

**Virtual Encounters Across National Borders:  
A Simulation-Assisted Methodology for the  
Analysis of Socio-Cultural Cleavages**

© Georg P. Mueller

University of Fribourg  
Department of Social Science  
Blvd de Perolles 90  
CH-1700 Fribourg / Switzerland  
Georg.Mueller@unifr.ch

Copies of transparencies  
presented at the

1st General Conference of the  
International Microsimulation Association

Vienna  
August 20-22, 2007

## **1. An introductory overview**

### European heterogeneity as a problem:

Cultural heterogeneity →  
cultural conflict between and within countries

Integration of European labor markets →  
increased cultural conflict  
due to increased labor migration.

### Research questions:

- a) Level of future conflict between natives and immigrants.
- b) Types of future conflicts and their consequences for the integration of immigrants.
- c) Groups of immigrants, critical with regard to type or level of conflict.

### Methodological approach:

Microsimulation of value conflicts  
by virtual encounters between  
natives and future immigrants.

### Exemplary case study:

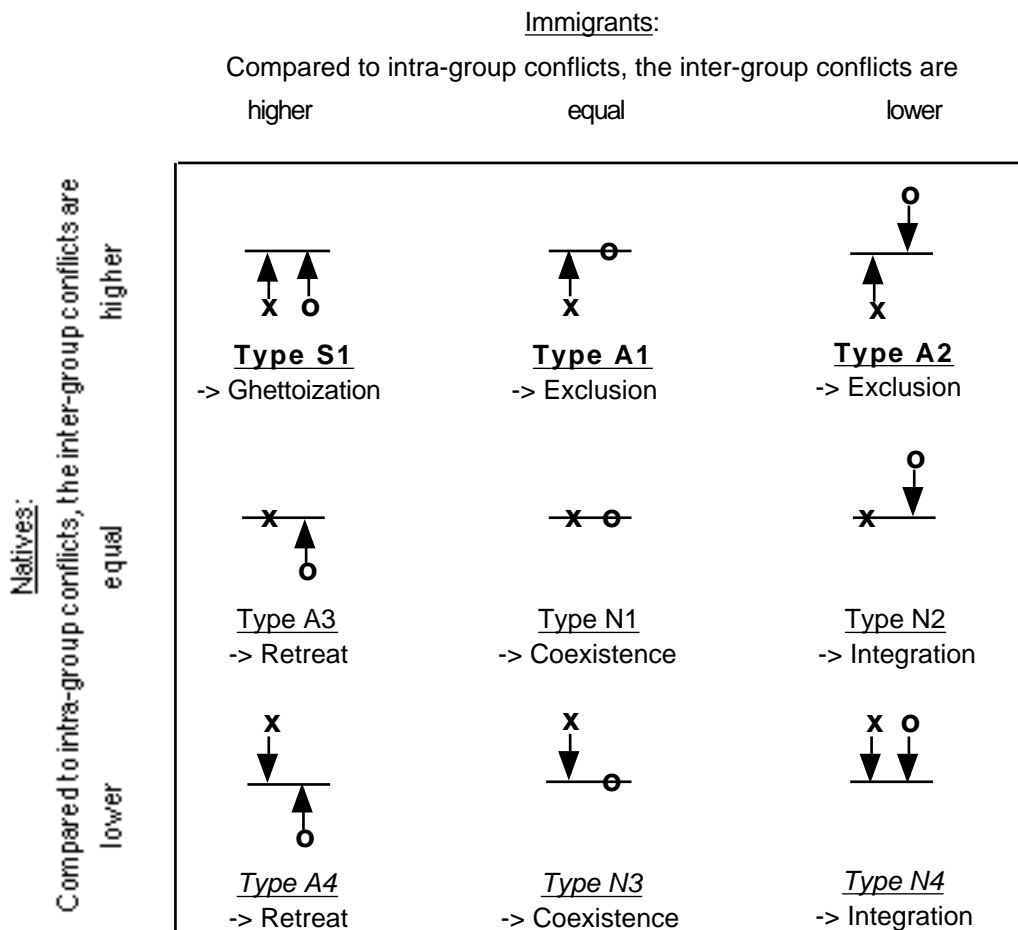
Work related value conflicts due to  
Polish migration to Germany

## 2. Socio-cultural cleavages and their consequences

Socio-cultural cleavage: the original meaning:

- a) Two antagonistic groups,  
e.g. defined by religion.
- b) Rel. high inter-group conflict  
referring to norms/values.
- c) Rel. low intra-group conflict  
within both groups.

Fig. 1: A cleavage typology based on varying conflict levels:



Legend:

x: Level of intra-group conflict of the natives; o: Level of intra-group conflict of the immigrants; —: Level of the inter-group conflict between immigrants and natives; S1: Symmetrical cleavage; A1-A4: Asymmetrical cleavages; N1-N4: Non-cleavages; **Bold types:** Destabilizing the society of immigration; *Italic types:* Pacifying the society of immigration.

### Type S1:

Symmetrical „classic“ cleavage:  
both groups perceive a conflict  
-> Ghettoization of immigrants.

### Types A1 to A4:

Asymmetrical cleavages:  
only one group perceives conflict  
-> Retreat or exclusion

### Types N1 to N4:

Non cleavage situations  
-> Coexistence or integration

### Types S1, A1, A2:

Destabilizing cleavages:  
Immigration increases average  
level of general internal conflict.

### Types A4, N3, N4:

Pacifying cleavages:  
Immigration decreases average  
level of general internal conflict.

### 3. Simulated virtual encounters

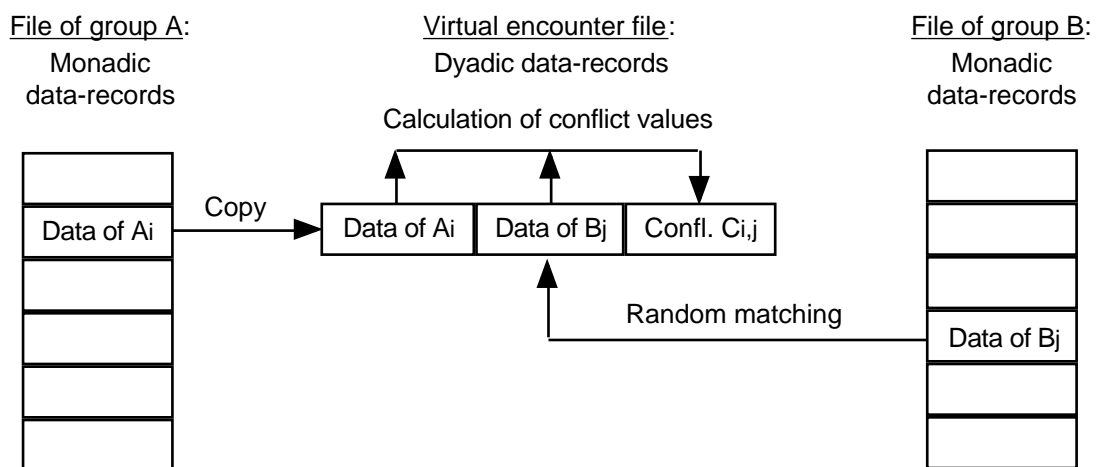
General approach:

Simulation of inter-individual conflicts  
which can be aggregated  
to indices of inter- / intra-group conflicts.

Input data:

Interviews referring to individual values

Fig. 2: Simulation of inter-individual conflicts



Legend:

Confl.  $C_{i,j} = (\text{Value difference } A_i - B_j) / (\text{Social distance } A_i - B_j)$

Comment on fig. 2:

Details to be specified:

- i) Social distance  $A_i - B_j$
- ii) Value difference  $A_i - B_j$

if necessary, calculations also for alternative assumptions about social reality.

Calculation of intra-/inter-group conflicts:

By aggregation of virtual encounter file,  
if necessary only for selected groups,  
depending on immigration flows or policy.

## 4 The example of the Polish immigration to Germany

### 4.1 General levels of conflicts

#### Field of analysis:

- Migration of Polish labor force to Germany
- Consequences for conflicts about work values

#### Raw dataset:

European Values Study EVS 1999/2000

#### Virtual encounter file:

10'950 randomly matched records  
for encounters PL–PL, D–D, D–PL  
with intra- / inter-national conflicts about

- (a) obedience to superiors (EVS Q19)
- (b) work ethos (EVS Q1A)
- (c) meritocratic income distribution (EVS Q18)

#### Value differences:

= 0 for pairs with same EVS coding  
= 1 for pairs with different EVS coding

#### Two opposite distance models:

##### Model A:

Equal distance 1 for all pairs

##### Model B:

Distance = 1 for pairs with same status (EVS Q110a)

Distance =     for all other pairs

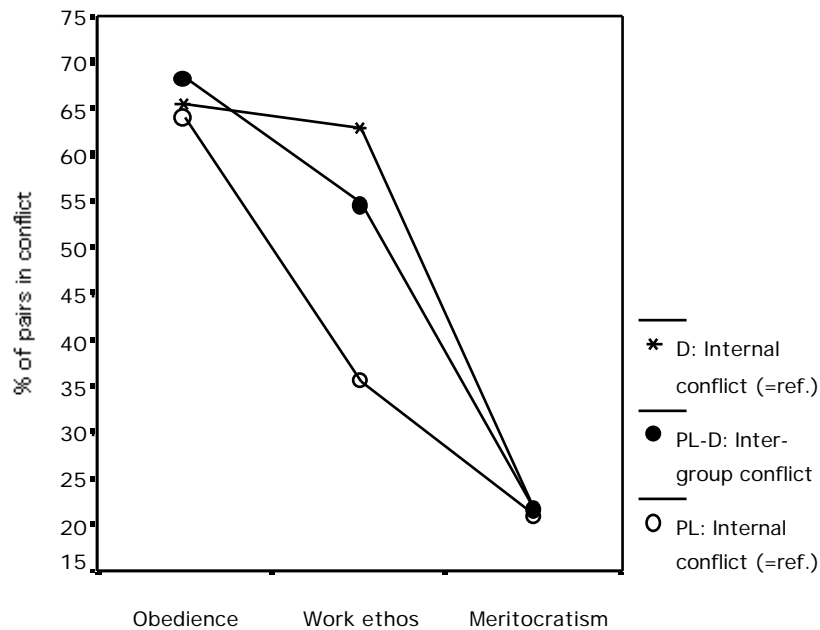
#### Simulated difference between distance models:

For inter- / intra-national conflicts:

Max.  $\pm$  2.5 units on a 0–100 scale

-> Preference for simpler  
equal distance model A

Fig. 3: Value cleavages between Poland and Germany



Assumption:

Level of inter-national conflict PL-D =  
Level of conflict between  
Germans and future Polish immigrants

Interpretation of fig. 3:

Obedience:

Slight symmetrical cleavage  
-> Immigration is destabilizing

Work ethos:

Big asymmetrical cleavage  
-> Immigration is pacifying

Meritocratism:

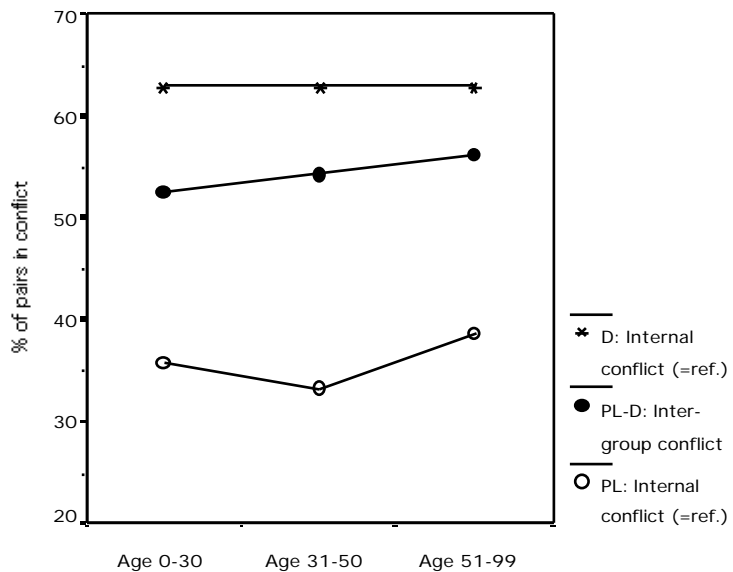
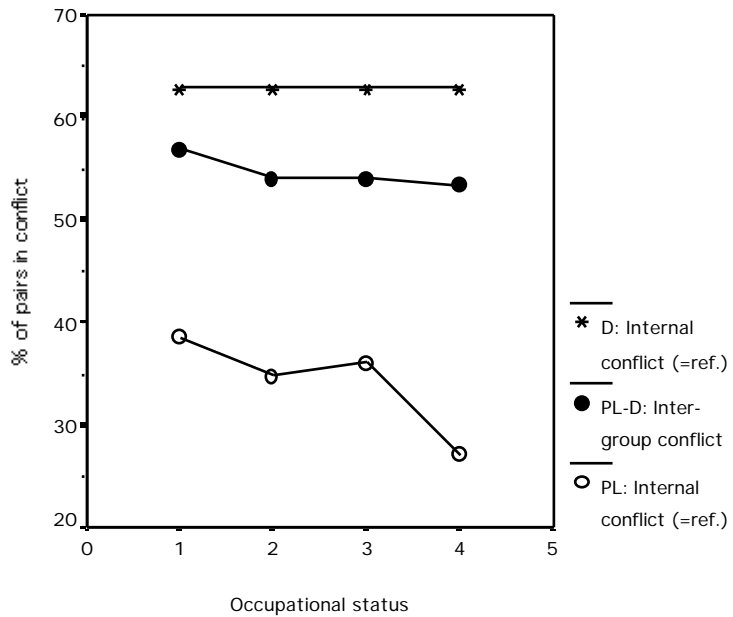
Non-cleavage situation

Follow-up question:

Are there different results for selected groups,  
e.g. defined by an immigration policy  
focussed on age and occupational status?

## 4.2 Conflicts by age and occupational status of Polish immigrants

Fig. 4a,b: Conflicts about work ethos



### Comments on fig. 4a,b:

For all age and status groups (EVS Q85, Q110a):

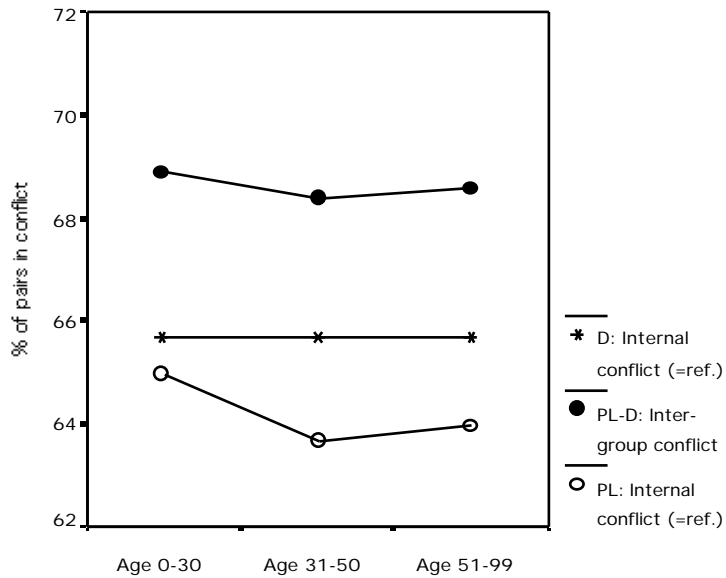
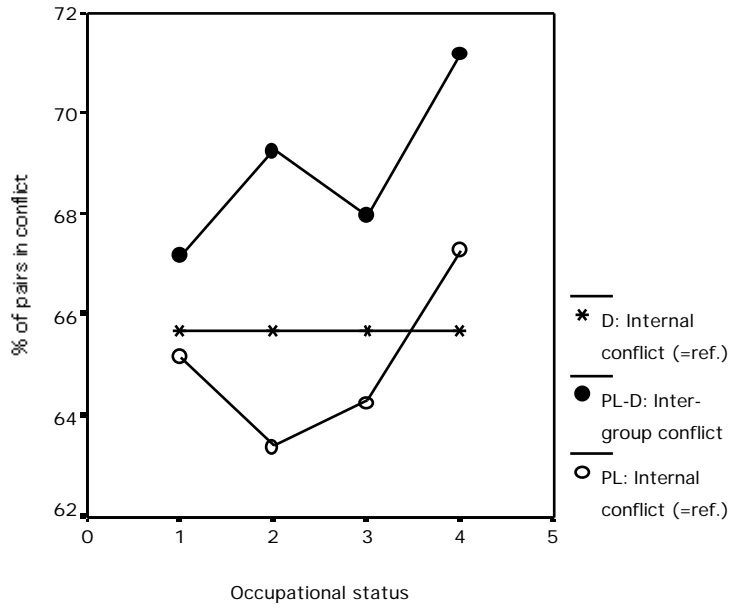
Asymmetrical cleavage, as in fig. 3

→ Risk of retreat, especially for:

Age-group = 31 - 50

Occupational status = 4

Fig. 5a,b: Conflicts about obedience to superiors



Comments on fig. 5a,b:

For all age and status groups:

Symmetrical cleavage, as in fig. 3

→ Risk of ghettoization, especially for:

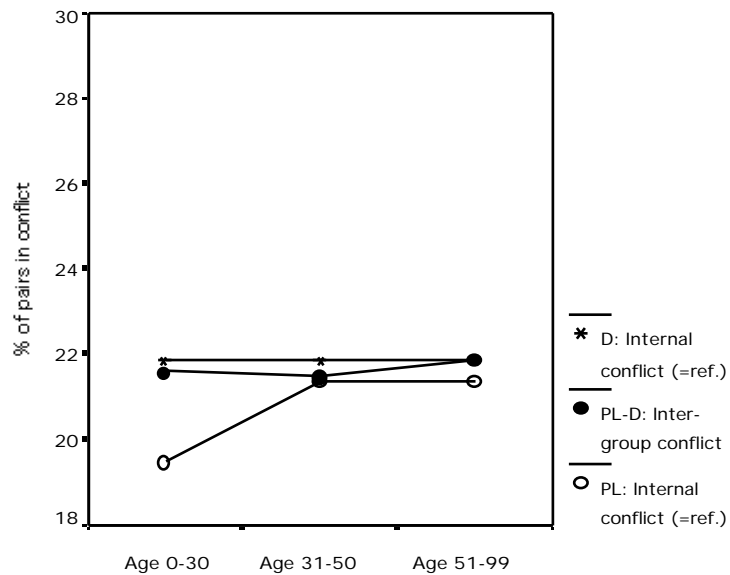
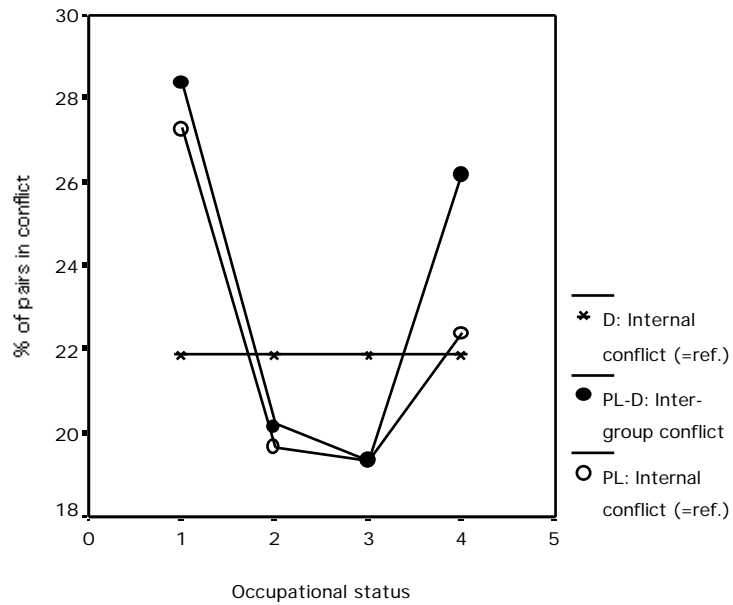
Occupational status = 2 or 4

→ Risk of destabilization especially by:

Age-group = 0-30

Occupational status = 4

Fig. 6a,b: Conflicts about meritocratism



Comments on fig. 6a,b:

Contrary to fig. 3:  
 Non cleavage situation only for  
 age = 31-50 and 51-99

Symmetrical cleavage for  
 occupational status = 1 and 4  
 -> Risk of ghettoization.

Asymmetrical cleavage for  
 Age = 0-30 -> Risk of retreat

## 5. Summary and outlook

### Demonstrated in this paper:

Usefulness of virtual encounter simulations  
for the analysis of  
future conflicts by immigration.

### Major findings about Polish immigration:

Work ethos and obedience are  
critical values for future conflicts

Age group 0-30 and  
Occ. status = 4 = upper middle classes  
are relatively conflictive

→ Caveat immigration policy!

### Further applications of virtual encounter simulations:

Conflict management  
by anticipating conflictive reactions  
to political decisions:

Legalization of human cloning,  
use of atomic energy, etc.

Forecasts  
of future intra-societal value cleavages,  
based on current value trends:  
Spread of Islamic fundamentalism  
in multireligious societies, etc.