



Universitat Autònoma de Barcelona



Relational patterns of local productive specialization: A personal network's typology of entrepreneurs and workers in Mexican textile enclaves.

Paper presented at the XXXIII Sunbelt Social Networks Conference of the International Network for Social Network Analysis (INSNA). Hamburg, May 21 – 26, 2013

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Proyecto ENCLAVE. MINECO (CSO2012-32635) - UAA PISIT12-1N

Overview

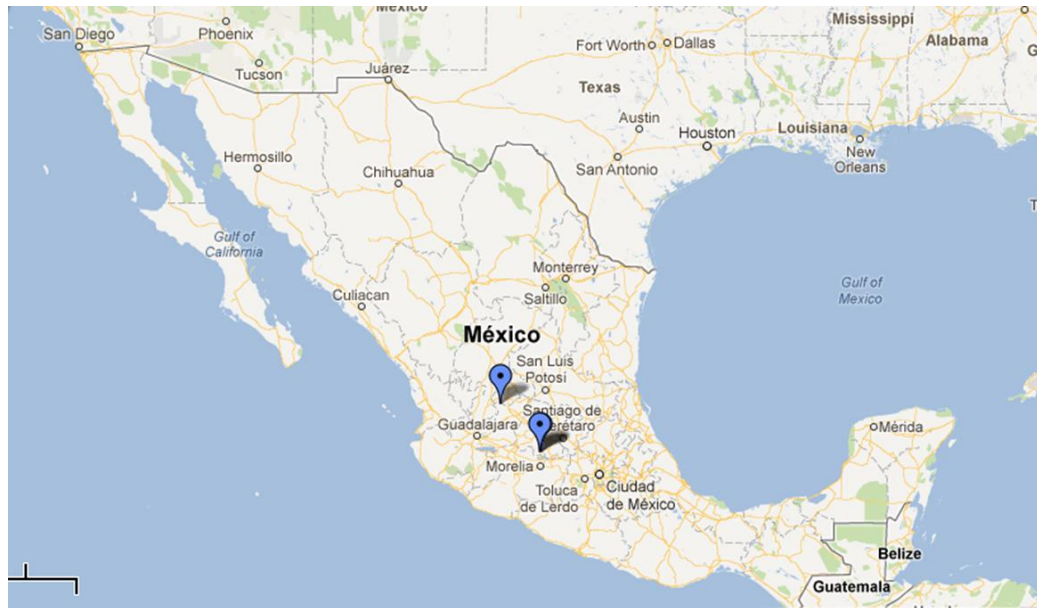
1. Main objective and frame of the research project.
2. Three apparel's industry productive enclaves in México.
3. Theoretical assumptions.
4. Methods
5. Towards a typology of personal networks
6. Findings and conclusions.

1. Main objective and frame of the research project.

- To estimate Individual Social Capital of productive actors in three high – specialized localities in México, through a Personal Network´s approach.
- Linked to project “Social entrepreneurship: local embeddedness, social networking sites and theoretical development - ENCLAVE (2013-2015). MINECO (CSO2012-32635).
- Contribution to a wide research project of labor studies group in thematic network “Poverty and Territorial Development” of National Council of Science and Technology (CONACYT).

2. Three productive enclaves in México

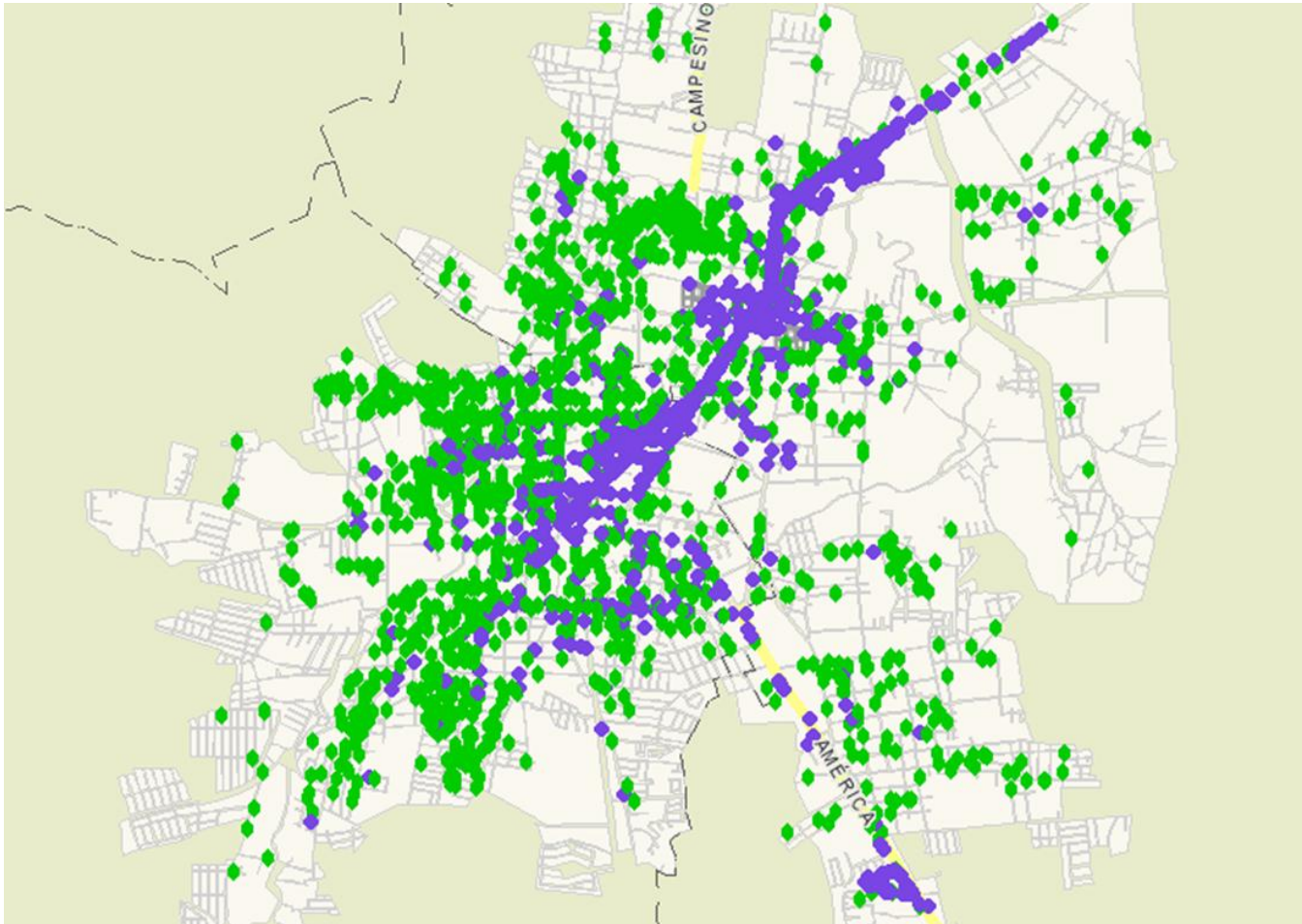
- Multidisciplinary study in three apparel industry highly-specialized localities in central – western México.



2. Three productive enclaves in México

- Moroleón (49,000 inhabitants):
More than 900 small factories and 900 clothing stores.
- Uriangato (59,000):
617 factories and 1,218 stores... “The biggest clothing store in México”
- Villa Hidalgo (18,700):
One store for every 24 people.

2. Three productive enclaves in México



Moroleón – Uriangato conurbation:

Green dots are factories, blue are clothing stores.

2. Three productive enclaves in México

Economic Units (EU) and Occupied Persons (OP) for selected sectors in localities under study.

	Locality					
	Moroleón		Uriangato		Villa Hidalgo	
	EU	OP	EU	OP	EU	OP
Total Economic Units and Occupied Persons	4710	13988	4448	12116	1600	3971
Manufacturing	1201	4558	965	3052	156	623
Textile products and clothing ^{1,2}	904	3772	617	2229	93	470
Proportion on manufacturing	75.27	82.76	63.94	73.03	59.62	75.44
Total Trade (Wholesale and Retail)	2198	5731	2403	6147	1125	2393
Textile products, clothing, shoe Trade (Wholesale and Retail) ²	906	2245	1218	2674	771	1626
Proportion of total trade	41.22	39.17	50.69	43.50	68.53	67.95
Manufacturing and trade related to apparel industry	1810	6017	1835	4903	864	2096
Proportion of total local economy	38.43	43.02	41.25	40.47	54.00	52.78

Source: INEGI, 2009

2. Three productive enclaves in México

- Atypical localities:
 - Non – classical and precarious labor model.
 - Lower social inequality levels and less poverty than other towns and classic industrial poles in the region.
 - More equilibrated Human Development Level.

(García Macías 2011; Lozares, Molina, García Macías, & Maza, 2011; Maza et al., 2011)

2. Three productive enclaves in México

Income Poverty at Guanajuato's V sur region, 2005.				
State/municipality	Population	Income Poverty (% of population)		
		Alimentary	Capacities	Patrimony
National	103,263,388	18.2	24.7	47.0
Guanajuato	4,893,812	18.9	26.6	51.6
Acámbaro	101,762	19.2	27.9	54.6
Coroneo	10,972	24.4	32.8	57.0
Jaral del Progreso	31,780	17.6	27.2	56.1
Jerécuaro	46,137	32.0	41.4	65.5
Moroleón	46,751	9.5	16.1	42.6
Salvatierra	92,411	18.6	26.8	52.2
Santiago Maravatío	6,389	14.6	20.5	41.0
Tarandacuao	10,252	19.3	25.4	45.3
Uriangato	53,077	11.6	19.9	50.4
Yuriria	63,447	27.2	36.4	61.7

Note. Data from CONEVAL (2006b)

3. Theoretical assumptions.

- Nan Lin: Social capital as resources embedded in social networks, which can be accessed by actors to achieve instrumental or expressive goals.
- Unequally distributed among positions in social structure: Occupations as a proxy.

(Lin, 2001; 2005; Lin y Dumin, 1986; Lin y Erickson 2008; Bekkers, Völker, Van der Gaag y Flap 2008; Van der Gaag 2005)

3. Theoretical assumptions.

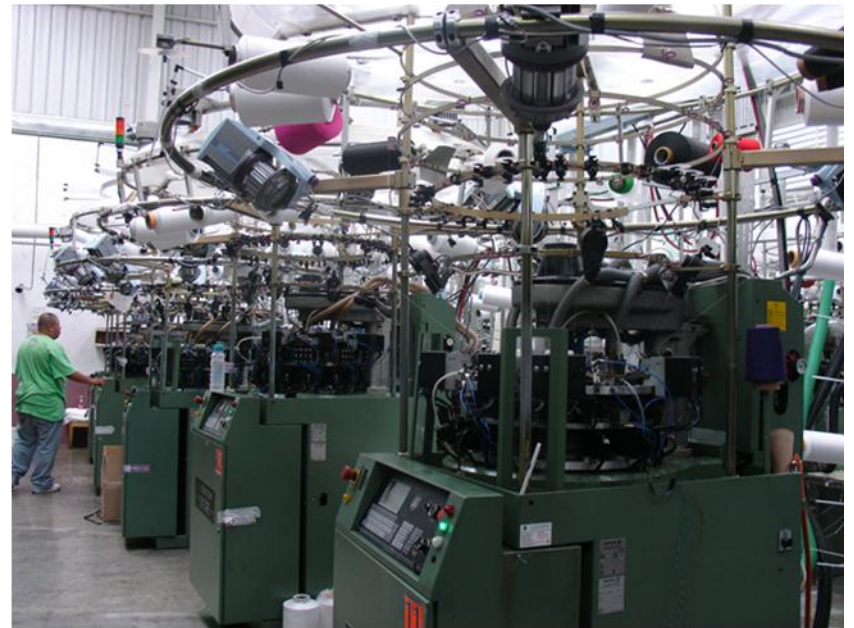
- We claim that Personal Networks contains those resources directly accessible to Ego in multiple settings (Family, work, neighborhood, associations)

(McCarty, Molina, Aguilar, & Rota, 2007; Molina 2005, García-Macías 2012)

- And we use a mixed approach between Network and Resources perspectives to estimate Social Capital.

3. Theoretical assumptions.

- ¿Does Social Capital maintain its unequal distribution in these *apparently* more homogeneous localities, socially and occupationally speaking?

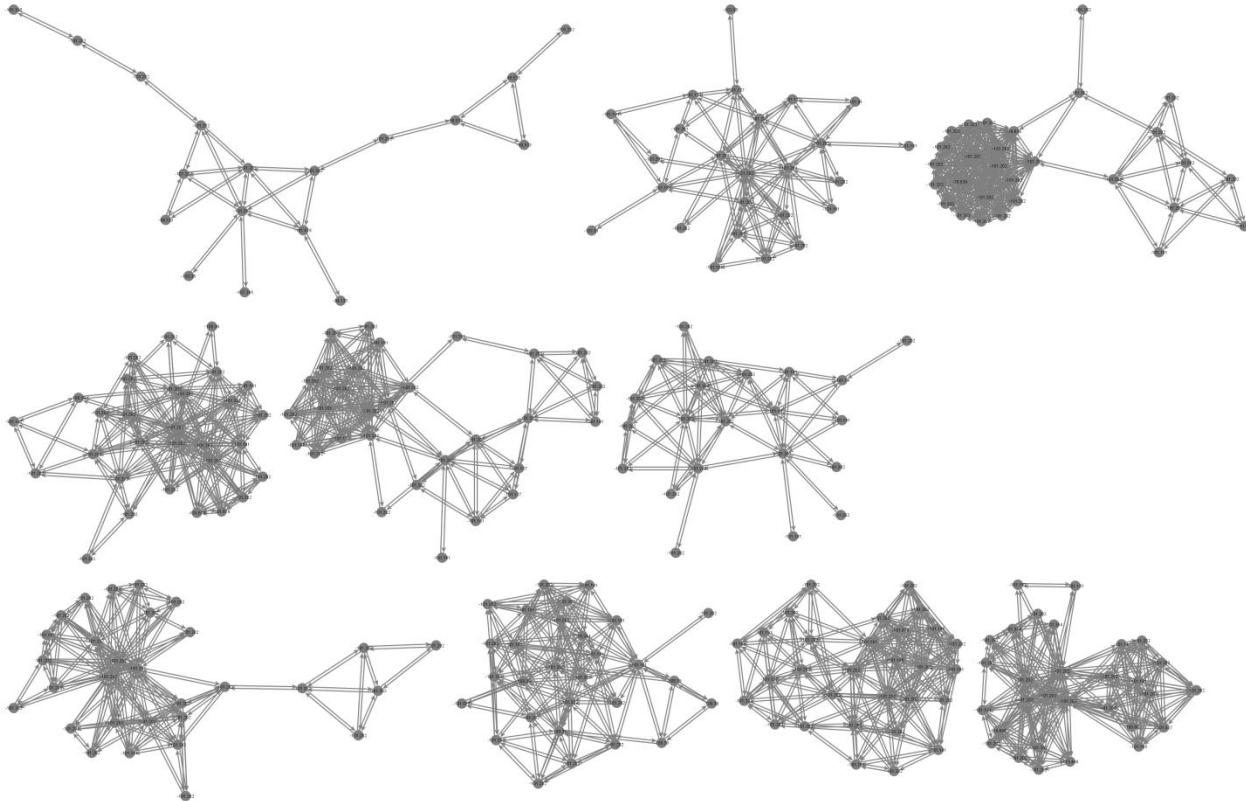


4. Methods.

- Sample (N=75) of personal networks of workers according to 5 occupational groups in apparel industry:
 - Entrepreneurs
 - Shop Owners
 - Shop employees
 - Artisans (Workers at home)
 - Operators (Industrial workers)
- Ego-centered EgoNet interview, fixed 30 Alter size, with Alter – alter links.
- Occupational (and relational) information for 2,250 Alter.

5. Towards a personal networks typology.

- ¿Are there some relational patterns in this sample of networks?



5. Towards a personal networks typology.

- We used a non-hierarchical cluster analysis (K-Means), taking into account 5 variables (Normalized, Z scores), closely related to our main hypothesis:
 - Occupational heterogeneity: IQV (Agresti & Agresti, 1978)
 - Degree Mean.
 - Proportion of Ego's family members.
 - Total Accessed Prestige (Lin, 2001)
 - Geo-dispersion Index (Molina, McCarthy & Levine, 2010; Molina, Bolívar & Cruz, 2011)

5. Towards a personal networks typology.

Clustering Variables Means by Network Type

Network type		Proportion of Family Alter	Degree Mean	Occupational IQV	Geo-dispersion Index	Total Accessed Prestige
1	Media	,5284	15,4983	,8484	,845174	821,32
	N	19	19	19	19	19
	Desv. típ.	,18801	4,85356	,11344	,3939031	239,000
2	Media	,1540	21,1599	,4490	,212599	1210,60
	N	10	10	10	10	10
	Desv. típ.	,12376	4,76130	,28454	,2449975	205,552
3	Media	,1456	7,9874	,7131	,728896	1231,19
	N	16	16	16	16	16
	Desv. típ.	,11045	3,89889	,18743	,4489384	114,424
4	Media	,3090	13,8911	,7217	,270304	688,33
	N	30	30	30	30	30
	Desv. típ.	,19155	3,46224	,13626	,1943036	184,054
Total	Media	,3091	14,0080	,7156	,506077	907,47
	N	75	75	75	75	75
	Desv. típ.	,22066	5,62062	,20378	,4184789	302,344

5. Towards a personal networks typology.

- Four clearly distinguished clusters:

Type of Network by Ego's occupational group

Recuento

		Occupational Group					Total
		Entrepreneurs	Shop Owners	Shop employees	Artisans	Operators	
Type of network	1	4	3	3	4	5	19
	2	4	2	2	2	0	10
	3	4	6	2	2	2	16
	4	3	4	7	6	10	30
Total		15	15	14	14	17	75

5. Towards a personal networks typology.

- Four clearly distinguished clusters:

	Network type	Proportion of Family members	Degree Mean	Occupational IQV	Geodispersion Index	Total Accessed Prestige
1	Low SC, dense translocal strong ties	Very High	Low	Very high	Very high	low
2	High SC, dense local weak ties	Low	High	Low	Low	high
3	High SC, sparse translocal weak ties	Low	Very Low	Average	Very High	high
4	Low SC, sparse local strong ties	High	Low	Average	Low	low

5. Towards a personal networks typology.

- **Clustered Graphs Visualization (Visone)**

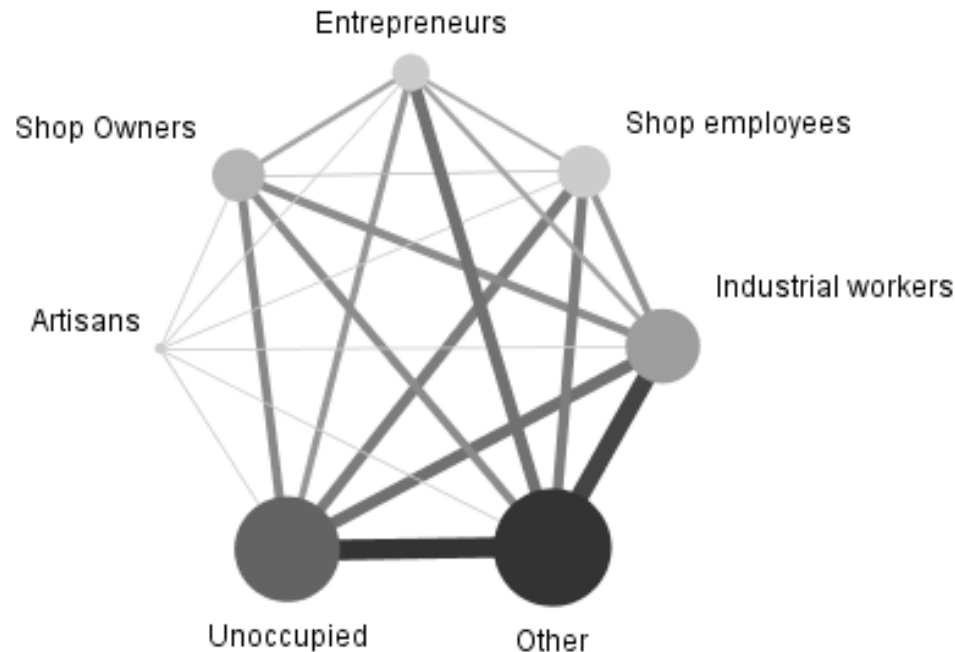
(Brandes, Lerner, Lubbers, McCarty, & Molina, 2008)

- We classified each network according to the cluster in which they are included.
- And then we observe the weight of occupational categories in those types, and how they link to each other...

5. Towards a personal networks typology.

Type 1 (n=19)

Low Social Capital, dense translocal strong ties



Node size = Median relative class size;

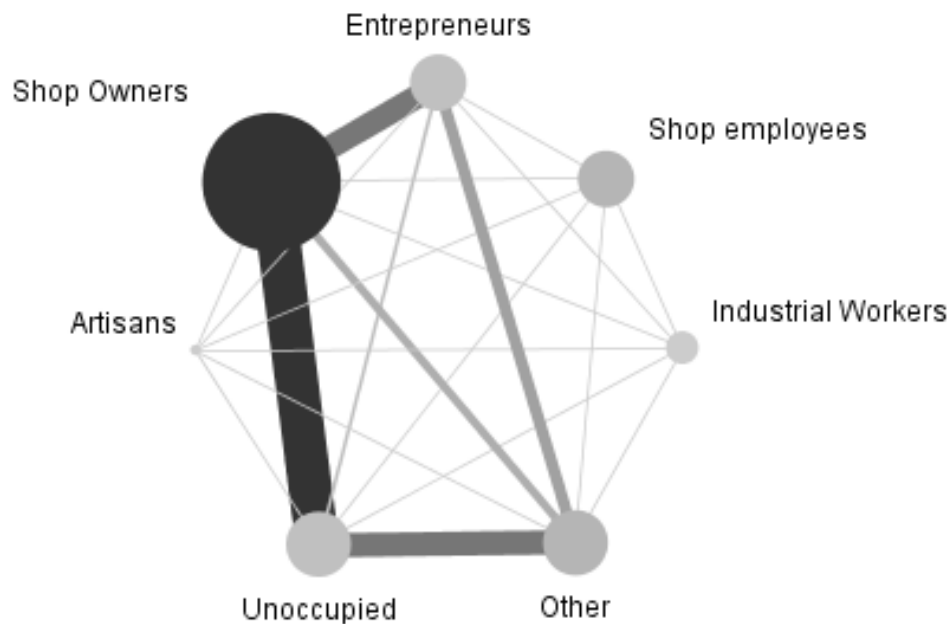
Node color = Median intra – class tie weight;

Link Width and color = Median relative intra-class tie weight-

5. Towards a personal networks typology.

Type 2 (n= 10)

High Social Capital, dense local weak ties



Node size = Median relative class size;

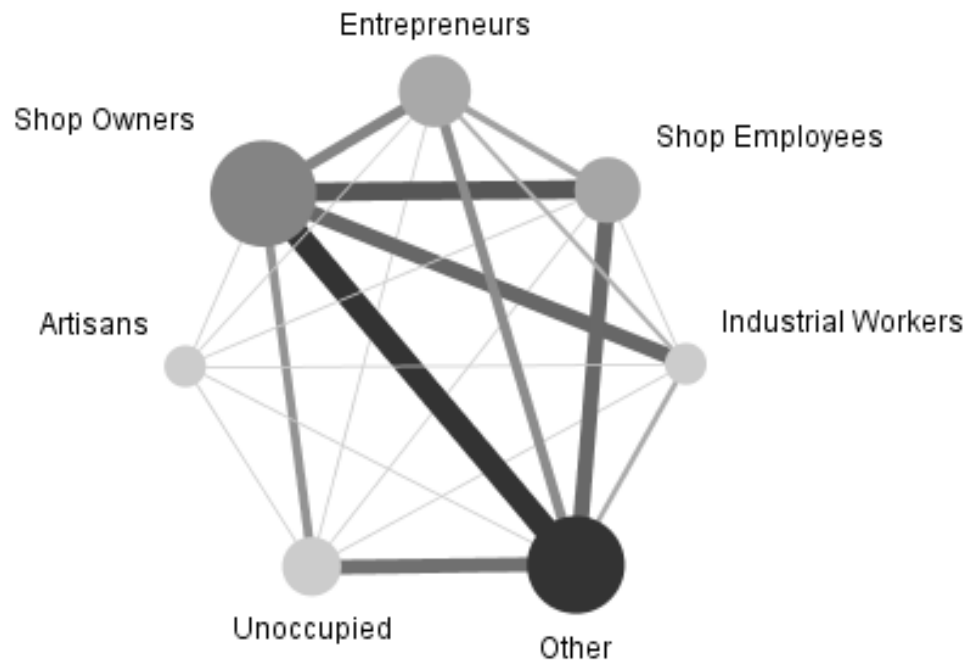
Node color = Median intra – class tie weight;

Link Width and color = Median relative intra-class tie weight-

5. Towards a personal networks typology.

Type 3 (n=16)

High Social Capital, sparse translocal weak ties



Node size = Median relative class size;

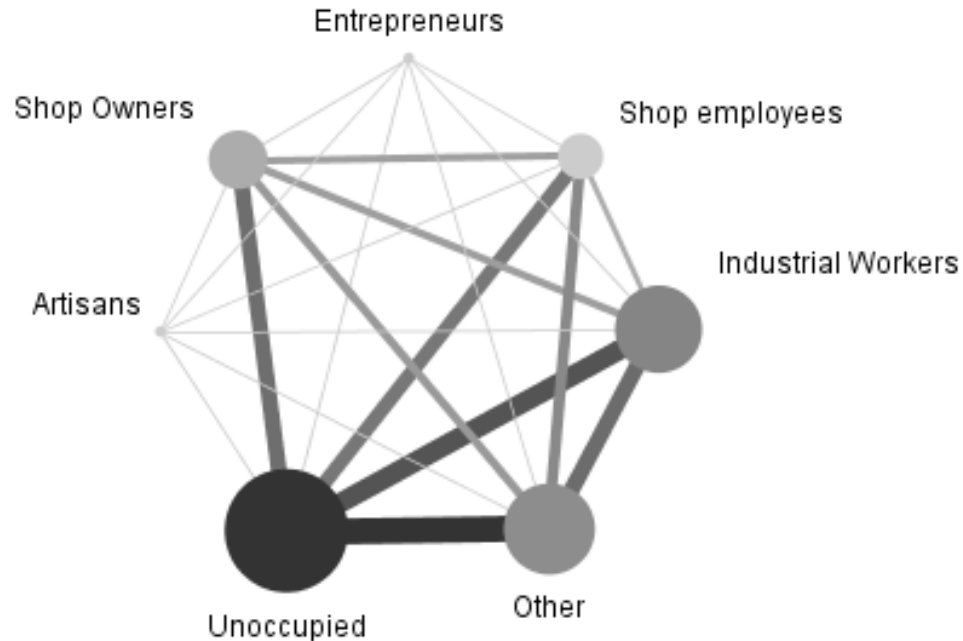
Node color = Median intra – class tie weight;

Link Width and color = Median relative intra-class tie weight-

5. Towards a personal networks typology.

Type 4 (n=30)

Low Social Capital, sparse local strong ties



Node size = Median relative class size;

Node color = Median intra – class tie weight;

Link Width and color = Median relative intra-class tie weight-

6. Findings and conclusions.

Potential access to resources

Effective Networks (accessing more resources)	
Type 2	Type 3
10/75	16/75
Mainly weak ties	
Dense in local space	Sparse in translocal and transnational spaces
Bonding occupational relations (Shop owners)	Bridging and linking occupational relations (Mainly from clothing industry outsiders)
Occupational homogeneity	Occupational heterogeneity
Low number of unoccupied contacts	

6. Findings and conclusions.

Potential access to resources

Non effective Networks (accessing less resources)	
Type 1	Type 4
19/75	30/75
Mainly Strong ties	
Sparse (Translocal and transnational spaces)	Sparse (Local space)
Low Bridging to a cohesive, non related to clothing industry class; unoccupied.	Clearly linked to a relevant unoccupied number of Alter
Occupational heterogeneity	
High number of unoccupied contacts	

6. Findings and conclusions.

- Social and occupational inequality is evident from a relational approach.
 - Two very contrasting blocks
 - Frequency of Non effective networks = 49 (65%)
 - 88 % of industrial machinery operators.
- Findings confirm Lin's Social Capital propositions.
- Personal network analysis and positional approach of SC are not incompatible.

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Thank you!

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