

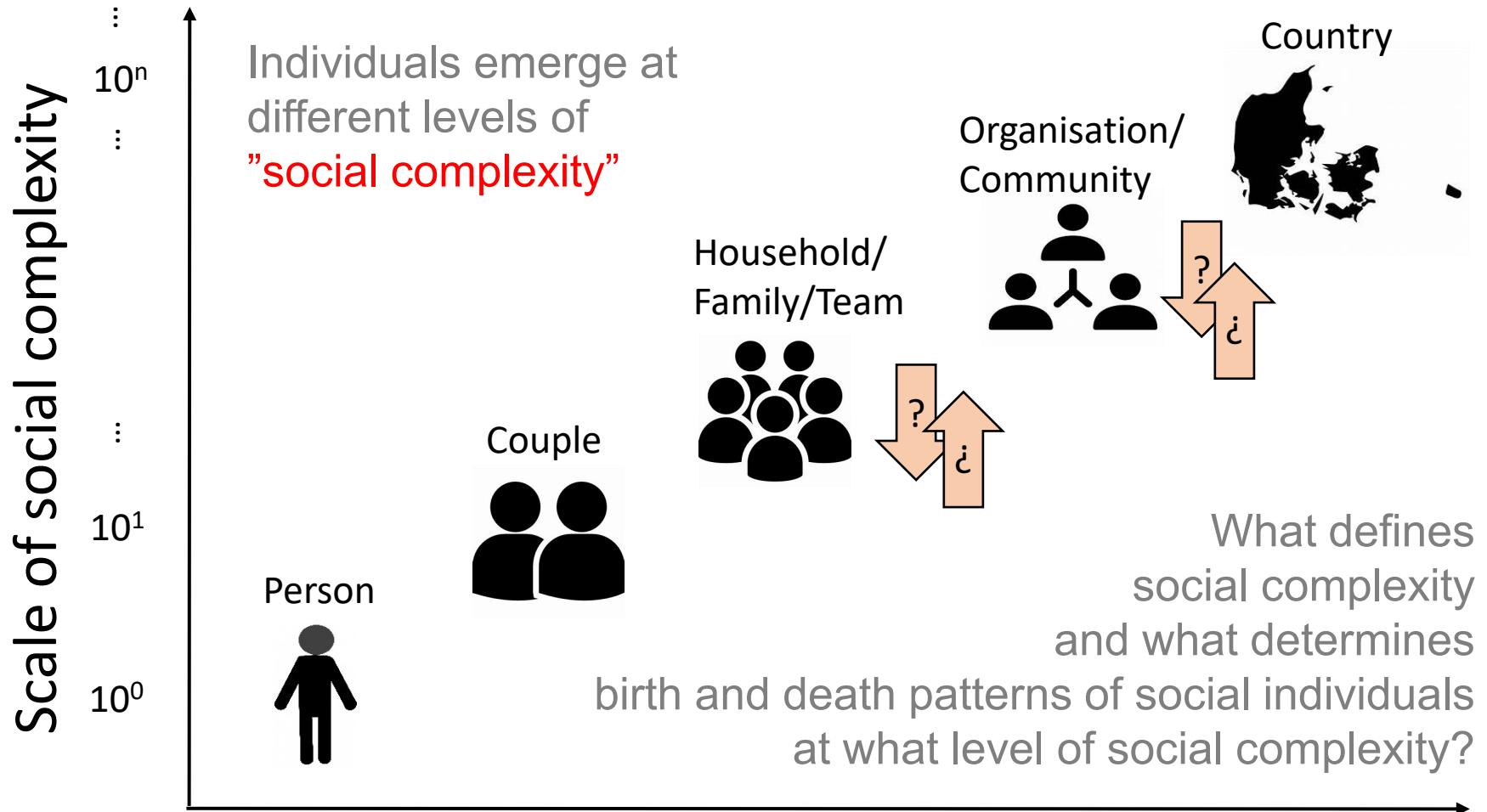
Birth and Death of Social Individuals

Work in Progress

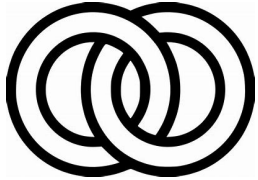
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People and groups of people are 'social individuals'



Data on married couples, families, and households: pilot approach



Age- and gender specific marriage and divorce counts by time and country for cohorts (and periods).
Marriage records.



Age- and gender specific family formation counts by time and country for cohorts (and periods), as well as information on birth and death dates of family members (parents+all children).

OECD Family Database,

www.oecd.org/els/social/family/database



Age- and gender specific household formation and dissolution counts by time and country for cohorts (and periods). Further, members of the household by age and gender.

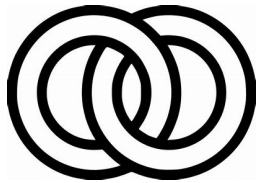
Danish registry data, ...

Demographic Yearbook, United Nations Statistics Division

<http://unstats.un.org/unsd/demographic/sconcerns/fam/default.htm>

Birth and death

The individual married couple



B: By marriage

D: By divorce or death of spouse

The individual (married) family



B: By birth/adoption of first child into a marriage

D: By death of its last member (family ties are assumed to be eternally binding, beyond divorce)

Birth and death

The individual household



B: Born by household head (reference or 'marker' individual person) signing the legal contract

D: Change of address? Change of household head? Death of members.

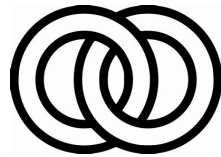
"what is an individual?"

Identity ? (defined by co-residence, and at least some degree of resource sharing)

- A household is a great opportunity to think about defining individuality, birth and death. Issues arise that also arise, e.g., in biology.
- Birth and survival of households must be carefully distinguished:
 - When a household divides, does the original household die and give birth to two new households, or does the ‘parent’ household survive and give birth to one offspring household?
 - Similar problem as in bacteria cells, which grow and divide in two. Does the mother ego die and leave two daughter egos, or does she survive and create one new daughter? And is the daughter born at ‘age zero’, or does one have to account for the age of her mother?

- To what extent does location (address) and change of location should affect household identity? Which and how many members of the former address have to move to the new location so it is considered the same household?
- What if two households move and merge into one? At a new or one of the former addresses?
- Households can also die by death of all their individual members.
- non-head members entering or leaving an existing household can be considered growth and shrinkage of a household which affect the household's probability of death and of giving birth to new households.

Dimensions & components of individuality – first thoughts



Dimension of the Individual	Components of individual dimensions		
Members (Parts)	Aging	Aging	Aging
	Non-replaceable	Replaceable	Non-replaceable
	Determinate size	Can grow or shrink	Can grow & shrink
Relationships (Links)	Defining among members	Non-specific	Defining among members
	interdependent	can be loose/modular	interdependent
Functioning	Non-defining	Defining (co-residence & resource sharing)	Non-defining
	Survival relevant	Survival relevant	May affect survival

room for development...

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