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Transnational Social Fields and Social Spaces from a Network Perspective: Measuring Cross-Border Social Structures

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Motivation

- Transnational literature has a theoretical potential for contributing to the development of social theory.
- Transnational literature was inspired by the network perspective, but uses network terms in a metaphorical way.
- Transnational *fields* – transnational *spaces*.
- We suggest here two ways to operationalizing two key issues in transnationalism: **embeddedness** and **span**.

Network inspiration ...

- “They live within a ‘**transnational social field**’ that includes the state from which they originated and the one in which they settled (...). A social field can be defined as an unbounded terrain of interlocking *egocentric* networks.”

Glick Schiller and Fournon 1999:344

Transnational space

- “(...) ***transnational space*** has been defined as “configurations of social practices, artifacts and symbol systems that span different geographic spaces in at least two nation-states without constituting a new ‘deterritorialised’ nation-state” (Pries 2001: 18).

Our proposal

- We are talking about measuring *emerging social structures across borders, and the ways they appeared, operated, and change.*
- We suggest using a) **personal network** methods and data, b) the selection of a **focal place or places**, and c) the assessment of the different levels of **embeddedness, span**, and ...

b) Selection of a focal place

- David Kyle, *Transnational Peasants* (2000), identified in the same region of Ecuador two different patterns of transnationalism.
- The two villages in Otavalo showed a pattern of circular migration for selling textile goods produced in the region along with other marketable products (with 23 countries mostly in Europe) – *funnel*.
- The villages in Azuay had a flow of irregular migrants to New York – *tunnel*.

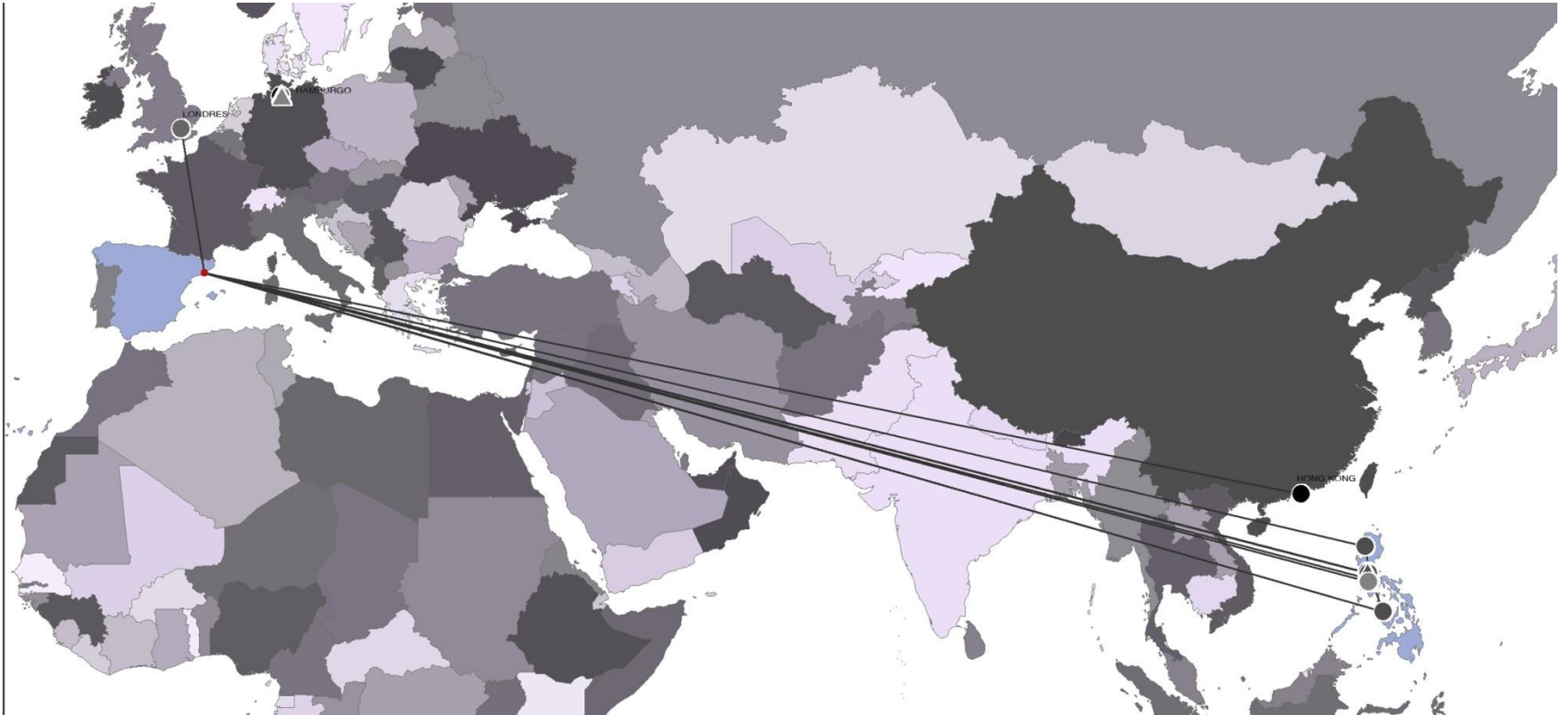
c) *Assessing embeddedness, span ...*

- Different levels of embeddedness account for the flow of social capital through the transnational field/space (Faist 2000).
- i.e. the *mixed embeddedness* of Islamic butchers in The Netherlands described by Kloosterman et al. (2002): simultaneous embeddedness in both the local Dutch institutions and the co-ethnic networks it is possible for them to run the businesses, taking advantage of both societal (i.e. participation in official organizations), and ethnic resources (flexible and cheap workforce).

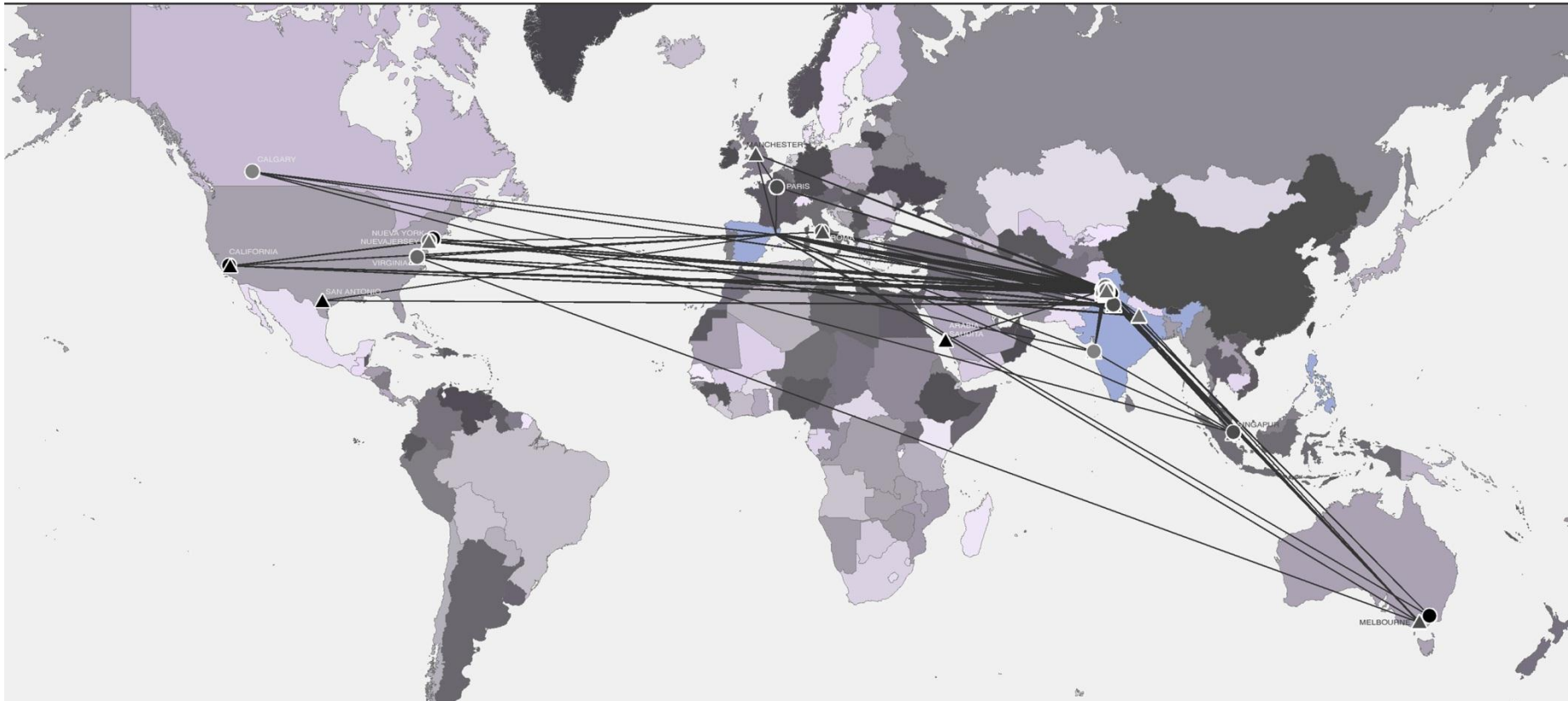
Case study

- Three collectives of people living in Barcelona from **Sikh**, **Chinese**, and **Filipino** origins (Molina and Pelissier 2010), study funded by the Council of Barcelona and the ACSAR Foundation in order to detect uncovered social needs.
- Fieldwork: November 2008 – April 2009 with a quota sample of 25 cases (30 alters) in each collective considering the age, sex and residence time in Spain, with the aid of EgoNet (<http://sourceforge.net/projects/egonet/>).
- The anonymized dataset is publicly available ([http://visone.info/wiki/index.php/Signos %28data%29](http://visone.info/wiki/index.php/Signos_%28data%29)).

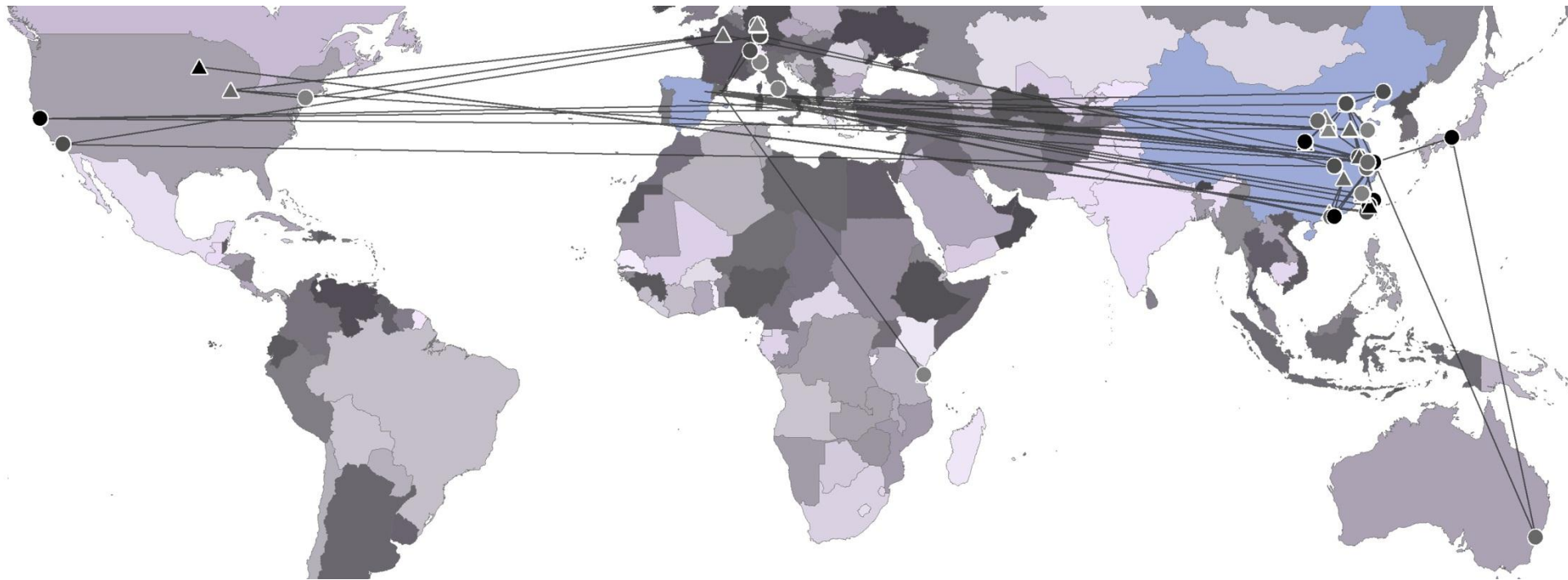
Filipino (“tunnel”)



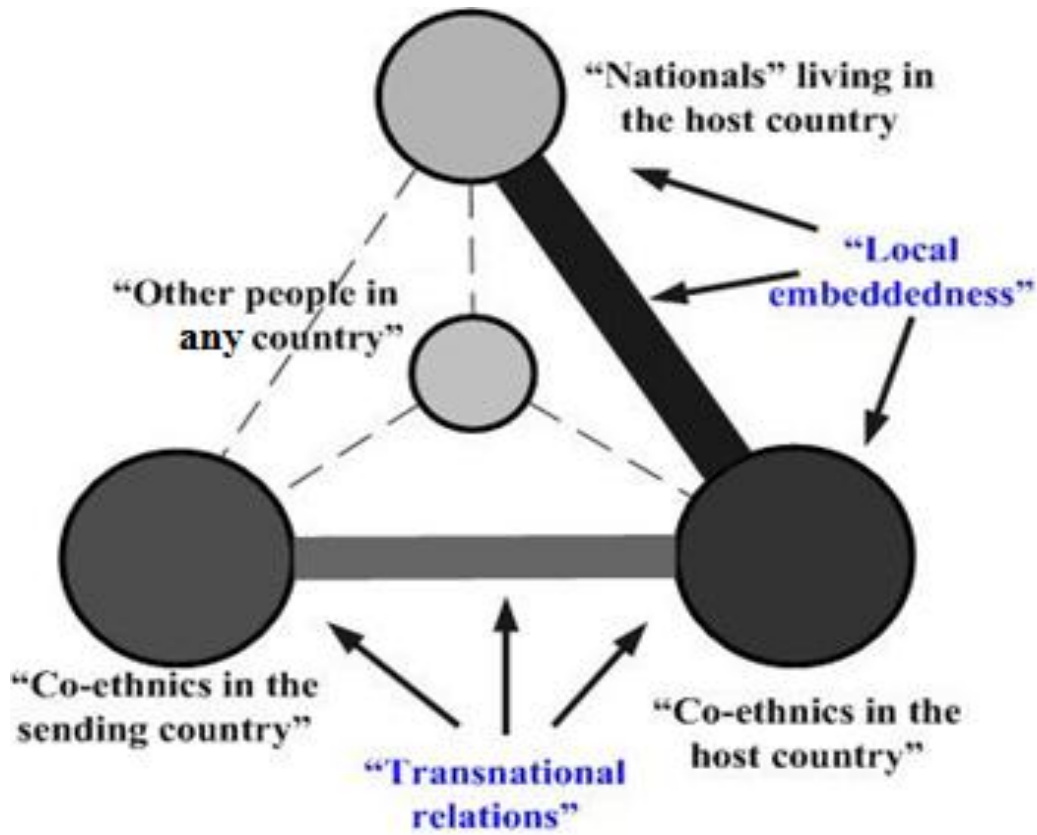
Sikh (“funnel”)



Chinese (“diaspora” ...)



Clustered Graphs (Brandes et al. 2008, Lerner et al. 2007, 2008)

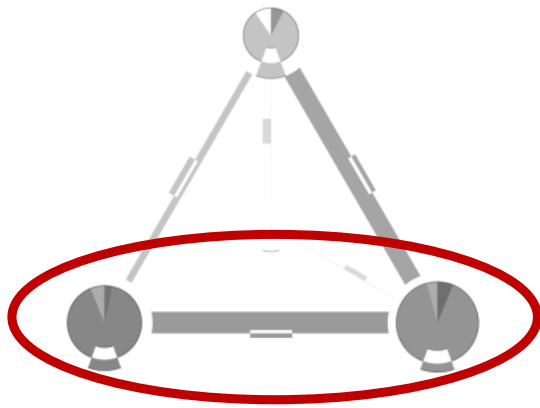


Clustered Graphs (Lerner 2013, personal communication)

- The size $n(A)$ of a class A is the number of alters in it. The relative class-size is the class-size divided by the number of alters in the network. Let $m(A,B)$ denote the number of ties between class A and class B . The weight $w(A,B)$ of the tie between A and B is defined by

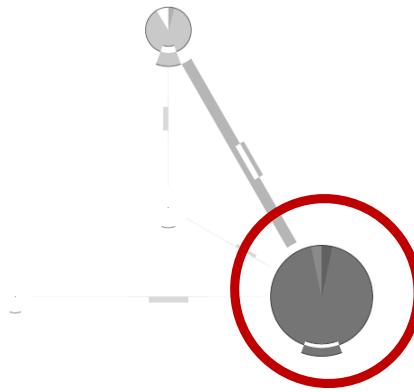
$$w(A, B) = \frac{m(A,B)}{\sqrt{[n(A)*n(B)]}} \quad (1)$$

- The area of the node representing a class is proportional to its relative size; the color-intensity (darkness) of the node representing a class A is proportional to the intra-class weight $w(A,A)$, and the thickness and the darkness of the line connecting class A and class B is proportional to the weight $w(A,B)$.



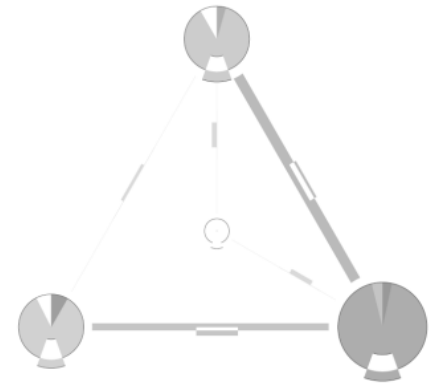
a
Sikhs

N=25. M=6.5 years of
residence



b
Filipino

N=25. M=8.3 years of
residence

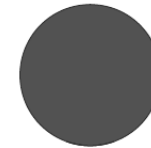


c
Chinese

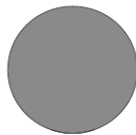
N=25. M=13 years of
residence

Figure 2. The personal networks of Sikhs (a), Filipino (b) and Chinese (c) people in Barcelona. Size indicates the number of people in each class, darkness indicates density and its standard deviation is indicated by the grey scale.

Filipino women ...



- a. 30 years old, 3 years of residence. b. 38 years old, 1 year of residence.



- c. 45 years old, 9 years of residence. d. 28 years old, 9 years of residence.

IQV (Budescu and Budescu 2012)

$$IQV = \frac{K}{K-1} * \left(1 - \sum_{i=1}^K p_i^2\right)$$

- K is the number of categories (i.e. number of countries)
- p_i is the proportion of observations that fall into a given category I (i.e. proportion of alters residing in a given country)

Distribution of IQV (span)

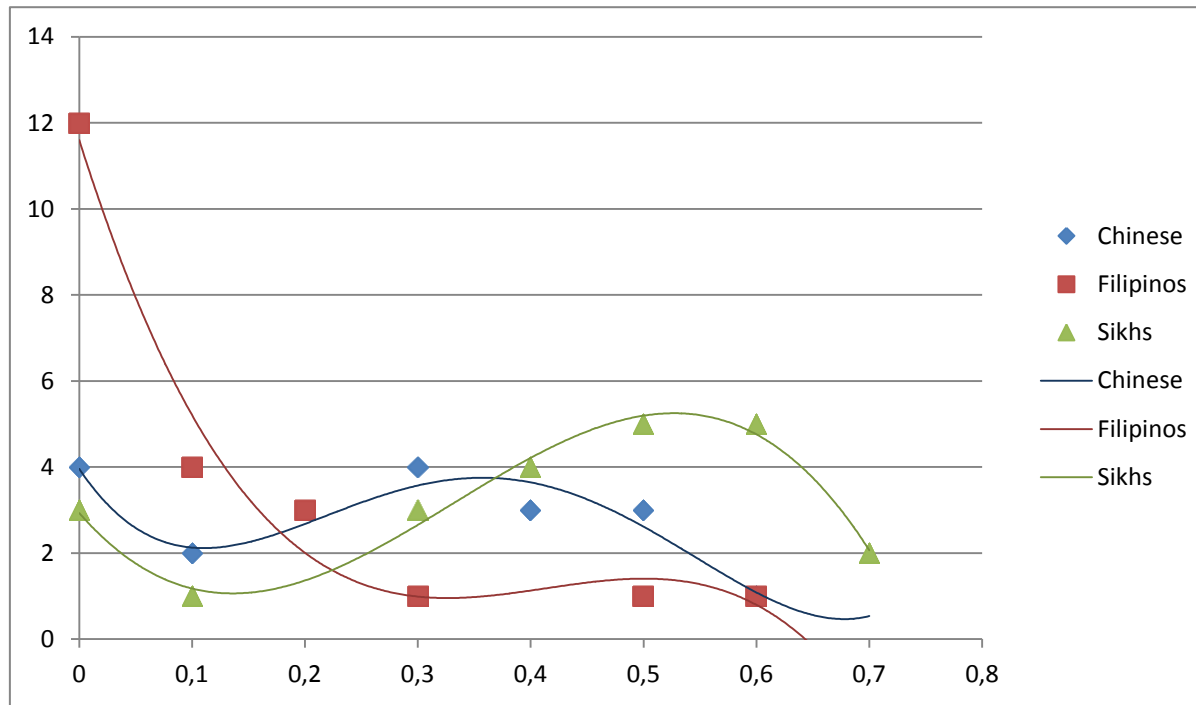


Figure 7. Diversity of alters' countries of residence (frequencies of IQV).

Statistic	Filipinos	Chinese	Sikhs
min	0.000	0.000	0.000
p25	0.000	0.070	0.252
median	0.000	0.301	0.485
p75	0.156	0.441	0.553
max	0.556	0.626	0.691
mean	0.101	0.280	0.408
standard deviation	0.161	0.207	0.210
skewness	1.825	-0.057	-0.865
kurtosis	5.307	1.682	2.528
N	660	510	690

Table 1. Descriptive statistics of the Index of Qualitative Variation (diversity of alters' countries of residence).

In sum ...

- Personal network analysis is well suited for measuring, and analyzing transnational structures ...
- In case we have personal network data!

Thanks!