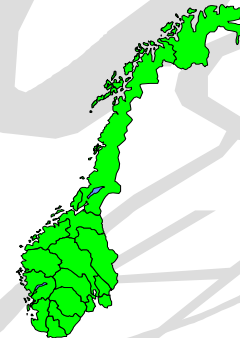
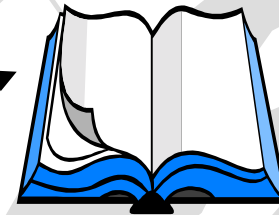
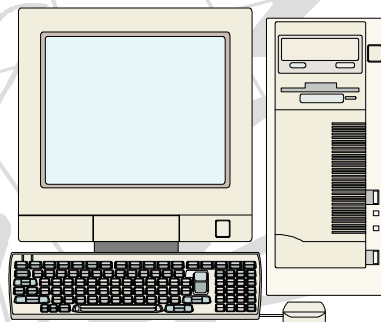
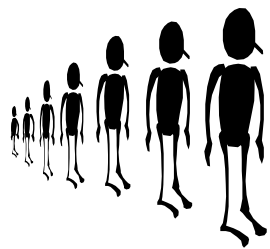


Future Censuses in Norway A Register Based Approach

Harald Utne, Statistics Norway

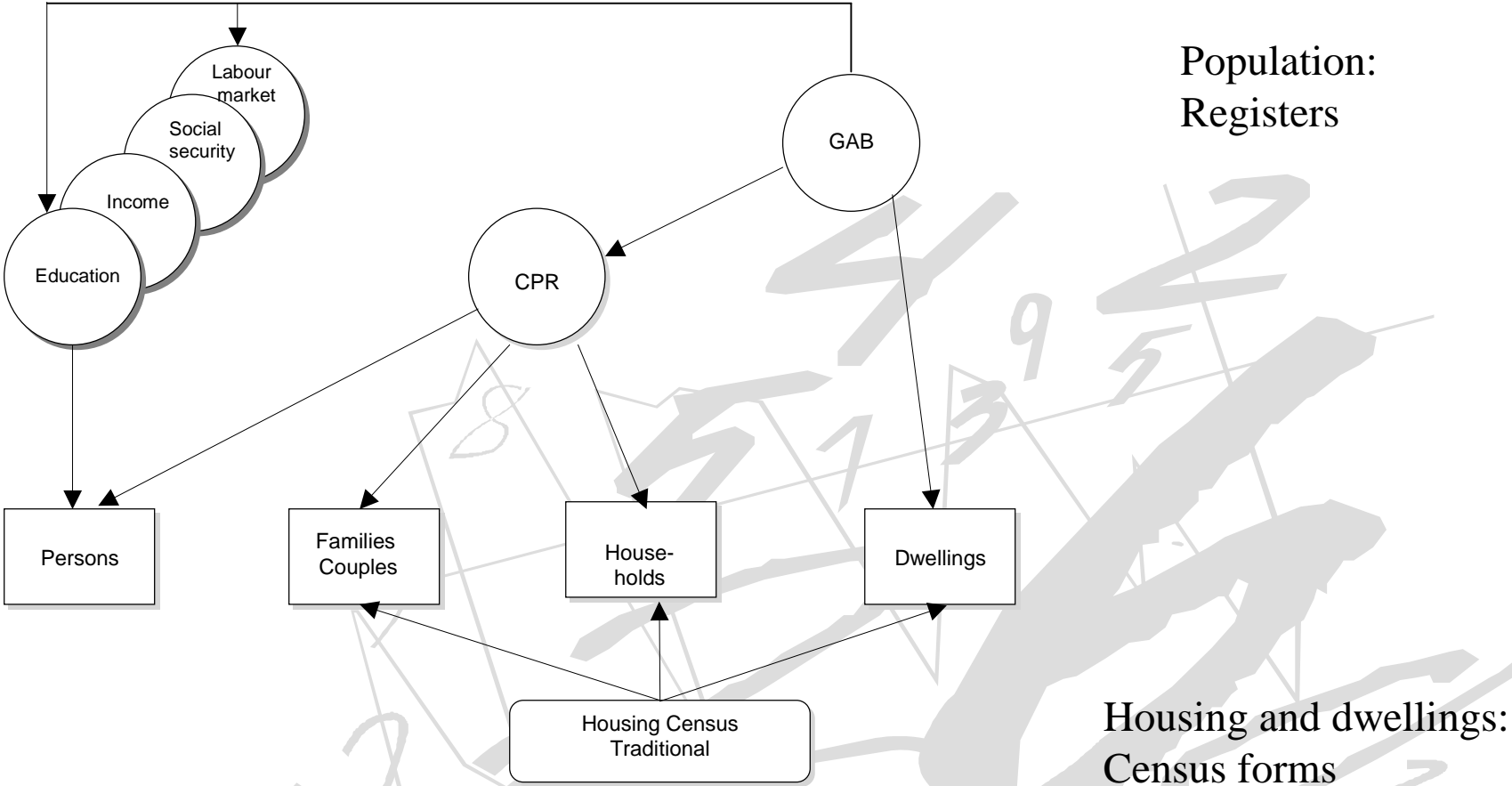


Statistisk sentralbyrå
Statistics Norway

Use of registers in Norwegian censuses

- ◆ 1960 Last fully traditional census
- ◆ 1964 Central Population Register
 - ✓ Unique PIN
- ◆ 1970 and 1980 Increased use of registers
- ◆ 1990 Register data on demography, education, income, geographical characteristics
 - ✓ Questionnaires for data on labour market, housing, dwellings
 - ✓ Sample survey

Census 2001 Data collection



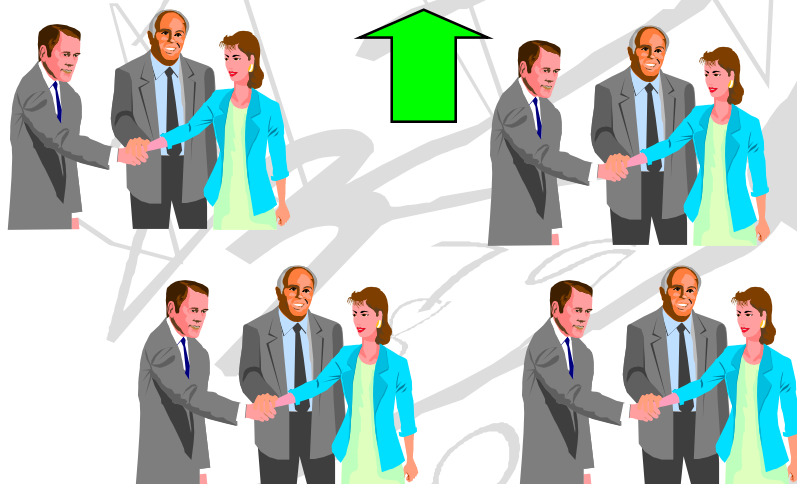
Two major goals for Census 2001

- ◆ Produce Census statistics for 2001
- ◆ Establish a basis for future register-based censuses
 - ✓ The Dwelling Address Project

Situation prior to the Dwelling Address Project

Multi-dwelling buildings

Main street 8 A



The Dwelling Address Project

◆ Major goals

- ✓ Extend the GAB-register to comprise dwellings
- ✓ Establish a link between dwellings and persons
 - **The “missing link”**

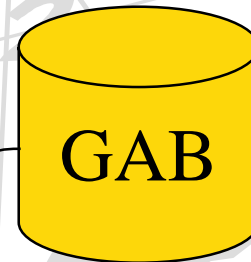
◆ Participants

- ✓ Statistics Norway (Census 2001)
- ✓ Tax Inspectorate (CPR)
- ✓ Norwegian Mapping Authorities (GAB)
 - Municipalities (local authorities)

Activity 1: Co-ordinate existing addresses in GAB-register and CPR

Personal address

Dwelling address



Inconsistency between addresses in GAB and CPR
1998: 4,5 %
End of 2000: 0,5 %

Activity 2: Identify dwellings and report new addresses to GAB



Responsible: Norwegian Mapping Authority and the municipalities
Finished: 1 May 2001, some municipalities much later

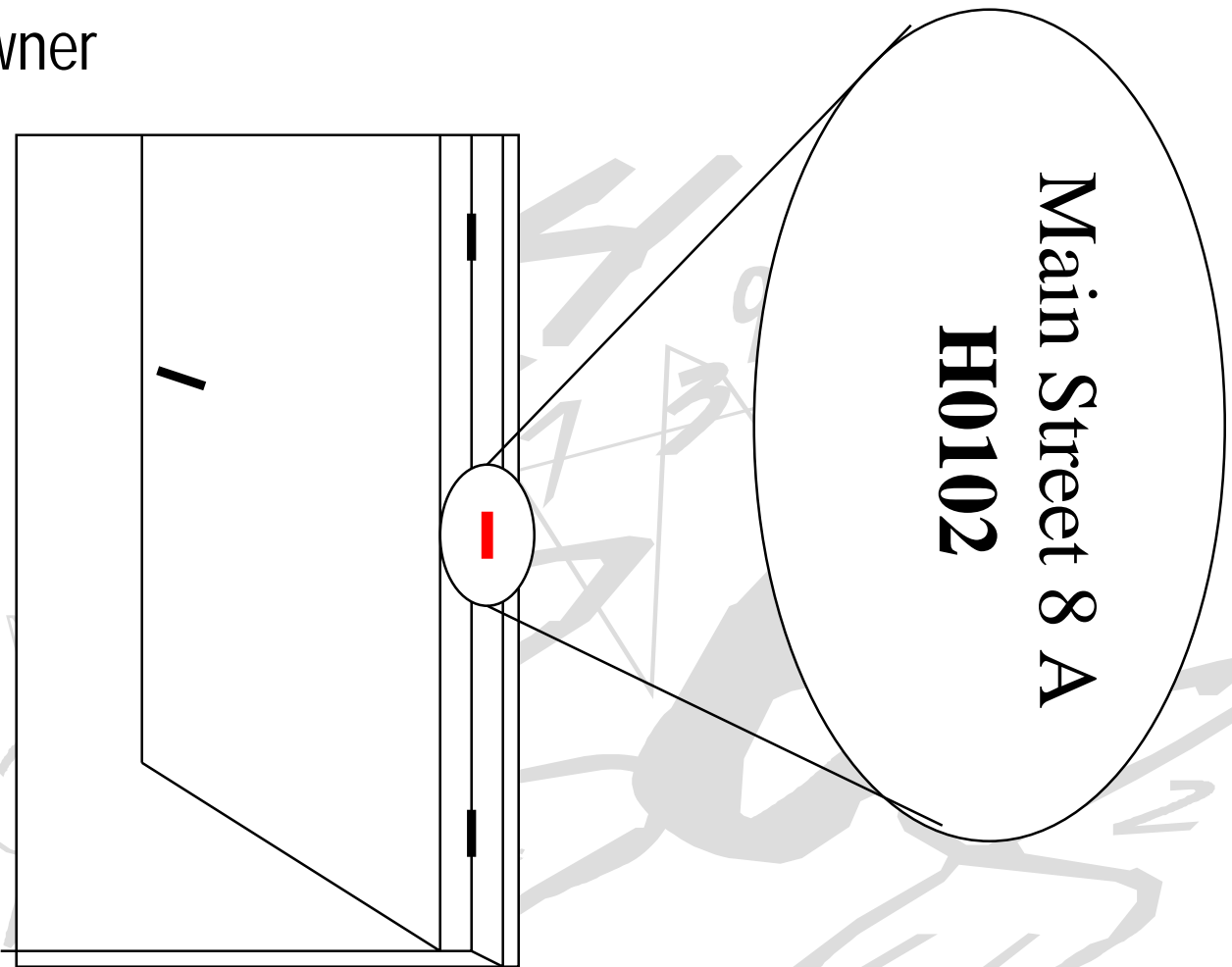


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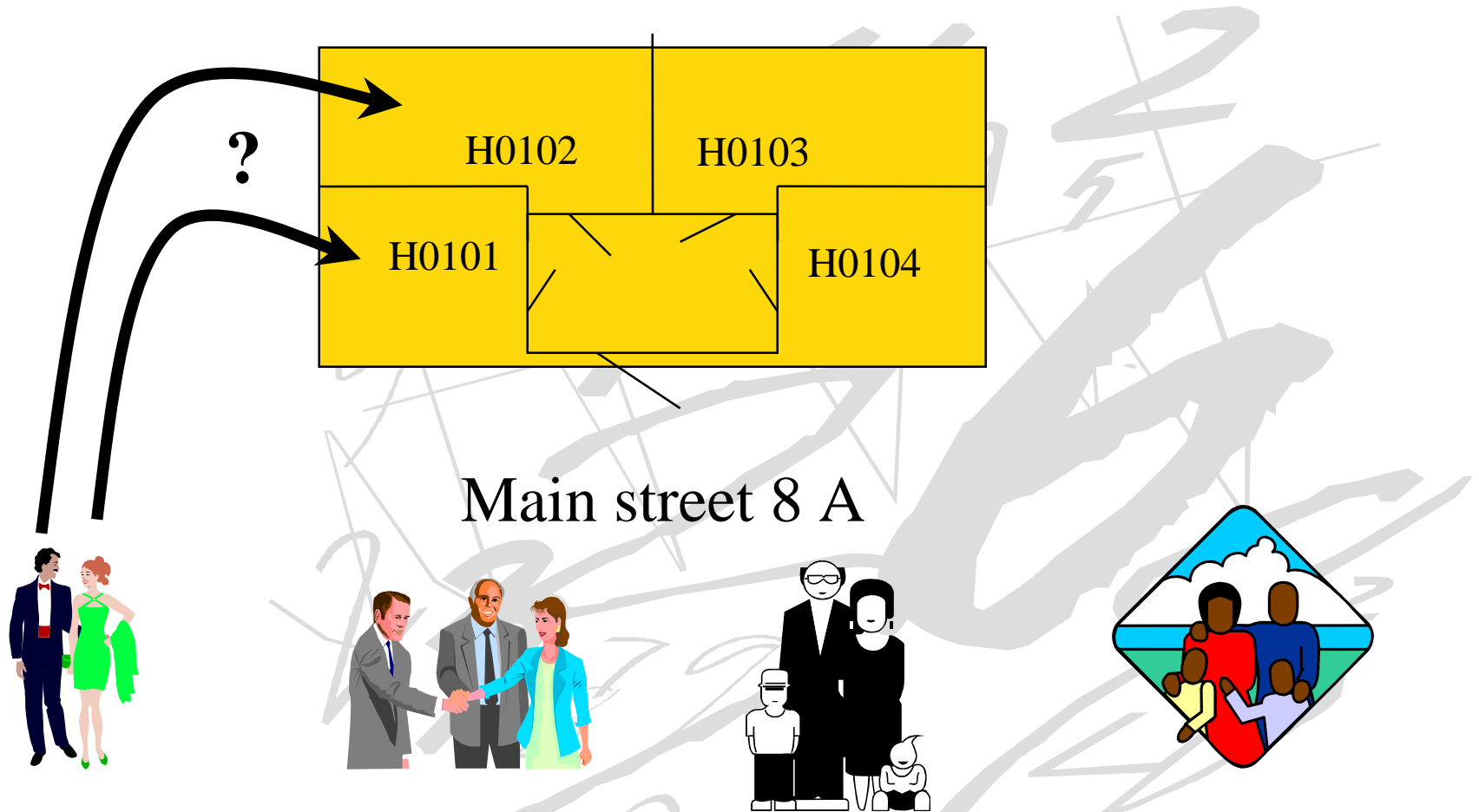
Activity 3: Labelling the dwellings

Responsible: Owner

October 2001

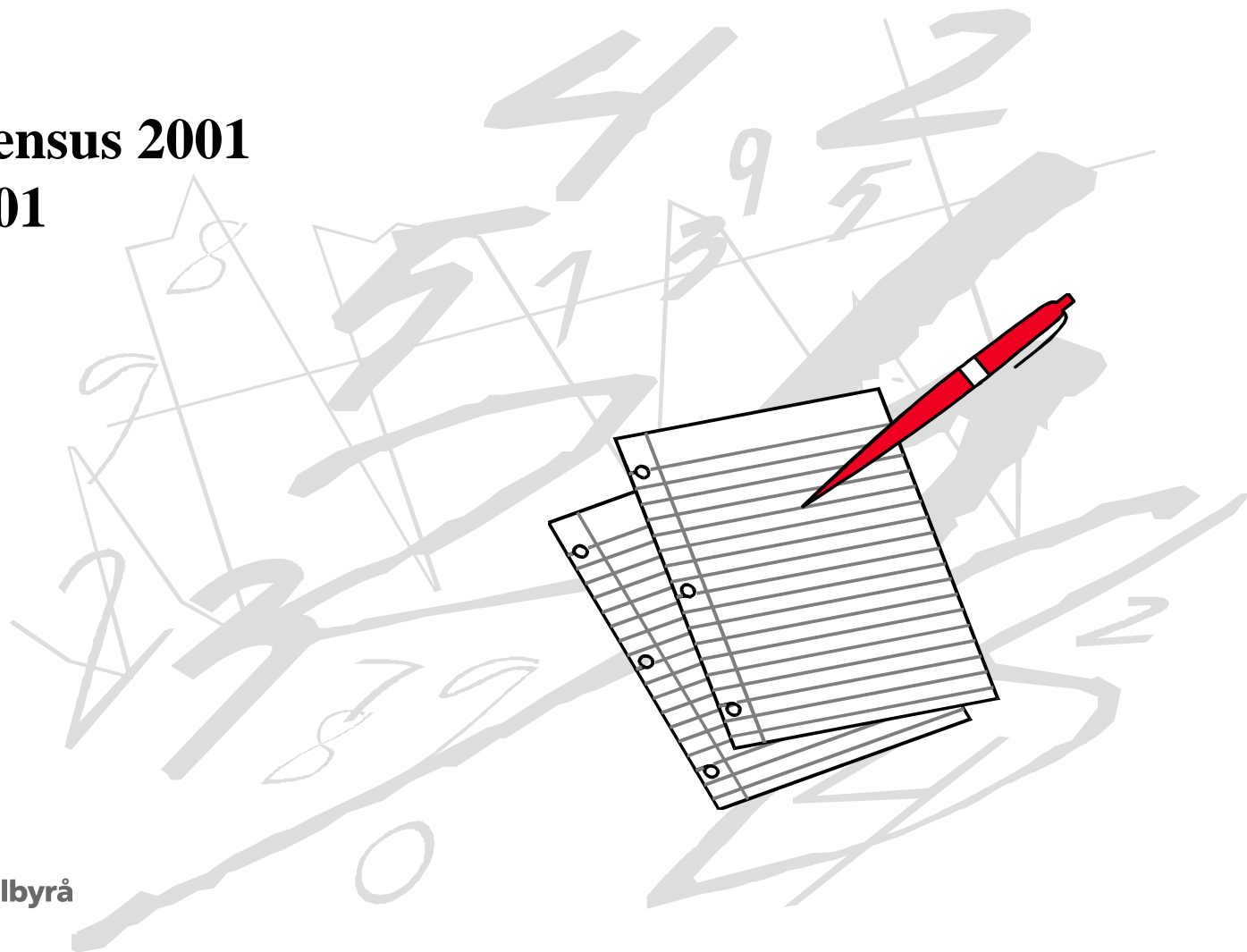


Multi-dwelling buildings after activity 1 - 3

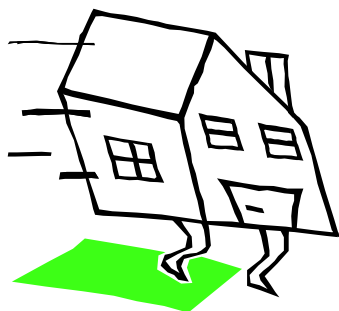


Activity 4: Establish a link between dwelling and persons
Activity 5: Collect information on dwellings for updating GAB-register

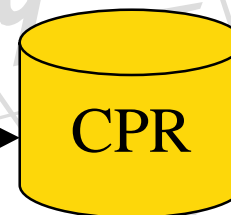
Responsible: Census 2001
3 November 2001



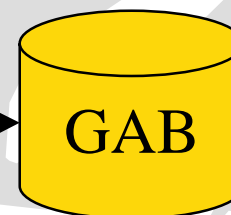
Activity 6: Updating the register systems after Census 2001



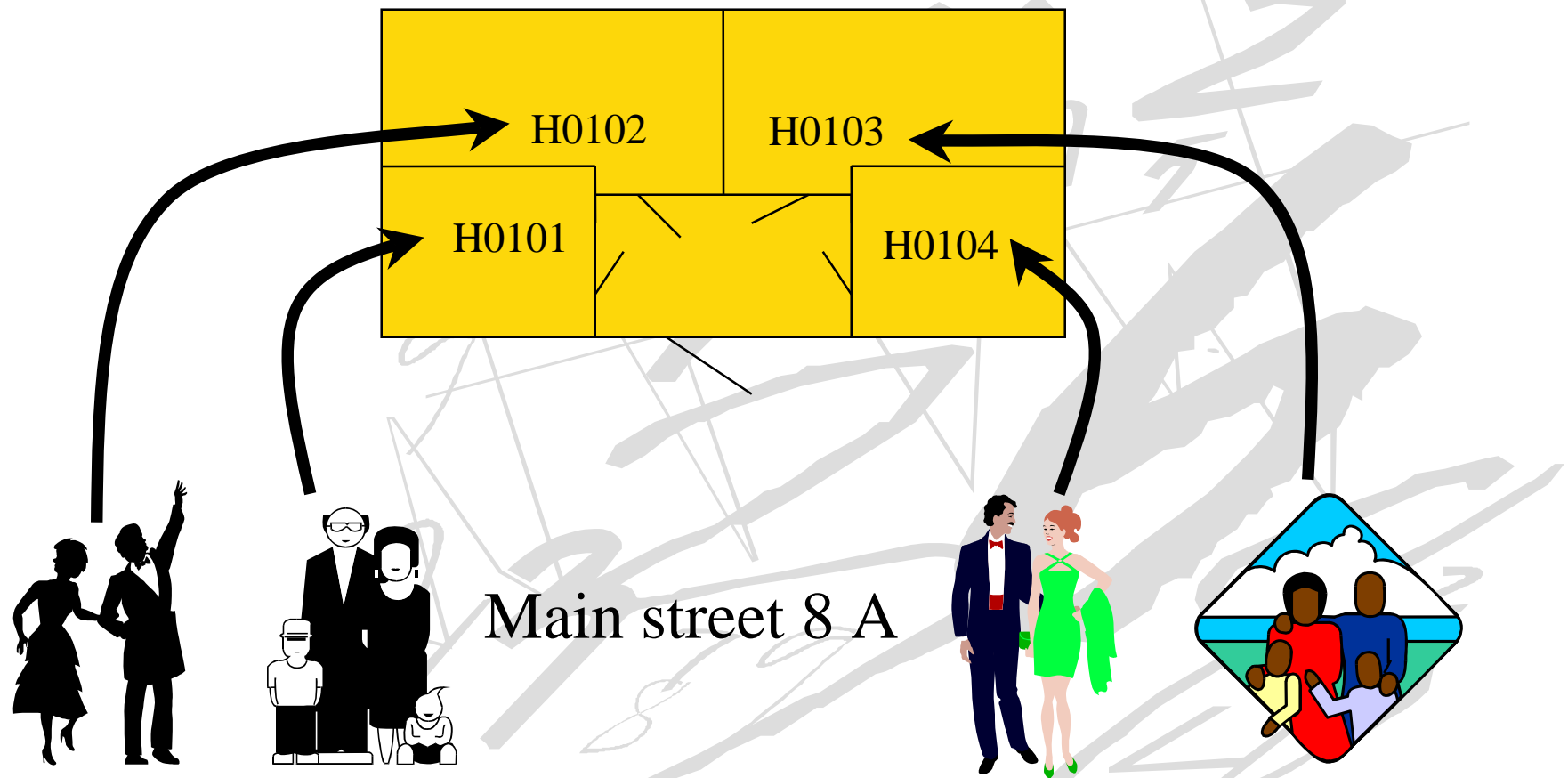
Removal declarations



Building licenses for
new buildings and
changes in construction

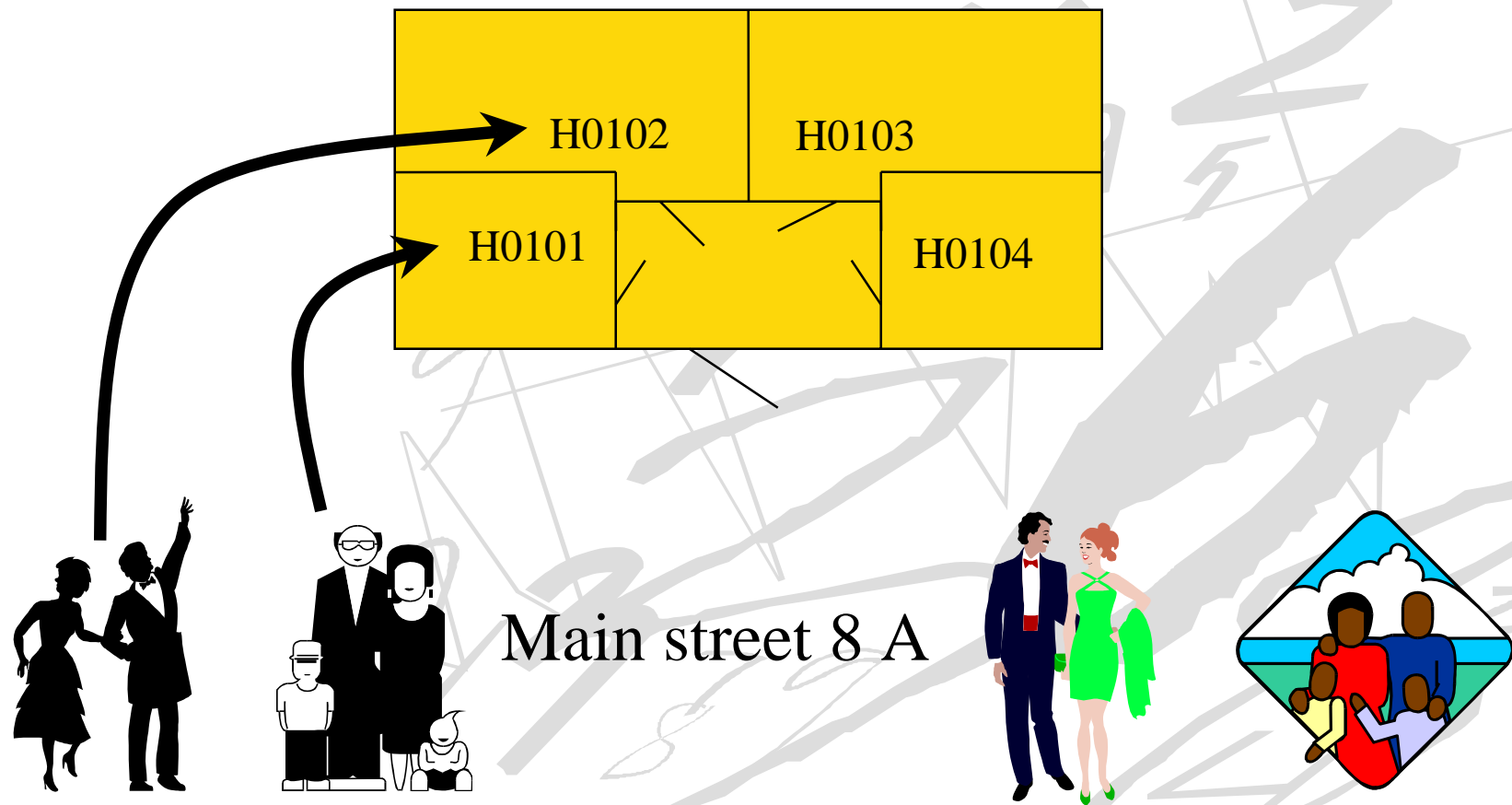


Multi-dwelling buildings after Census 2001, planned



Multi-dwelling buildings after Census 2001, result

55 % of all persons linked to a unique dwelling address



Census 2001: Non-response

- ◆ Total response rate: 93 %
- ◆ High item non-response for question on dwelling number
 - ✓ 55 % of all persons in multi-dwelling buildings linked to a unique address
 - High non-response in Oslo
- ◆ Reasons
 - ✓ Not all dwellings identified correctly (local authorities)
 - Errors reported by households could not be corrected before census
 - ✓ Not all dwelling labelled in time (owners)
 - ✓ Dwelling number not reported on census form even if available (households)
- ◆ Time schedule too tight

Situation by the end of 2002

- ◆ Coverage for dwelling numbers: 65 %
 - ✓ Updating by information from removal declarations
- ◆ Still 450 000 persons lacking a dwelling number
- ◆ Not satisfactory
- ◆ Decision: Dwelling Address Project prolonged to 2003



New project: Updating of dwelling numbers in CPR

Activities:

- ◆ New project for identifying and labelling dwellings, mainly in Oslo
- ◆ Additional survey to collect addresses for persons lacking dwelling number
 - ✓ February 2003: Forms for 130 000 families
 - ✓ November 2003: Forms for 110 000 families – mainly in Oslo
 - ✓ "Small scale census"
- ◆ Substantial extension of the Dwelling Address Project:
Absolutely necessary to conduct register-based census in the future

Preparing for next Census

Population Census

- ◆ Register-based in 2001, most variables already available
- ◆ Improvement for some variables (occupation, education taken abroad)

Housing Census

- ◆ Complete the Dwelling Address Project, incl. updating of registers
 - ✓ Unique dwelling address for all persons
- ◆ Improve data on families
 - ✓ No register data on cohabitants
 - ✓ System for classification based on family relations, gender and age
 - ✓ Using experiences from the other (Nordic) countries
- ◆ Establish a new system for updating and processing of data on households and housing
- ◆ Quality monitoring

A register based approach – the producer's point of view

- ◆ Reducing costs
- ◆ Reducing response burden

A register based approach – the users' point of view

- + Census and annual statistics directly comparable
 - ✓ Same data sources
- + Census type of statistics may be produced currently
- Only variables available from registers included in Census
 - Variables not included in 2001, will be included next census
 - Occupation
 - Variables only partly included in future censuses
 - Type of living quarters
 - Variables not included in future censuses
 - Non-core topics; Ethnic group, State of repair of building

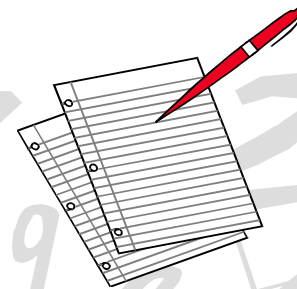
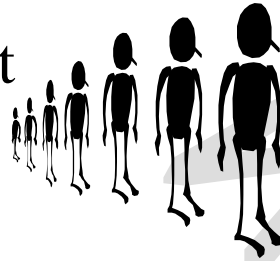
In general: Users accept the register-based approach

A register based approach – quality aspects

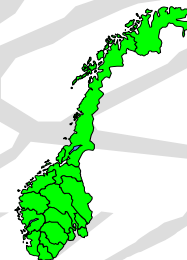
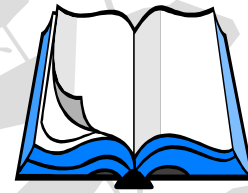
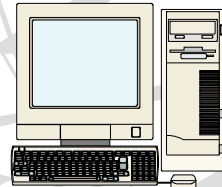
- No census data available for quality control of register data
Coverage and quality of variables
- + Quality measures for register-based statistics developed
Compare with data from sample surveys

Will there be censuses in the future in Norway?

NO: The population will not take part in census taking



YES: Census statistics will be published



The role of censuses in the future?

- ◆ Mainly dissemination?
 - Publish coherent statistics for small areas
- ◆ Tool for integration of statistics from different sources?

