



ugr



# Urban v. Rural Variation In Social Capital

Evidence from Belgium & Spain

Steven Lannoo (UG)  
Francisco Entrena Durán (UGR)  
Pieter-Paul Verhaeghe (UG)



ugr



# This presentation

- ▶ Theoretical framework
  - Our conceptualization of SC
  - Urban-rural contrast as constraint and opportunity
- ▶ Methods
- ▶ Some results and early conclusions



# Social Capital

- ▶ Bourdieu, Lin, ...: (not Putnam, Fukuyama, ...)  
“Social Capital as a form of Capital”
- ▶ Resources
  - ▶ money, goods, time, information, ...
- ▶ Invested
  - ▶ put at disposal of others
  - ▶ intention: return
- ▶ In Social Relationships



ugr



## Literature: urban influence on social relations

- ▶ Erosion
- ▶ Change
- ▶ Composition effect
- ▶ No effect



ugr



## (1) City life erodes SC

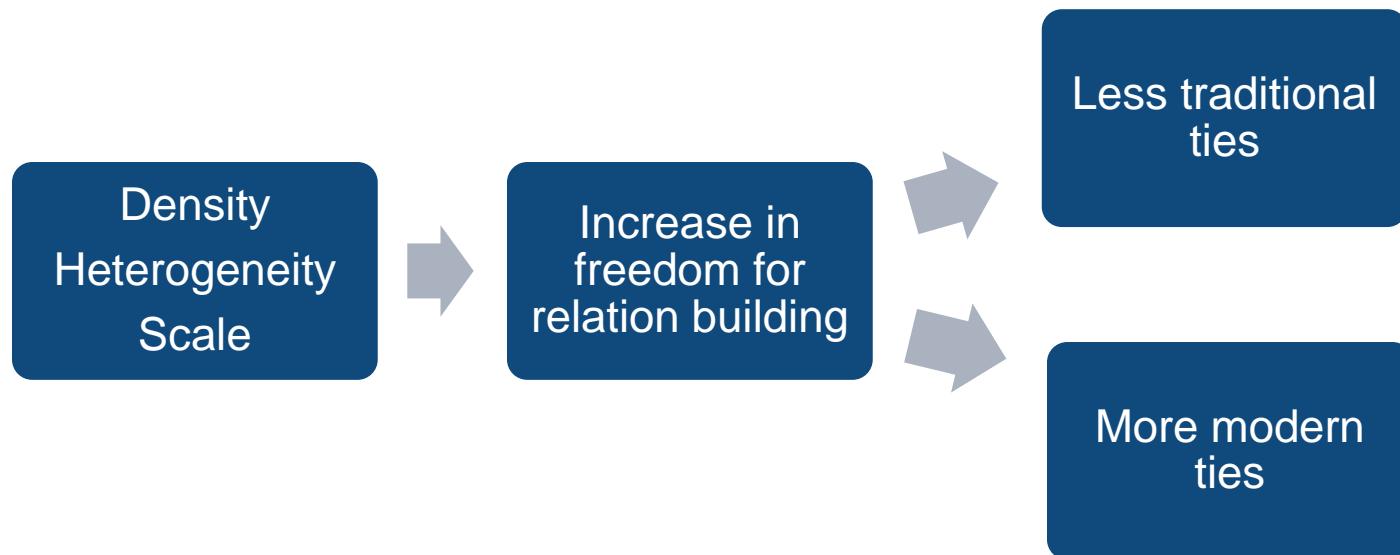




ugr



## (2) City life changes SC





ugr



## (2) City life changes SC

Less traditional ties / More modern ties

- (1) More SC friends and acquaintances., less from family
- (2) More SC for well-off, less for less well-off
- (3) More SC for everybody (self-chosen ties = better ties)



ugr



### (3) City-life attracts other people

- ▶ younger, wealthier, ...
- ▶ compositional: disappear after control individual level variables



## (4) City-life = Rural Life

- ▶ Never has been different
- ▶ Countryside is urbanized
  - ▶ Transportation
  - ▶ Communication
  - ▶ Devision of labour

-> Attenuation of rural ‘way of life’ (Pahl)



# Methods

- ▶ Social Capital Measurement:
  - ▶ Position Generator (Nan Lin)
    - ▶ “do you know a doctor?”
  - ▶ Resource Generator (Van der Gaag)
    - ▶ “do you know someone who can give medical advice?”



ugr

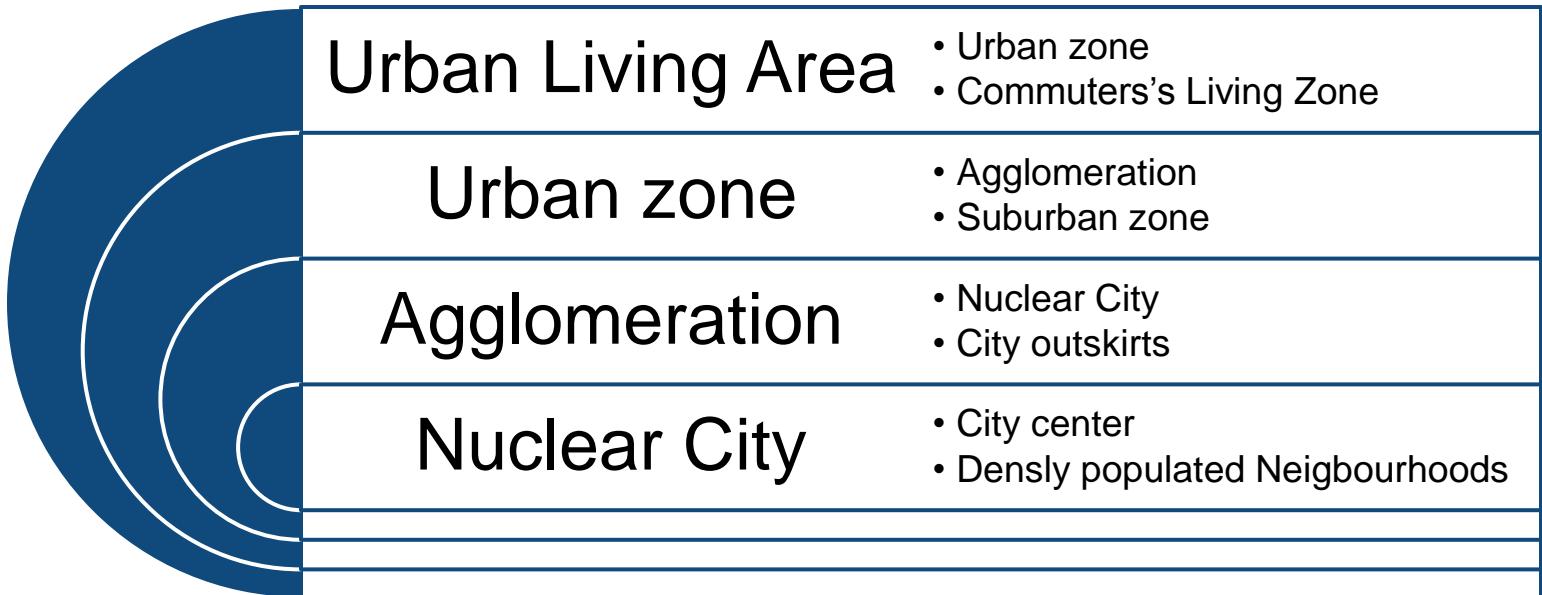


# Data & Analysis

- ▶ Student Data
  - ▶ 2400 Belgian students
  - ▶ 1850 Spanish students
- ▶ Multilevel Analysis
  - ▶ 190 municipalities in Belgium
  - ▶ ??? In Spain



# Urban Zones





ugr

# Average Network Status

## Entire Network - Belgium



	0-model			Model1			Model2			Model3			Model4		
	Random Intercept			Effect of Space			Controll 2nd Level			Compositional Effects			Interaction Effect		
	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p
<b>FIXED<sup>a</sup></b>															
Intercept	49.26	0.09	0.000	50.01	0.16	0.000	49.97	0.16	0.000	50.23	0.23	0.000	50.21	0.23	0.000
Sex										-0.28	0.12	0.022	-0.27	0.12	0.025
Age										0.25	0.03	0.000	0.25	0.03	0.000
Origin										-0.10	0.19	0.594	-0.12	0.19	0.534
Residence										0.29	0.14	0.041	0.30	0.14	0.035
Status Parents										0.04	0.00	0.000	0.05	0.01	0.000
Education Mother															
No secundary										-1.65	0.30	0.000	-1.64	0.30	0.000
Only secundary										-0.80	0.19	0.000	-0.81	0.20	0.000
Higher = reference															
Space															
Central Aggl. = reference															
Suburban municipality				-0.69	0.27	0.010	-0.95	0.26	0.001	-0.77	0.24	0.002	-0.73	0.24	0.003
Commuters' municipality				-0.86	0.22	0.000	-0.89	0.23	0.000	-0.67	0.22	0.003	-0.65	0.21	0.003
Rural municipality				-1.05	0.22	0.000	-0.77	0.24	0.002	-0.77	0.21	0.001	-0.75	0.21	0.001
% non-Belgians							-0.71	2.38	0.767	-2.39	2.12	0.262	-2.38	2.17	0.275
Average Fiscale Income (€ 1000)							0.24	0.05	0.000	0.10	0.05	0.031	0.10	0.05	0.026
Space*Status Parents															
Suburban zone													0.00	0.01	0.914
Commuters' zone													-0.01	0.01	0.550
Rural zone													-0.01	0.01	0.406
<b>RANDOM<sup>a</sup></b>															
$\sigma^2_r$	9.71	3.12		9.72	3.12		9.70	3.11		8.64	2.94		8.62	2.94	
$\sigma^2_{u0}$	0.38	0.62	0.000	0.25	0.50	0.001	0.18	0.42	0.005	0.09	0.30	0.088	0.00	0.29	0.237
$\sigma^2_{u5}$													0.09	0.01	0.290
$\rho$		3.77%		2.51%			1.82%			1.00%			1.00%		
<b>MODEL FIT<sup>b</sup></b>															
Deviance	11982.15			11962.27			11945.41			11327.57			11325.53		
n° estimated parameters	3			6			8			15			20		
$\chi^2$				19.88	0.000		16.86	0.000		617.84	0.000		2.04	0.844	

<sup>a</sup>Estimation Procedure = Restricted Maximum Likelihood<sup>b</sup>Estimation Procedure = Full Maximum Likelihood



ugr

# Average Network Status Aquantances - Belgium



	0-model			Model1			Model2			Model3			Model4																	
	Random Intercept			Effect of Space			Controll 2nd Level			Compositional Effects			Interaction Effect																	
	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p															
<b>FIXED <sup>a</sup></b>																														
Intercept	47.74	0.12	0.000	48.16	0.16	0.000	48.28	0.19	0.000	48.54	0.34	0.000	48.54	0.34	0.000															
Sex										0.22	0.20	0.262	0.22	0.20	0.271															
Age										0.21	0.04	0.000	0.21	0.04	0.000															
Origin										-0.33	0.36	0.357	-0.31	0.36	0.390															
Residence										0.20	0.24	0.407	0.21	0.24	0.390															
Status Parents										0.01	0.01	0.133	0.00	0.01	0.924															
Education Mother																														
No secundary										-1.00	0.50	0.047	-1.02	0.5027	0.042															
Only secundary										-0.40	0.25	0.104	-0.39	0.25	0.112															
Higher = reference																														
Space																														
Central Aggl. = reference																														
Suburban municipality				-0.47	0.34	0.164	-0.82	0.36	0.024	-0.76	0.39	0.053	-0.78	0.40	0.052															
Commuters' municipality				-0.52	0.27	0.055	-0.74	0.31	0.017	-0.69	0.35	0.049	-0.71	0.36	0.049															
Rural municipality				-0.66	0.26	0.014	-0.65	0.30	0.031	-0.76	0.35	0.034	-0.77	0.36	0.034															
% non-Belgians							-3.29	2.53	0.196	-4.77	2.80	0.089	-4.54	2.78	0.103															
Average Fiscale Income							0.16	0.06	0.011	0.08	0.07	0.232	0.08	0.07	0.233															
Space*Status Parents																														
Central Aggl. = reference																														
Suburban zone													0.04	0.02	0.082															
Commuters' zone													0.02	0.02	0.436															
Rural zone													0.02	0.02	0.303															
<b>RANDOM <sup>a</sup></b>																														
$\sigma^2_r$	29.47	5.43		29.48	5.43		29.44	5.43		29.14	5.40		29.14	5.40																
$\sigma^2_{u0}$	0.07	0.25	0.486	0.03	0.17	>.500	0.03	0.17	>.500	0.07	0.27	>.500	0.00	0.01	>.500															
$\sigma^2_{u5}$													0.06	0.25	0.367															
$\rho$	0.24%			0.10%			0.09%			0.25%			0.22%																	
<b>MODEL FIT<sup>b</sup></b>																														
Deviance	14354.37			14348.98			14344.20			13914.50			13912.52																	
estimated parameters	3			6			8			15			20																	
$\chi^2$	5.39			0.145			4.78			429.70			1.98																	
Estimation Procedure = Restricted Maximum Likelihood																														
Estimation Procedure = Full Maximum Likelihood																														
Acquaintances																														

Estimation Procedure = Restricted Maximum Likelihood

Estimation Procedure = Full Maximum Likelihood



*ugr*

# Average Network Status Friends- Belgium



	0-model			Model1			Model2			Model3			Model4		
	Random Intercept			Effect of Space			Controll 2nd Level			Compositional Effects			Interaction Effect		
	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p	Parameter	SD/SE	p
<b>FIXED<sup>a</sup></b>															
<i>Intercept</i>	50.93	0.14	0.000	51.50	0.24	0.000	51.76	0.27	0.000	51.20	0.39	0.000	51.20	0.39	0.000
<i>Sex</i>										-0.37	0.30	0.217	-0.32	0.30	0.280
<i>Age</i>										0.68	0.08	0.000	0.69	0.08	0.000
<i>Origin</i>										0.70	0.36	0.051	0.62	0.36	0.082
<i>Residence</i>										0.33	0.26	0.206	0.34	0.26	0.185
<i>Status Parents</i>										0.02	0.01	0.112	0.06	0.01	0.000
<i>Education Mother</i>															
No secundary										-1.46	0.69	0.035	-1.38	0.69	0.046
Only secundary										-0.66	0.32	0.038	-0.70	0.32	0.028
Higher = reference															
<i>Space</i>															
Central Aggl. = reference															
Suburban municipality				-0.89	0.62	0.152	-1.45	0.60	0.017	-1.16	0.60	0.055	-1.12	0.59	0.059
Commuters' municipality				-0.63	0.31	0.044	-1.08	0.37	0.005	-0.87	0.37	0.019	-0.81	0.36	0.023
Rural municipality				-0.93	0.34	0.008	-1.06	0.41	0.011	-0.94	0.40	0.019	-0.91	0.39	0.019
% non-Belgians							-7.77	4.88	0.113	-8.73	4.59	0.058	-9.03	4.48	0.044
Average Fiscale Income							0.20	0.12	0.087	0.09	0.11	0.427	0.10	0.11	0.355
<i>Space*Status Parents</i>															
Central Aggl. = reference															
Suburban zone													-0.02	0.03	0.361
Commuters' zone													-0.05	0.02	0.028
Rural zone													-0.08	0.02	0.000
<b>RANDOM<sup>b</sup></b>															
$\sigma^2_{\text{r}}$	46.80	6.84		46.74	6.84		46.64	6.83		44.46	6.67		44.26	6.65	
$\sigma^2_{\text{u}_n}$	0.07	0.27	0.093	0.05	0.23	0.121	0.05	0.21	0.170	0.03	0.17	0.267	0.02	0.14	0.294
$\sigma^2_{\text{u}_s}$													0.00	0.01	>.500
$\rho$	0.15%			0.12%			0.10%			0.06%			0.05%		
<b>MODEL FIT</b>															
<i>Deviance</i>	15588.77			15581.95			15574.42			15021.86			15009.68		
<i>n° estimated parameter.</i>	3			6			8			15			20		
$\chi^2$				6.82			7.53			552.56			0.000		

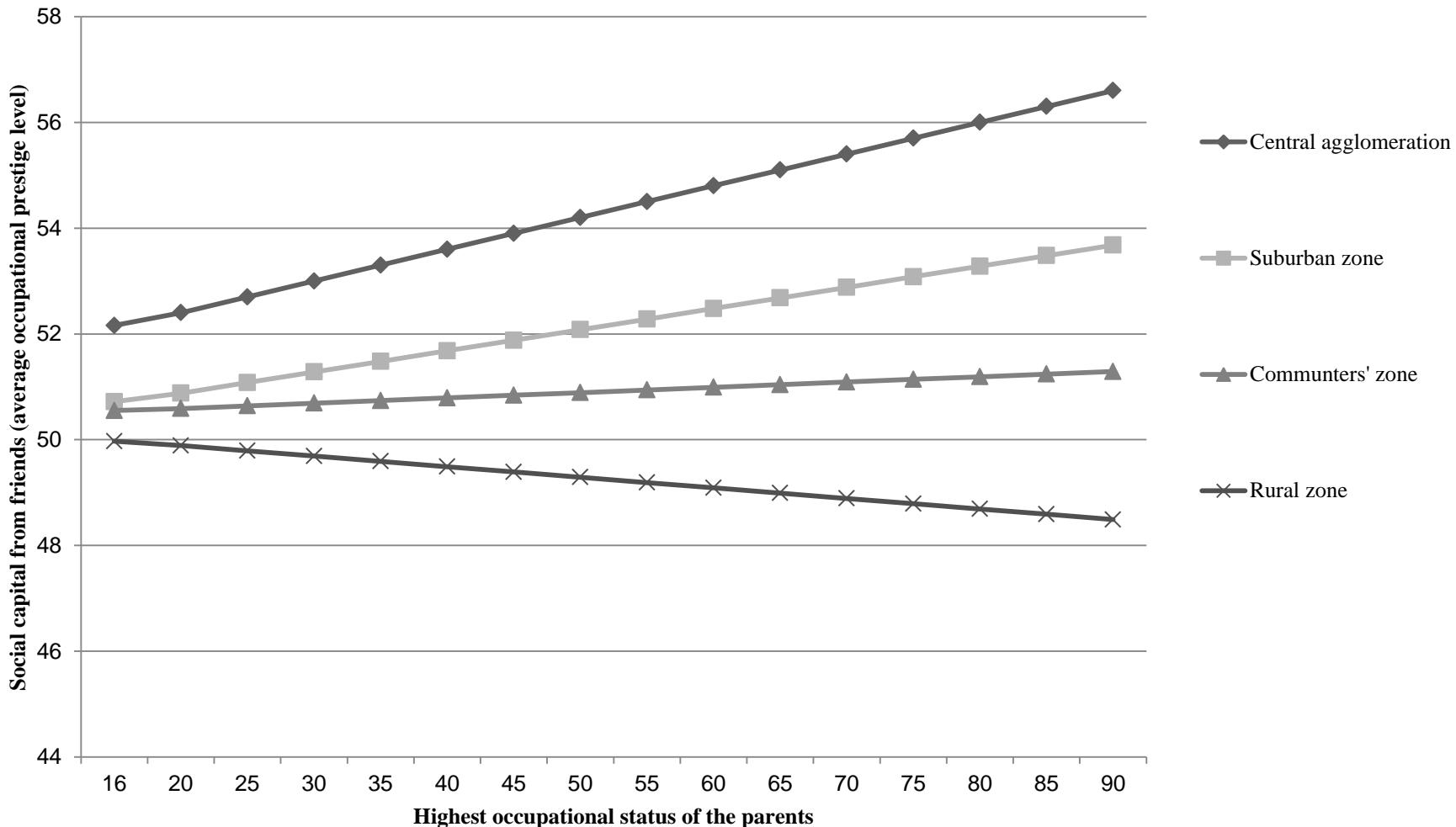
<sup>a</sup>Estimation Procedure = Restricted Maximum Liklihood

<sup>b</sup>Estimation Procedure = Full Maximum Liklihood



ugr

# Average Network Status Friends - Belgium





ugr



UNIVERSITEIT  
GENT

## Interpretation

- ▶ Scale of city = network opportunity
- ▶ ... for students