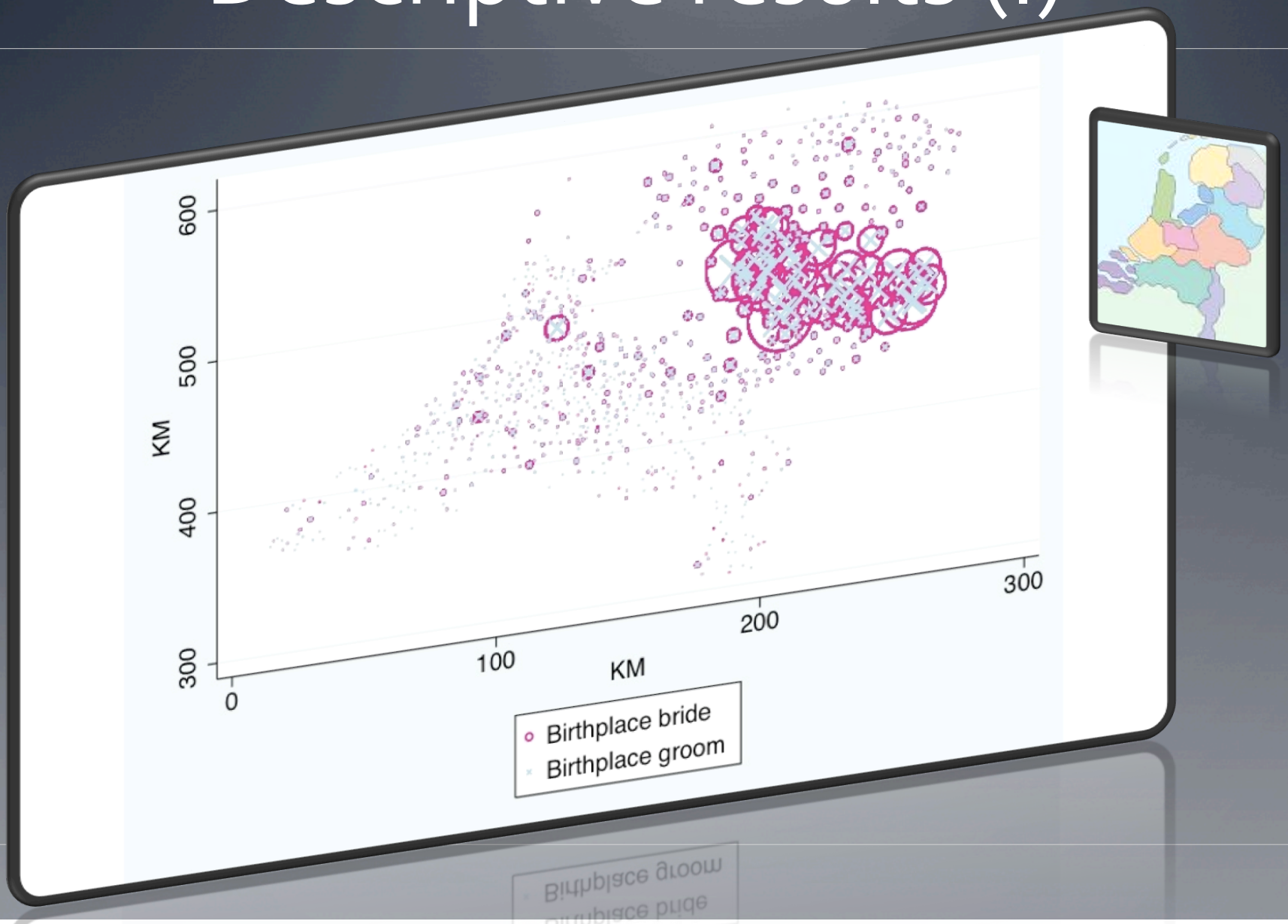
Descriptives

	N	Mean	Std. Dev.	Min	Max
Independent variables					
Bride / groom marry outside municipality of birth (1) or not (0)	31787	0.39		0.00	1.00
Distance between places of birth of bride and bridegroom (km)	31787	5.75	11.33	0.00	91.27
Marriage characteristics					
Status of the bridegroom's father[a]	31787	0.00	8.54	-37.62	50.78
Status of the bride's father[a]	31787	0.00	8.54	-37.53	50.87
Year of marriage (in decades since 1800)	31787	8.82	2.52	2.90	12.20
Age at marriage of the bridegroom	31787	26.54	4.43	16.00	61.00
Age at marriage of the bride	31787	24.23	3.98	16.00	53.00
Characteristics of the municipality of birth of the bridegroom in a certain year					
Presence of a train or tram station	4277	0.17		0.00	1.00
Presence of a post office	4277	0.12		0.00	1.00
Population size (per hundred)	4277	42.55	42.31	2.55	379.39
Characteristics of the municipality of birth of the bride in a certain year					
Presence of a train or tram station	4315	0.17		0.00	1.00
Presence of a post office	4315	0.13		0.00	1.00
Population size (per hundred)	4315	43.05	42.96	2.42	379.39

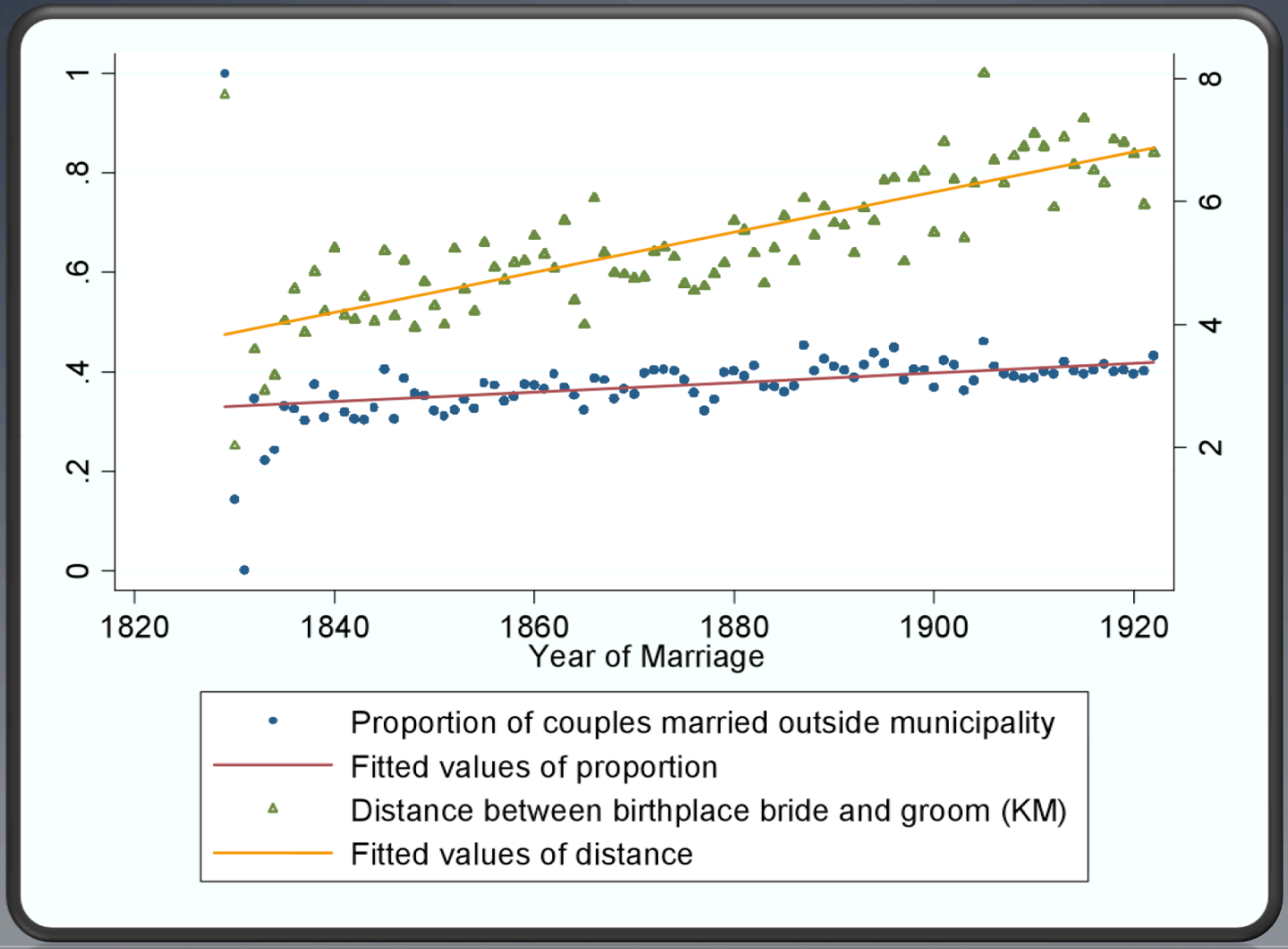
Methods

- Municipalities: Amsterdam Code
- Occupational stratification:
  - HISCO (historical occupational classification)
  - HIS-CAM (historical occupational stratification scale)
- Analyses:
  - Hierarchical linear models
  - Marriages within municipalities and years
  - Separate analyses for grooms and brides

Descriptive results (I)



Descriptive results (II)



Probability of heterogamous marriage - grooms

	Model 0		Model 1		Model 2	
	coef.	s.e.	coef.	s.e.	coef.	s.e.
Constant	-.371	.016	-1.193	.093	-1.192	.093
Marriage characteristics						
Father's status			.001	.001	.002	.002
Date of marriage (in decades since 1800)			.079	.007	.079	.007
Age at marriage			.014	.003	.014	.013
Characteristics of the municipality of birth in a certain year						
Presence of a train or tram station			-.131	.052	-.125	.052
Station x father's status					-.007	.004
Presence of a post office			.264	.050	.260	.050
Post x father's status					.000	.000
Population size (per hundred)			-.005	.000	-.005	.000
Population size x father's status					.000	.000
Variance components						
marriage municipality bridegroom * year	.357	.021	.292	.019	.292	.019
Father's status			.000	.000	.000	.000

Table 2: N of marriages = 31,787; N of birth places of the groom * year = 4,277

Probability of heterogamous marriage - brides

	Model 0		Model 1		Model 2	
	coef.	s.e.	coef.	s.e.	coef.	s.e.
Marriage characteristics						
Father's status			-.001	.001	.001	.002
Date of marriage (in decades since 1800)			.079	.007	.079	.007
Age at marriage			.014	.003	.014	.003
Characteristics of the municipality of birth in a certain year						
Presence of a train or tram station			-.036	.050	-.024	.051
Station x father's status					-.008	.004
Presence of a post office			.015	.050	.002	.050
Post x father's status					.009	.004
Population size (per hundred)			-.005	.000	-.005	.000
Population size x father's status					.000	.000
Variance components						
marriage municipality bride * year	.367	.021	.291	.0019	.289	.019
Father's status			.000	.0000	.000	.000

Table 3: N of marriages = 31,787; N of birth places of the bride * year = 4,315

Likelihood to marry heterogamously

- Indeed contextual variation in IV: 10% of variation on contextual level
- Odds increase over time: 8% per decade
- No relationship with occupational status
- Brides: no effect of mass communication / transport
- Grooms: positive effect of mass communication, negative effect of transport
- Urbanization decreases odds, (5% per 1000 inhabitants)
- No interaction effects for occupational status fathers of groom
- Occupational status bride's father increases with mass communication, and decreases with train station

Distance in birthplace (km) - grooms

	Model 0		Model 1		Model 2		Model 3	
	coef.	s.e.	coef.	s.e.	coef.	s.e.	coef.	s.e.
Constant	14.623	.143	12.538	.938	12.515	.938	11.083	.939
Marriage characteristics								
Father's status			.125	.016	.106	.020	.098	.023
Date of marriage (decades since 1800)			.322	.061	.320	.061	.292	.060
Age at marriage			-.062	.028	-.061	.028	-.051	.028
Characteristics of the municipality of birth in a certain year								
Presence of a train or tram station			-.179	.441	-.127	.443	-1.161	.442
Station x father's status					-.033	.047	-.056	.050
Presence of a post office			3.983	.375	3.906	.378	1.383	.429
Post x father's status					.085	.042	.076	.048
Population size (per hundred)							.037	.003
Population size x father's status							.000	.000
Variance components								
marriage	181.521	2.626	174.305	2.634	174.211	2.633	173.569	2.615
municipality bridegroom * year	14.049	1.624	8.879	1.431	8.888	1.429	7.083	1.358
Father's status			.087	.014	.087	.014	.089	.014
Deviance (-2*loglikelihood)	99473.180		99111.080		99106.650		98972.080	

Table 4: N of marriages = 12,274; N of birth places of the bridegroom * year = 3,695

Distance in birthplace (km) - brides

	Model 0		Model 1		Model 2		Model 3	
	coef.	s.e.	coef.	s.e.	coef.	s.e.	coef.	s.e.
Constant	14.5763	.148	10.898	.950	10.880	.950	9.643	.949
Marriage characteristics								
Father's status			.128	.016	.081	.019	.102	.023
Date of marriage (in decades since 1800)			.237	.063	.230	.063	.194	.062
Age at marriage			.023	.031	.025	.031	.031	.031
Characteristics of the municipality of birth in a certain year								
Presence of a train or tram station			1.257	.456	1.368	.456	.410	.445
Station x father's status					-.072	.045	-0.045	.047
Presence of a post office			3.658	.404	3.596	.404	1.143	.453
Post x father's status					.218	.042	.273	.048
Population size (per hundred)							.037	.003
Population size x father's status							-.001	.000
Variance components								
marriage	174.412	2.548	167.779	2.567	167.435	2.562	167.014	2.548
municipality bride * year	20.372	1.787	14.756	1.602	14.753	1.598	12.868	1.536
Father's status			.078	.014	.076	.014	.075	.014
Deviance (-2*loglikelihood)	99316.730		98945.520		98916.810		98785.850	

Table 5: N of marriages = 12,274; N of birth places of the bride * year = 3,649

Marriage distance

- Also variation at the level of context (grooms: 7.2%; brides: 10.5%)
- Higher status grooms and brides marry over larger distances (one km for each 8 points (on a scale from 1-99))
- Mass communication increases distance by about 4km
- Mass communication enhances the gap with regard to geographical mobility between high and low status groups
- Mass transport increases marriage for brides (about 1km) (not for grooms)
- Mass transport has no impact on relationship between social background and marriage distance
- Brides and grooms from larger municipalities marry over larger distances
- The effect of social background on heterogamy is smaller in larger municipalities

Conclusions

- Increase in probability to marry outside own municipality and increase in distance over time
- Mass communication increased both probability of geographical heterogamy as marriage distance. Mass transport did not.
- Mass transport does not decrease association between background status and heterogamy, while mass communication even increases the association

Discussion

- In sum: cultural explanations seem more helpful than explanations based on opportunity structures, but:
  - Mass communication also enhances opportunities

- Alternative explanations:
  - Segregation in preferred characteristics
  - Educational expansion and economic change
  - Changes in homogamy preferences

- Improve study by modeling meeting opportunities: which municipalities were 'connected':
  - i.e. were in each others vicinity or could be reached by mass transportation