The History of Admin Based Statistics in Denmark

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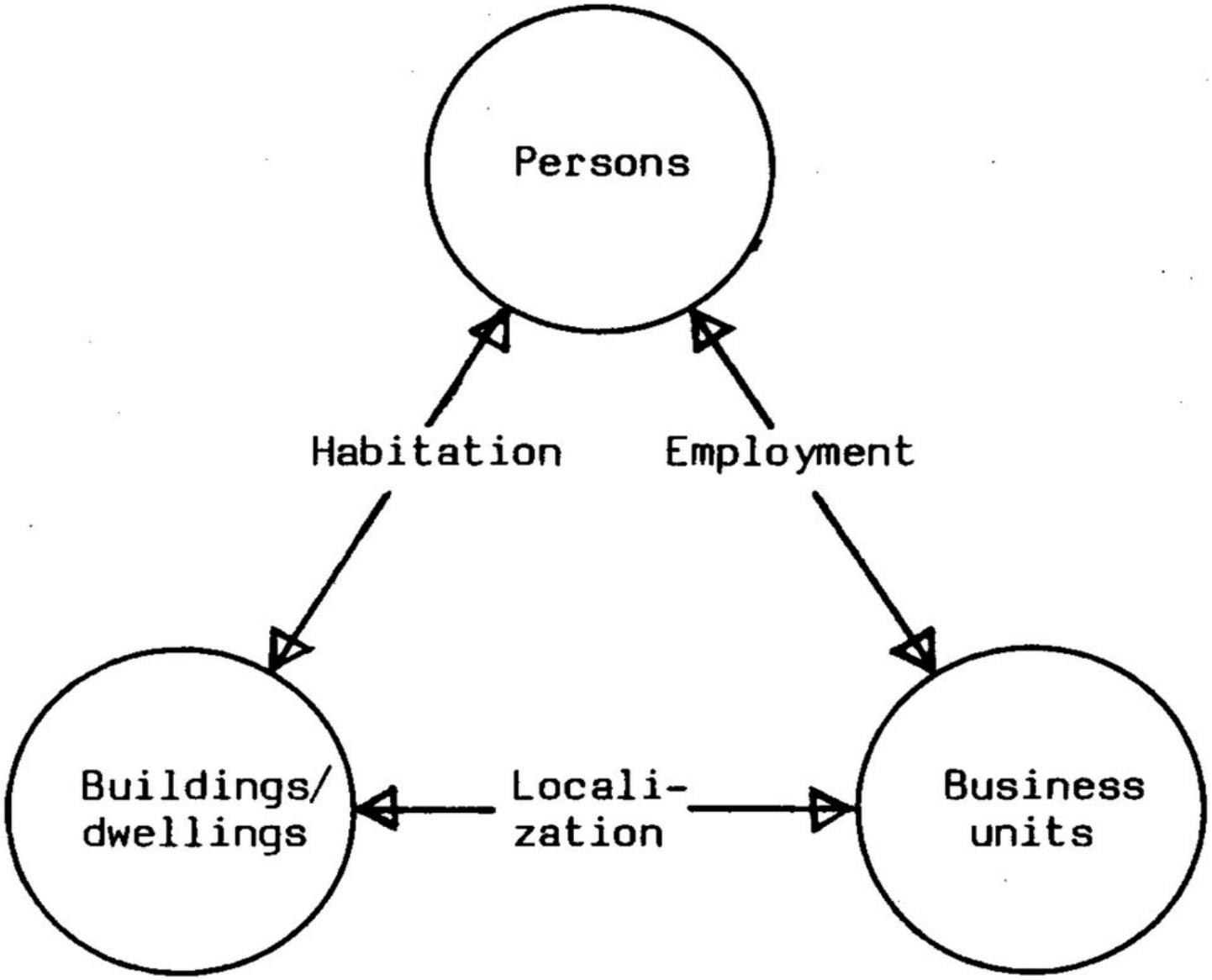


The case of Denmark

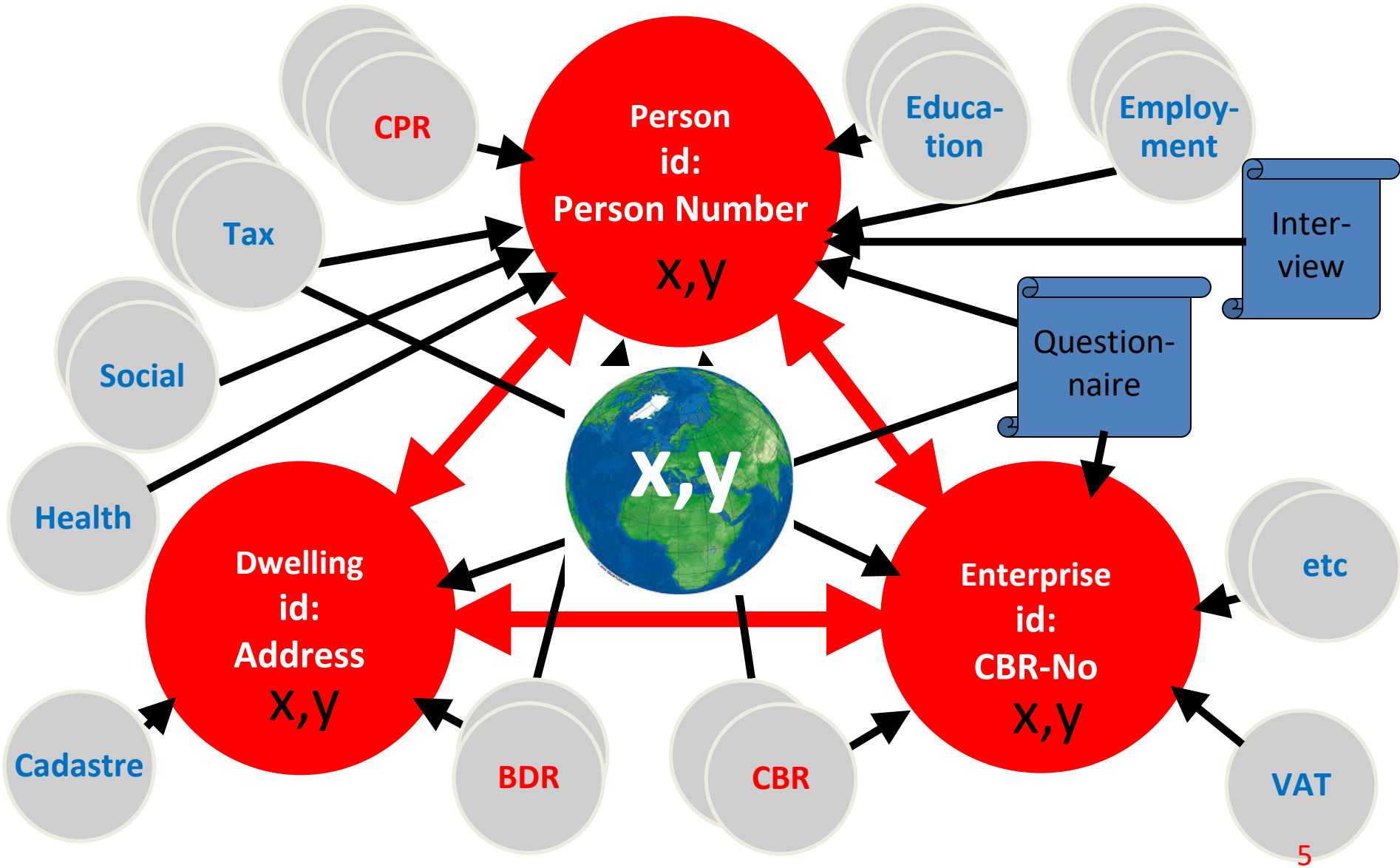
Milestones

1966	The Act on Statistics Denmark
1968	The Central Population Register (CPR) The Person Number (PN)
1970-73	Population and vital statistics based on CPR
1973-75	Education, labour, income
1975	Users: We like the idea!
1976	Register-based population census
1977	Central Register of Buildings and Dwellings
1978-81	Lawsuit: 5 municipalities vs Statistics Denmark
1981	Statistics Denmark wins in Supreme Court
1981	The first Population and Housing Census entirely based on register information

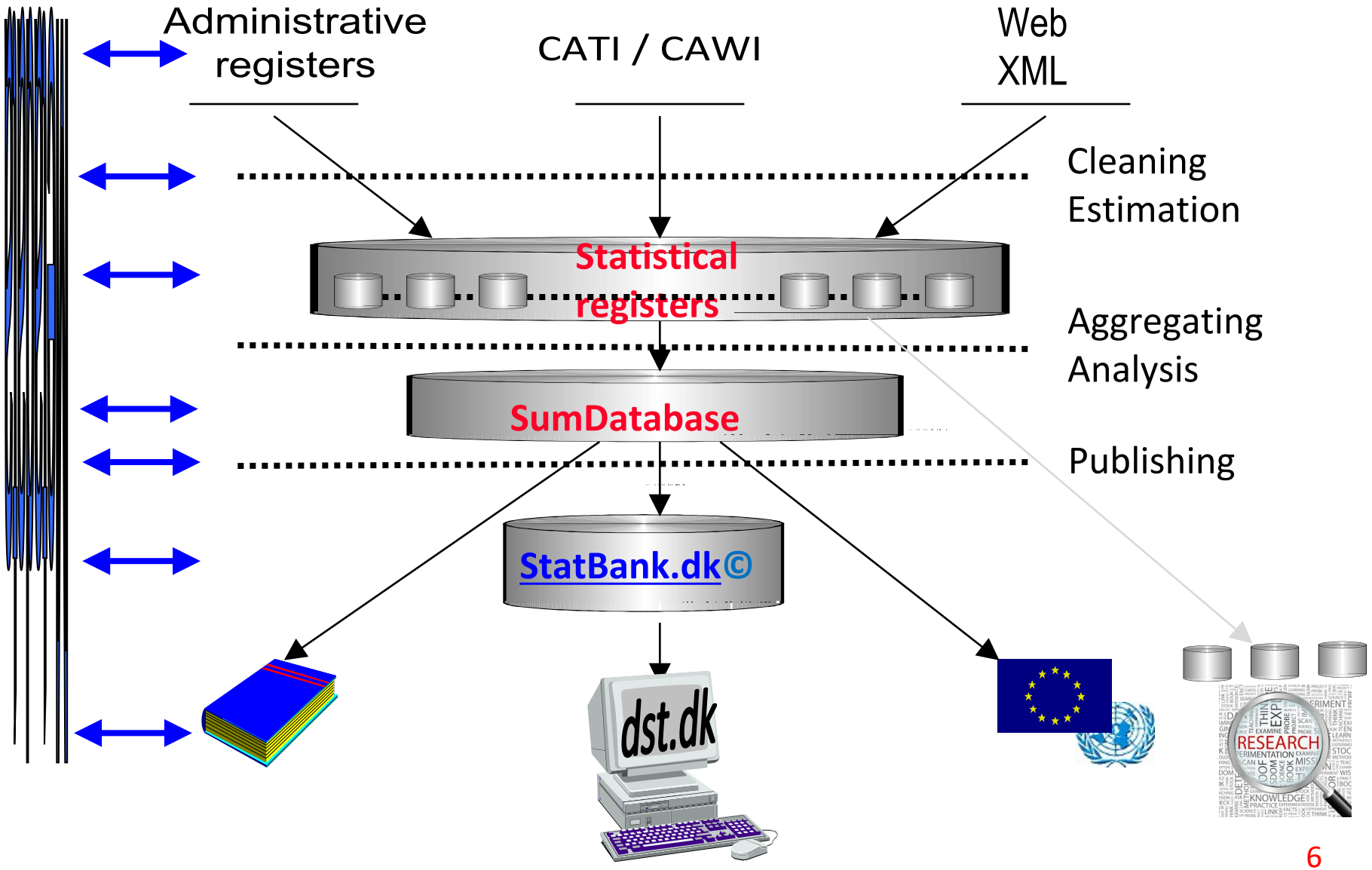
FIG. 1: A simple model



The notion of a Statistical Information System



The filing or archive structure



Cooperation with administrative authorities

- Legal basis – but that is not enough
- Spirit of cooperation
- Knowledge of the content and quality of the admin registers – documentation
- Knowledge about, and influence on changes

Opposition from admin agencies

- National Health Board
  - Death certificates delays
  - ”Only medical doctors can understand data”
- Ministry of labour
  - Unemployment data delays
  - Preferred to publish their own statistics

Difficulties in practical implementation

- Convincing ourselves
  - Champions of traditional statistics
  - University textbooks
  - Strong management commitment needed
- Convincing the rest of the world
  - Suspicion
  - Bad experience history, especially WW2
  - Survey *is* the truth ?
  - International meetings, Eurostat book (1995):

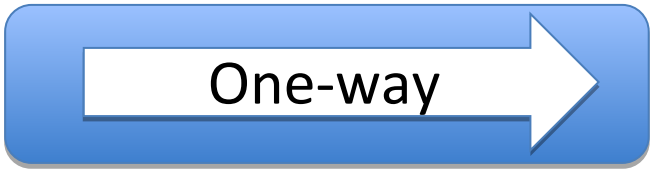
  Statistics on persons in Denmark – A register-based statistical system. Eurostat, Luxembourg 1995

Confidentiality and data protection

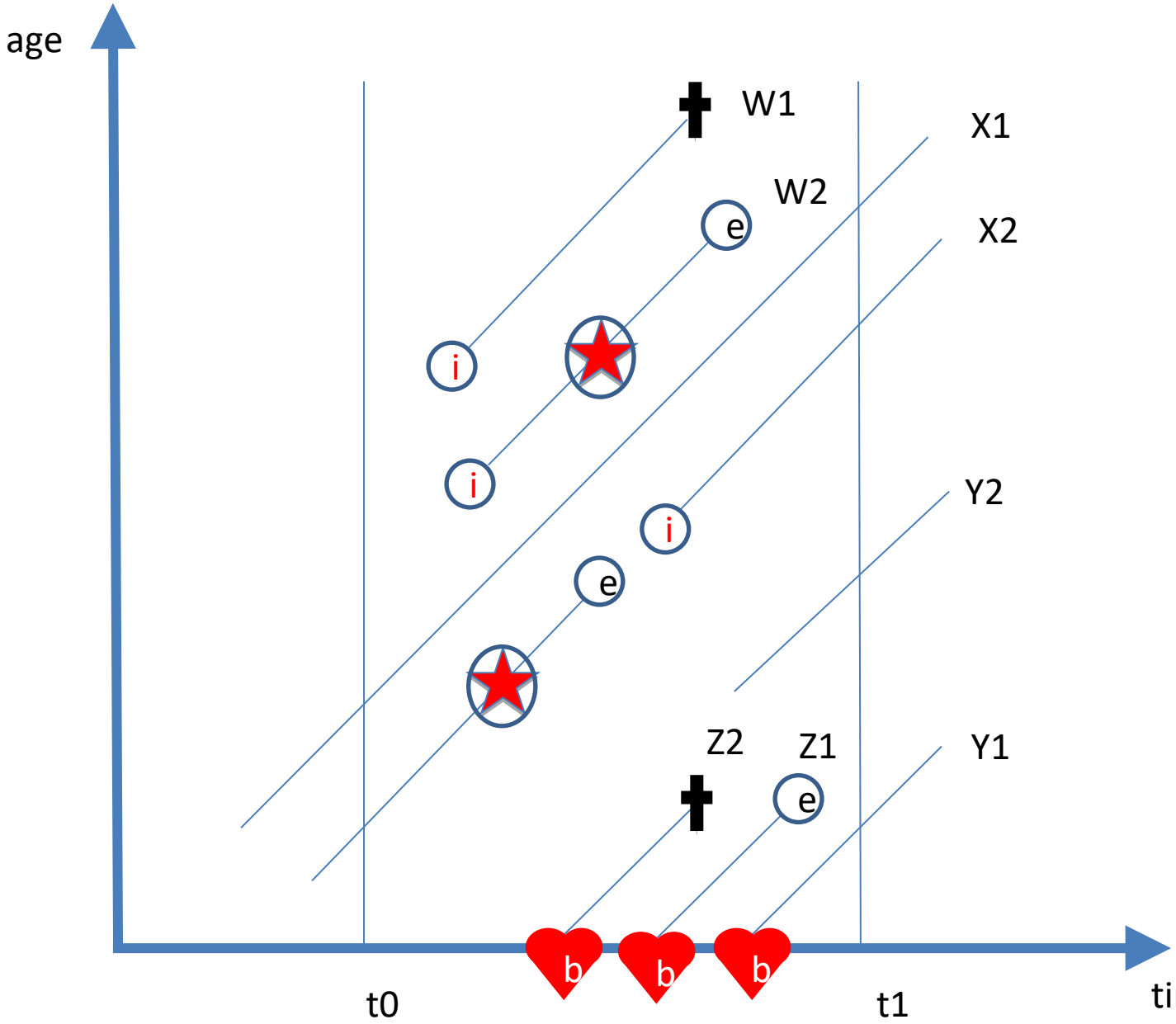
- Challenge: Keep public trust
- Confidentiality and access to data
  - The threat of a “Big Brother” society
  - Powerful public opposition in media
  - ”The Danish Association” claimed: No identifiers!
  - Lawsuit against Statistics Denmark in 1978-81 by five municipalities

The one-way street

- Administrative registers kept for administrations
  - combined across when real need
- Statistics is a ”by-product”
- Do not mix administration with statistics !
- No access to individual data in statistics
  - Not even for the source administrative agency



New research opportunities



Micro data and longitudinal analysis

Elsebeth Lynge:
Occupational mortality 1970-75
Occupational cancer 1970-80

Started with a few pioneers
- Epidemiology, health
- Labor market dynamics

Later:
Researchers' remote access

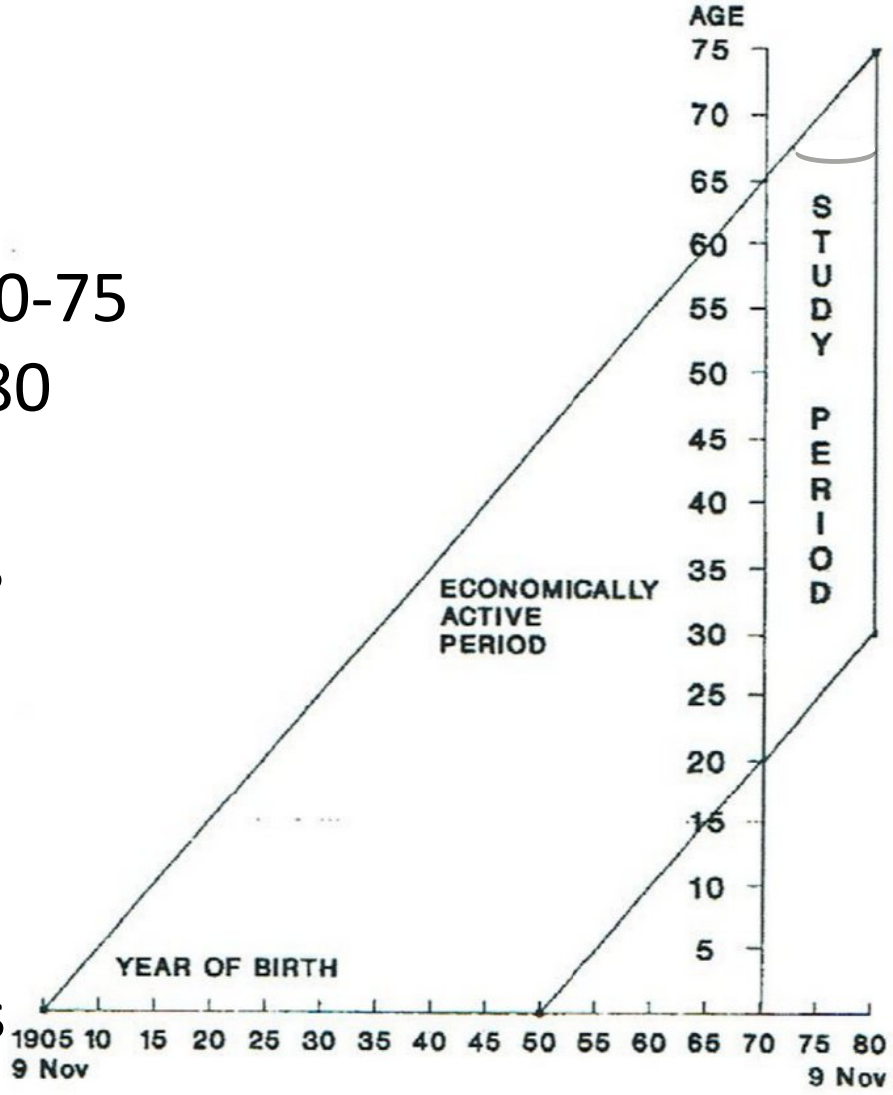


Figure 2. Study population defined by year of birth, economically active period, and study period.

Admin Statistics
+Advantages – Disadvantages

Debet	Credit
It is cheap	Cannot measure attitudes, etc.
It is fast	Survey / Census is the truth?
No response burden	Lack control of concepts
Total population coverage	Coverage problems
Coherence	Risk of data breaks
Without non-response	Confidentiality problems
Data quality may be outstanding	Theory of quality less developed

∑ = Great net gains!


The End!