

The Future of Historical Network Research  
Hamburg, 13-15 September 2013

Kinship networks and classes building  
in rural Westphalia (Prussia)  
18<sup>th</sup>/19<sup>th</sup> centuries

Christine Fertig  
University of Münster, Germany

# Rural class society?

- In 19th century: emergence of social classes in Germany
  - industrialization
- Classes in rural society
  - result of proto-industrialization?
  - ... or of kinship orientation?
- Social classes -> social network analysis!

# Sources

- Family reconstitutions (parish registers – births, marriages, deaths)
- Godparents (parish registers)
- Cadasters, land title registers, mortgages
- Family contracts (farm transfers, old-age pensions, inheritance compensations)

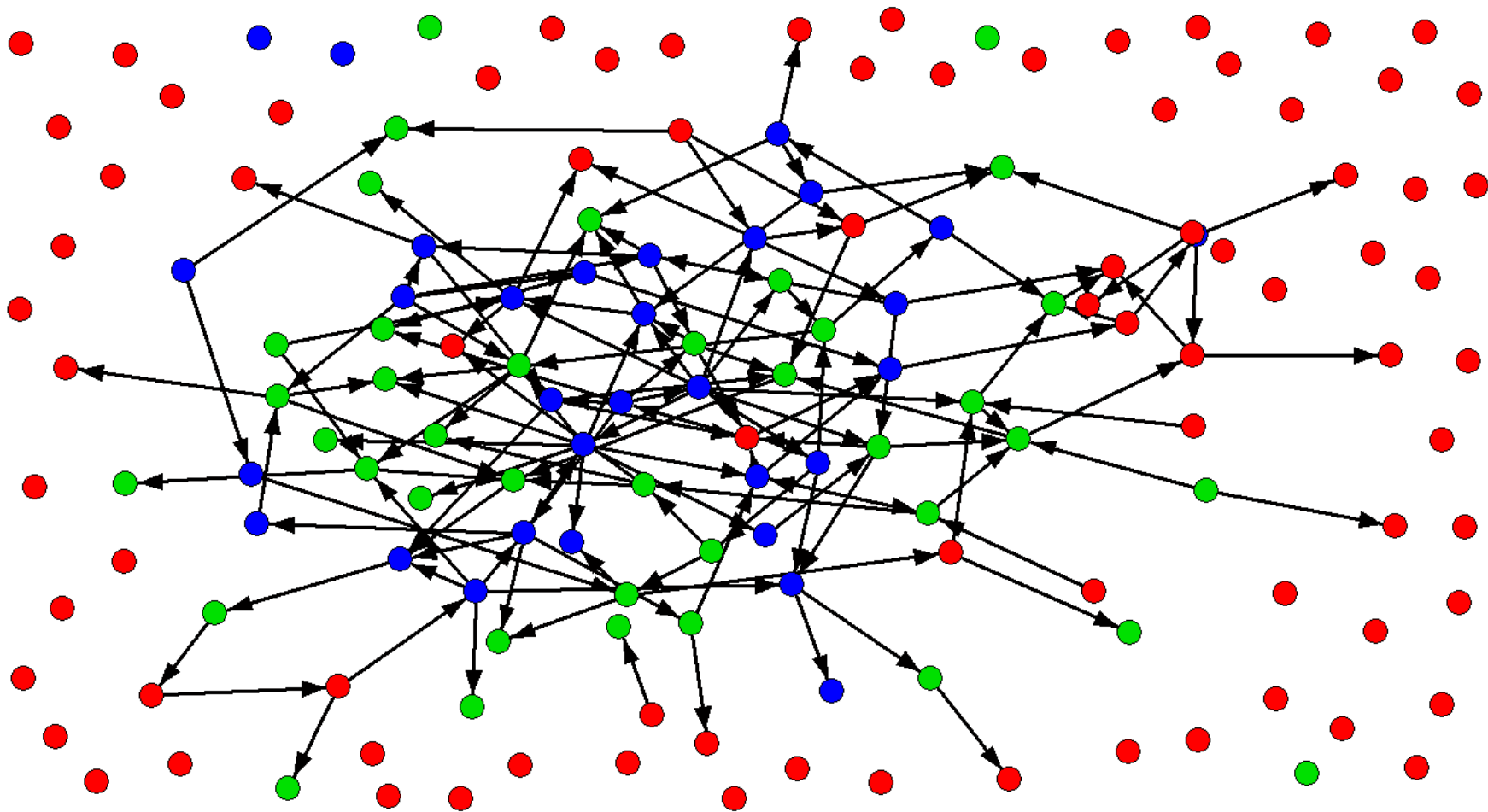
➤ MS Access Databases

# Borgeln and Löhne (Westphalia, Northwestern Germany)

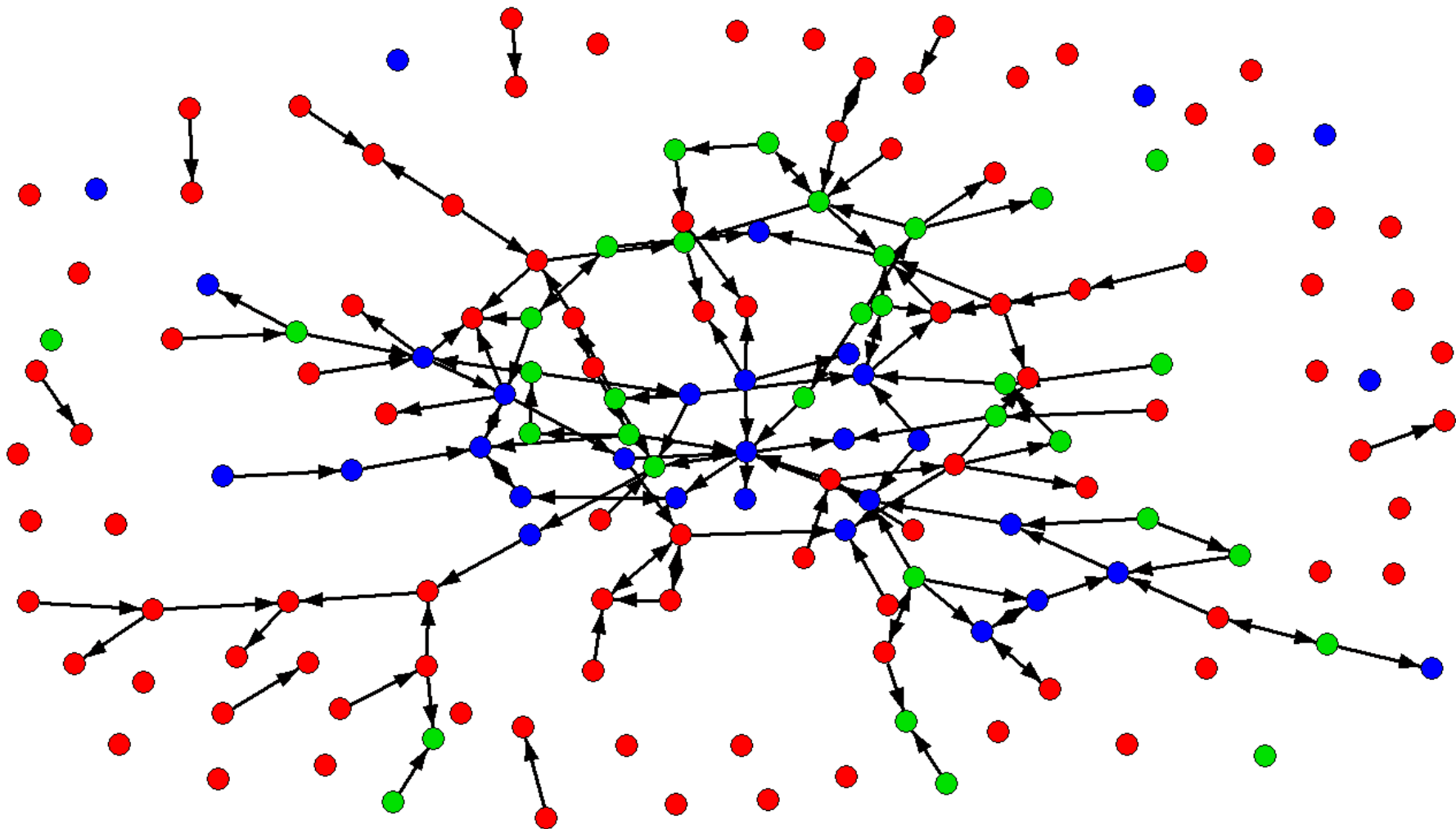


- 1: Marriage networks between peasants:  
Kinship cores and general reciprocity
- 2: P-graph analysis: Finding kinship cores in  
genealogical networks
- 3: In Love with a Cousin: Strategy or  
Coincidence?

Part 1:  
Marriage networks  
between peasants:  
Kinship cores and  
reciprocity

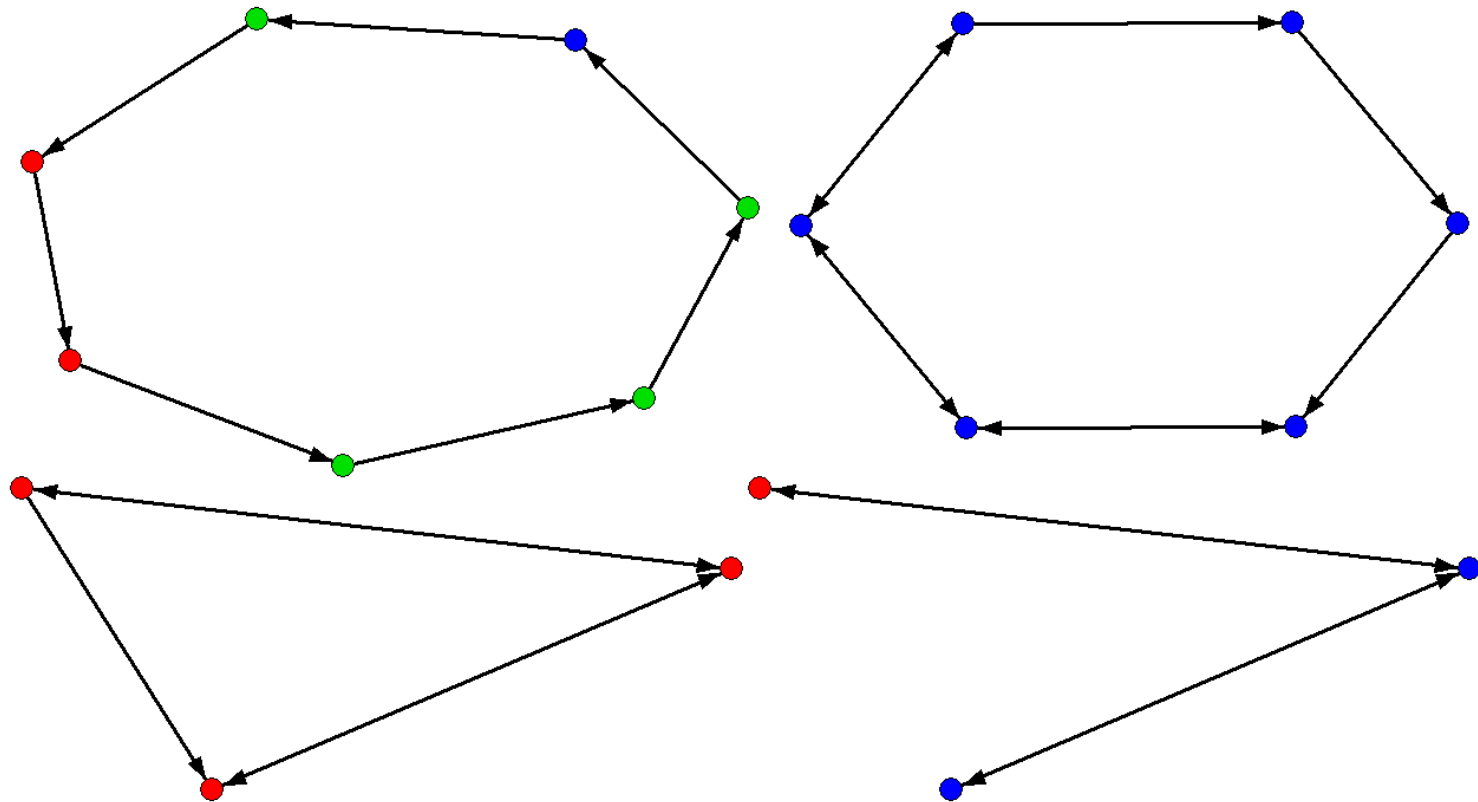


Kinship core in Löhne 1750-1874 (Weak component)

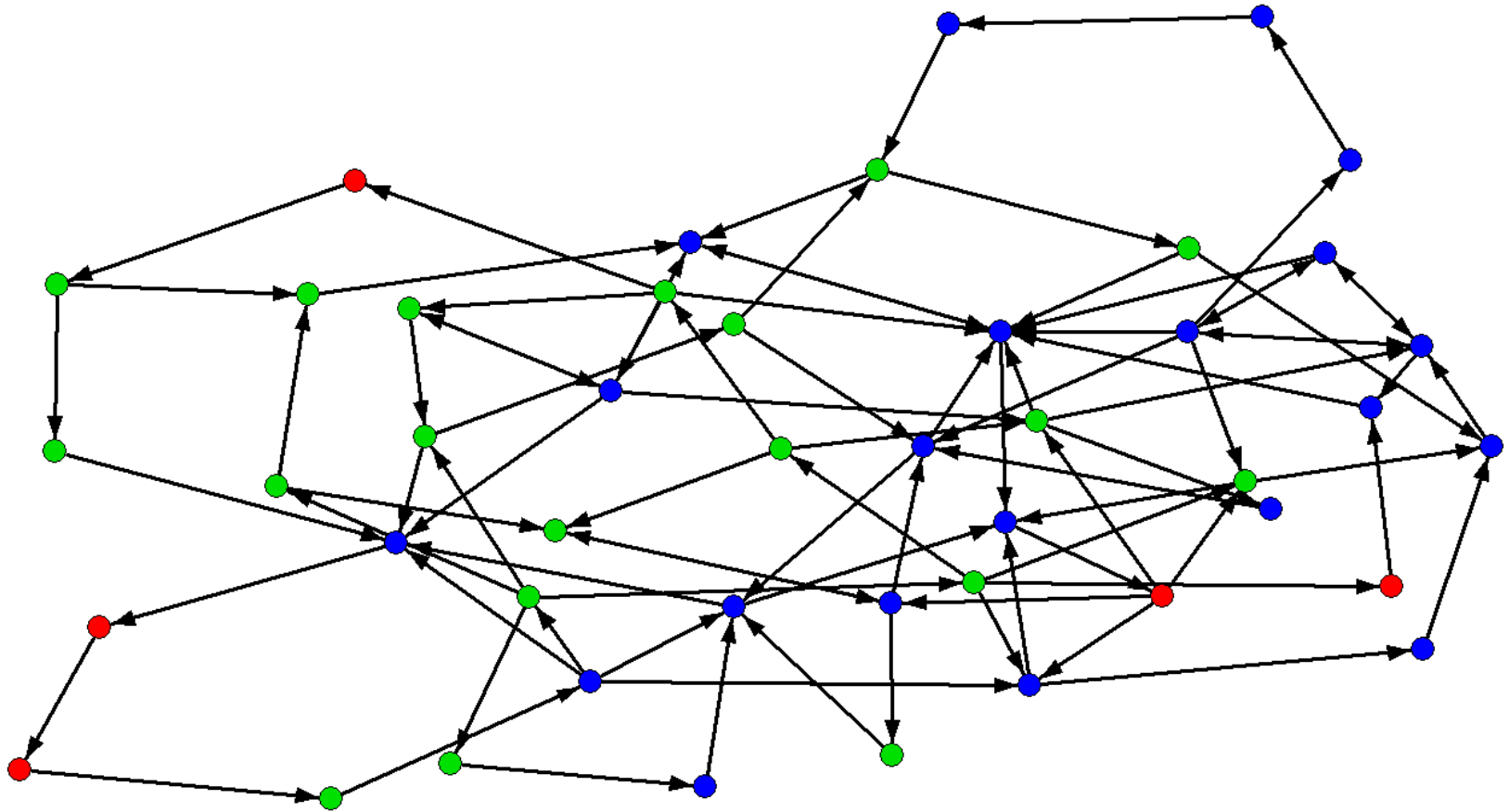


Kinship core in Borgeln 1750-1874 (Weak component)





Marriage circles in Borgeln 1750-1874 (Strong Component)

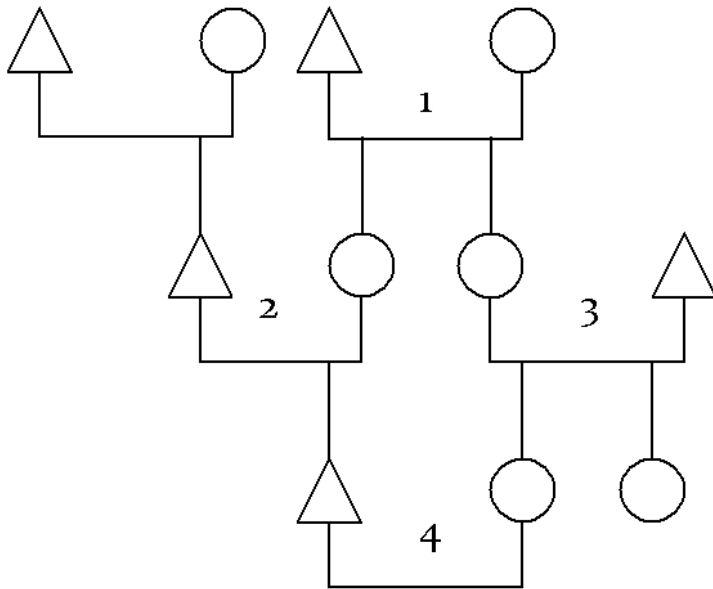


General Reciprocity in Löhne 1750-1874 (Strong Component)

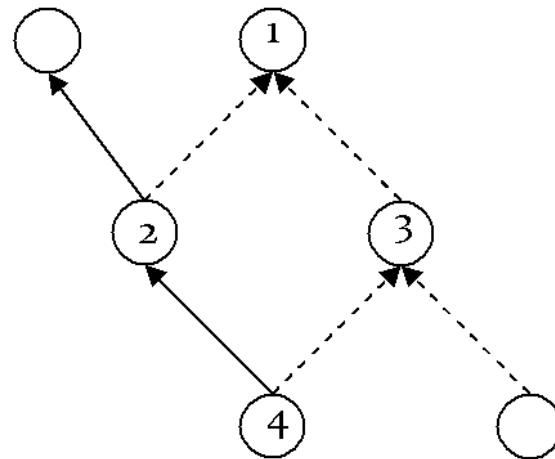
## Part 2:

P-graph analysis:  
Finding kinship cores in  
genealogical networks

## Conventional kinship diagram



## P-Graph



From: Thomas Schweizer, *Muster sozialer Ordnung. Netzwerkanalyse als Fundament der Sozialethnologie* (Berlin 1996), p. 222.

# Peasants and non-peasants within kinship core, Löhne, Borgeln (1750-1874) and Feistritz (Kärnten, 1860-1960)

		Peasants		Non-peasants		Total	
Löhne	Kinship core	211	(50%)	361	(39%)	572	(43%)
	Outside core	212	(50%)	561	(61%)	773	(57%)

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Borgeln	Kinship core	188	(58%)	428	(30%)	616	(35%)
	Outside core	138	(42%)	1.019	(70%)	1.157	(65%)

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	Outside core	138	(42%)	1.019	(70%)	1.157	(65%)
Feistritz (Carinthia)	Kinship core	182	(57%)	25	(8%)	207	(33%)
	Outside core	137	(43%)	281	(92%)	418	(67%)

Source: Databases Löhne and Borgeln; BRUDNER und WHITE 1997, S. 193 (Table 2).

Part 3:  
In Love with a Cousin:  
Strategy or coincidence?



# Marriages with relatives in Löhne (1770-1870)

	Consanguinal kin		Affinal kin			Not kin	Total
	Close	Distant	Horizontal	Close	Distant		
Numbers							
<b>1770-1795</b>		8		2	21	7	38
<b>1796-1820</b>	3	12		2	31	13	61
<b>1821-1845</b>		12	3	2	27	14	58
<b>1846-1870</b>	2	4	3	3	24	13	49
<b>Total</b>	5	36	6	9	103	47	206
Share (%)							
<b>1770-1795</b>		21%		5%	55%	18%	100%
<b>1796-1820</b>	5%	20%		3%	51%	21%	100%
<b>1821-1845</b>		21%	5%	3%	47%	24%	100%
<b>1846-1870</b>	4%	8%	6%	6%	49%	27%	100%
<b>Total</b>	2%	18%	3%	4%	50%	<b>23%</b>	100%
Ratio							$\chi^2$ (Yates)
<b>1770-1795</b>	-	1.5	-	3.8	1.1	0.6	4.93
<b>1796-1820</b>	2.8	1.2	-	0.9	1.0	0.8	3.07
<b>1821-1845</b>	-	1.2	9.6	0.6	1.3	0.7	19.47 **
<b>1846-1870</b>	0.9	0.5	3.2	3.2	1.0	1.0	6.45
<b>Total</b>	<b>1.1</b>	<b>1.1</b>	<b>2.2</b>	<b>1.2</b>	<b>1.1</b>	<b>0.8</b>	6.98 <sup>17</sup>

# Marriages with relatives in Borgeln (1770-1870)

	Consanguinal kin		Affinal kin			Not kin	Total	
	Close	Distant	Horizontal	Close	Distant			
	Numbers							
<b>1770-1795</b>	3		2	4	9	51	69	
<b>1796-1820</b>	2	2	5	3	11	76	99	
<b>1821-1845</b>	1	6	6	4	15	74	106	
<b>1846-1870</b>	1	9	4		24	76	114	
<b>Total</b>	7	17	17	11	59	277	388	
	Share (%)							
<b>1770-1795</b>	4%		3%	6%	13%	74%	100%	
<b>1796-1820</b>	2%	2%	5%	3%	11%	77%	100%	
<b>1821-1845</b>	1%	6%	6%	4%	14%	70%	100%	
<b>1846-1870</b>	1%	8%	4%		21%	67%	100%	
<b>Total</b>	2%	4%	4%	3%	15%	<b>71%</b>	100%	
	Ratio						$\chi^2$ (Yates)	
<b>1770-1795</b>	4.6	-	1.3	4.6	1.3	0.9	14.28 *	
<b>1796-1820</b>	4.7	1.9	5.8	2.3	0.7	0.9	20.35 **	
<b>1821-1845</b>	2.8	2.6	6.8	5.7	0.8	0.9	41.07 **	
<b>1846-1870</b>	1.0	2.1	4.8	-	0.9	1.0	14.41 *	
<b>Total</b>	<b>2.9</b>	<b>2.0</b>	<b>4.2</b>	<b>2.2</b>	<b>0.9</b>	<b>0.9</b>	61.85 **	18

## Marriages with relatives in Borgeln, peasants and day-labourers (1770-1870)

	Consanguinal kin		Affinal kin		Not kin	Total	
	Close	Distant	Horizontal	Close			
Numbers							
<b>Peasants</b>	4	11	11	8	24	82	140
<b>Day labourers</b>	1	1	3	-	8	90	103
Share in %							
<b>Peasants</b>	3%	8%	8%	6%	17%	59%	100%
<b>Day labourers</b>	1%	1%	3%	-	8%	87%	100%
Ratio							$\chi^2$ (Yates)
<b>Peasants</b>	4.6	2.4	4.6	3.4	0.7	0.9	59.14 **
<b>Day labourers</b>	3.2	0.9	3.9	-	0.6	1.0	5.57

# Conclusion I

## **Löhne (protoindustrial)**

- (1) Strong component of general reciprocity between peasant farms
- (2) P-graph: Day labourers part of local kinship core
- (3) Many marriages with relatives, but no kinship preference in partner choice

## **Borgeln (agricultural)**

- (1) Distinct center-periphery structure
- (2) Greater exclusion of day labourers from kinship network
- (3) Low number of kinship marriage, but statistical significant preference of relatives in peasant class

# Conclusion II

- Social network analysis allows for in-depth study of class building in historical societies
- Neither protoindustrial production nor kinship orientation responsible for emergence of class society
  - population growth
  - socio-ecological systems (family economy vs. individual wage labour)