international institute of social history

Measures of occupational classification. A collective problem?

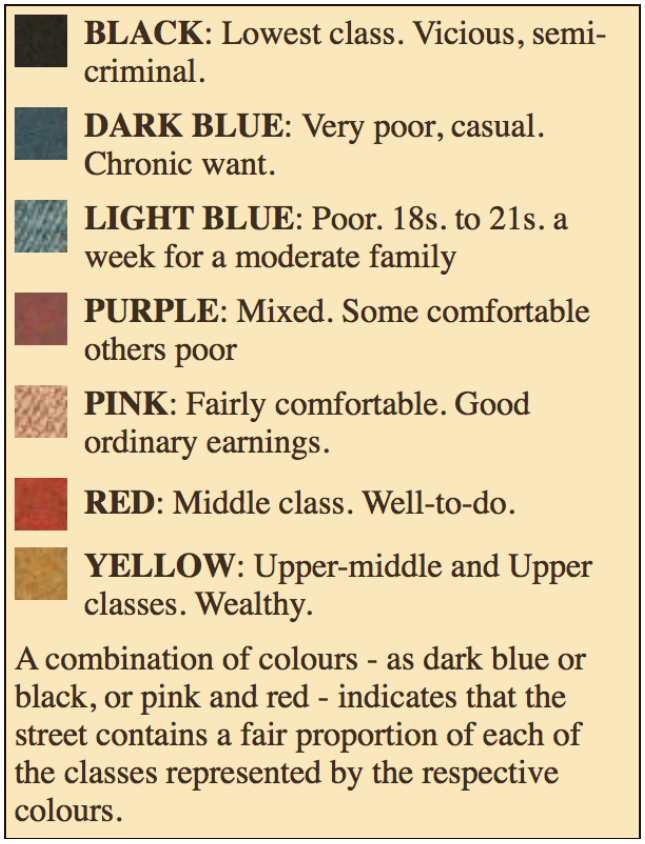
2017-03-22, Demography Today Lecture Series, Madrid

Richard Zijdeman

international institute of social history

Lack of comparability

- Many different occupational classifications
- Differences in mobility studies could results from different classification methods (Kaelble 1985)



Charles Booth (1886-1903)

international institute of social history

Current solution: 2-step procedure

Code into the concept, first:

- Classify into the concept
- Link the measure of stratification to the concept

international institute of social history

New problems

1. What concept?
- Historical International Standard Classification (HISCO)
- OCCHISCO
- PST

2. Not all measures link to all concepts

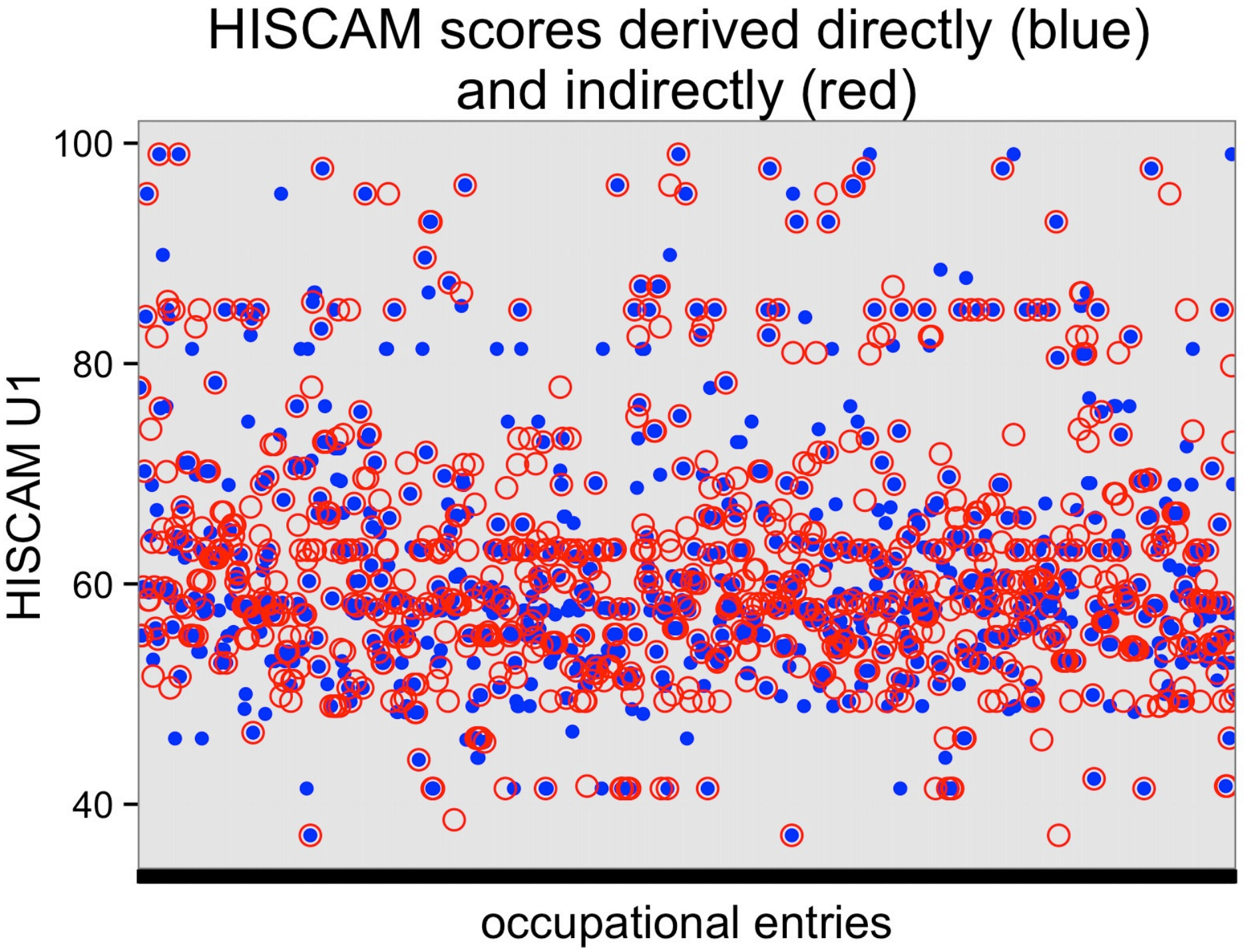
3. Adaptability of concepts (new versions)

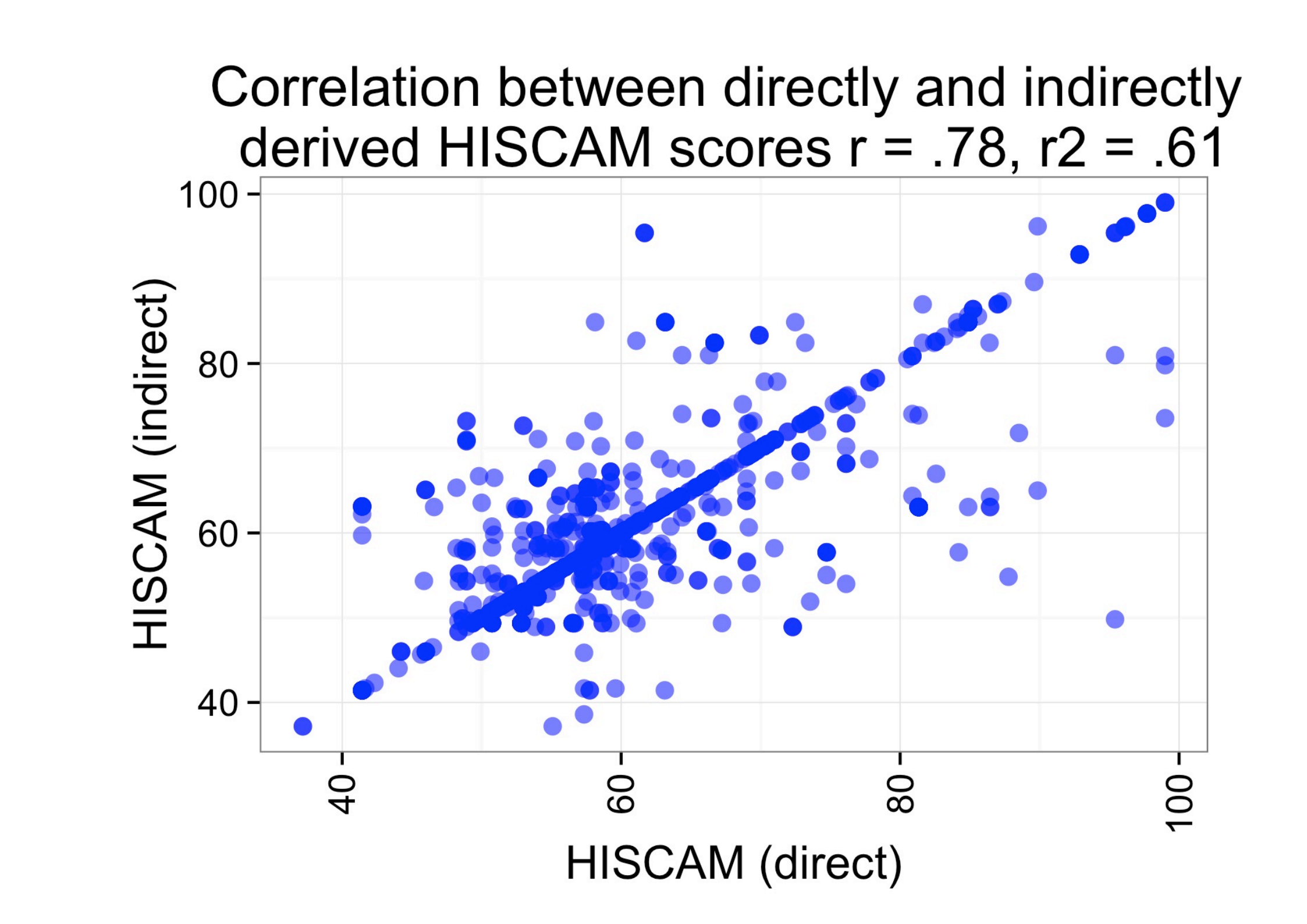
international institute of social history

Is this a substantive problem?

Illustrative example:

- Subset of SAME occupational titles from NAPP and HISCO
- Link these occupations to HISCAM
- For HISCO directly provided by HISCAM people
- For OCCHISCO indirectly through a mapping


HISCAM scores derived directly (blue)
and indirectly (red)
100
80
60
40
HISCAM U1
occupational entries


Correlation between directly and indirectly derived HISCAM scores r = .78, r2 = .61
HISCAM (indirect)
100
80
60
40
40
60
80
100
HISCAM (direct)

international institute of social history

So yes, this is problematic

- ‘Lost’ 41% explained variance
- Cf. regression models: usually not above 30%
- HISCAM often both as dependent and independent variable

international institute of social history

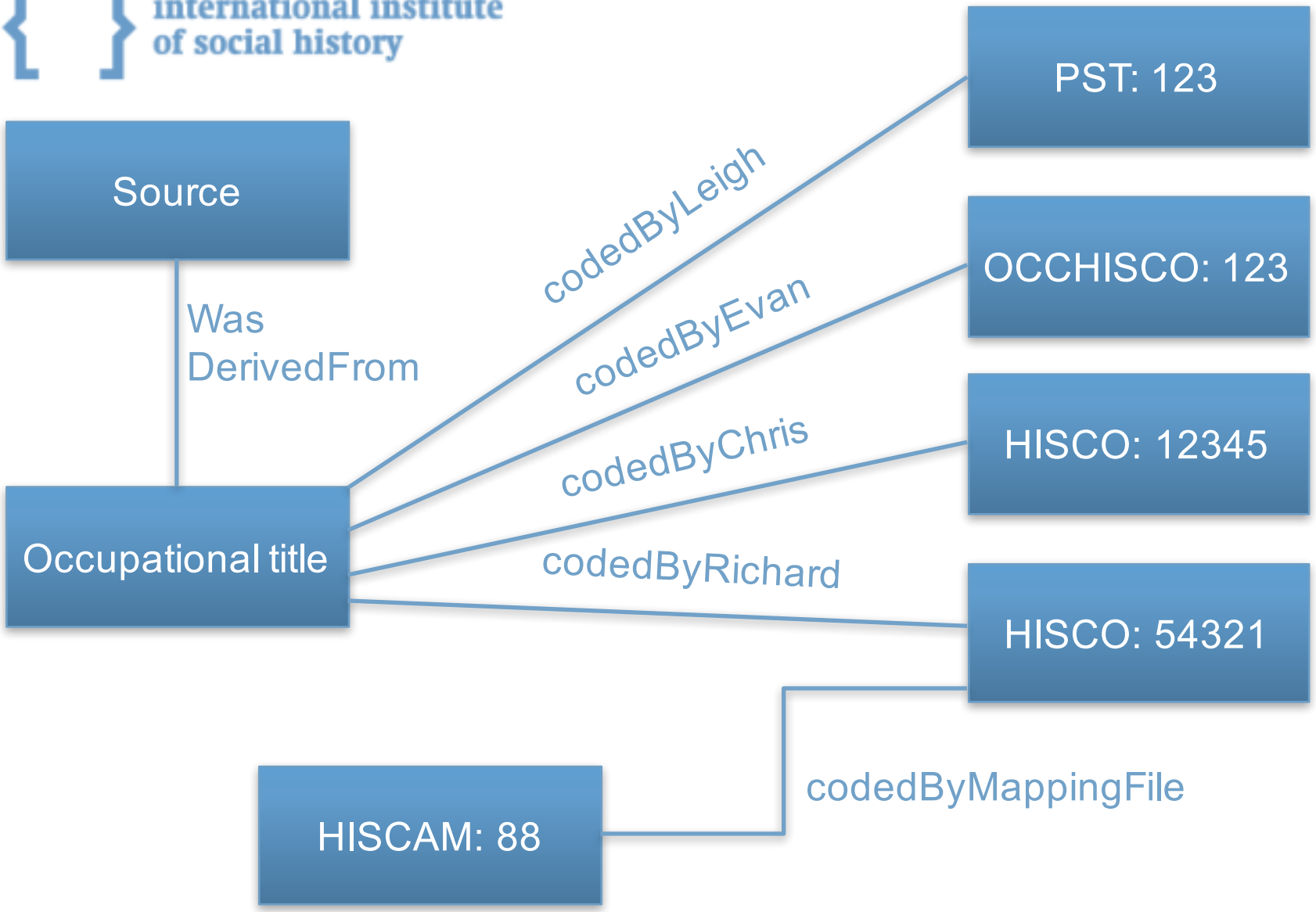
Towards a solution

1. Share what you've coded already
- helps coding new records
- allows for intra-coder reliability

2. Apply machine learning algorithms (Chris ;))
- Manually coded data as gold standard
- Use information from other directly coded concepts

3. Use linked data for provenance

international institute of social history



international institute of social history

Extended possibilities of linkage

- Linkage to texts (occupations in newspapers)
- Linkage to public resources: Wikipedia

international institute of social history

DEMO

international institute of social history

A collective solution:

- Go beyond the ‘best’ concept and ‘best’ scheme
- Share coded data
- Use coded data to code new occupations

international institute of social history

Thank you

richard.zijdeman@iisg.nl