

FRAD: the bright new future? Part 2

- Helsinki 29.11.2007
- Eeva Murtomaa
- National Library of Finland

Functional Requirements for Authority Data, FRAD

- FRBR ... "the need to extend the model ... to cover authority data"
- IFLA Working Group on Functional Requirements and Numbering of Authority Records, FRANAR was established in 1998
- world-wide review in 2005 and 2007

FRAD, Functional Requirements for Authority Records

Number to identify entities (ISADNs – International Standard Authority Data Numbers) / prepared for the IFLA Working Group on Functional Requirements and Numbering of Authority Records by Barbara B. Tillett ; edited by Glenn E. Patton

ISO TC 46/SC 9
ISNI, International Standard Name Identifier

Members of the IFLA Working Group on Functional Requirements and Numbering of Authority Records

Francoise Bourdon, France

Christina Hengel-Dittrich, Germany

Olga Lavrenova, Russia

Andrew MacEwan, UK

Eeva Murtomaa, Finland

Glenn Patton, chair, USA

Henry Snyder, USA

Barbara Tillett, USA

Hartmut Walravens, Germany

Mirna Willer, Croatia

Consultant

Tom Delsey, Canada

conceptual model is designed

- to analyse functional requirements of authority data that is required to support authority control
- to provide a frame of reference for relating the data that are recorded in authority records to the needs of the users of those records
- to assist international sharing and use of authority data both within the library sector and beyond

who are the users?

- the users of the authority data include both
- the authority data creators
- the end users
- who use the authority information either through direct access to authority files
- or
- indirectly through the controlled access points and reference structures in library catalogues, national bibliographies, etc.

user tasks

FRBR

to find

to identify

to select an entity

to obtain access

to the entity described

.

FRAD

to find

to identify

to contextualize

to justify

USER TASKS

to find an entity or set of entities corresponding to the user's stated search criteria

to identify an entity i.e. to confirm that the entity represented corresponds to the entity sought, and to distinguish between two or more entities with similar characters

to contextualize: to place a person, corporate body, work etc. in context and to clarify different kind of relationships between those entities

justify: document the reason for choosing the name or form of name

e.g. TO FIND an entity PERSON

attributes

“Known by” relationship $\bar{\circ}$ name

and

“Assigned” relationship $\bar{\circ}$ identifier

relationships

Dates of person

Title of person

Other designation associated with the person

Real name relationship $\bar{\circ}$ name*

Pseudonym relationship $\bar{\circ}$ name*

Secular name relationship $\bar{\circ}$ name

Name in religion relationship $\bar{\circ}$ name*

Earlier name relationship $\bar{\circ}$ name*

Later name relationship $\bar{\circ}$ name*

Alternative linguistic form relationship $\bar{\circ}$ name*

Other variant name relationship $\bar{\circ}$ name*

e.g. TO CONTEXTUALIZE an entity
FAMILY

attributes

relationships

Places associated with family

History of family

Genealogical relationship $\bar{\circ}$ family

Alternative linguistic form relationship $\bar{\circ}$ name

entity-relationship methodology

- the first step is to identify **the entities**, that are of interest to the users
- to identify **the relationships** between those entities
- to identify **the attributes** of each entity
- at a more detailed level also
- to depict the relationships that may exist between instances of entities

entities

- work, expression, manifestation, item
- concept, object, event, place

- **person, family, corporate body**
- **name**
- **identifier**
- **controlled access point (constructed name)**
- **rules**
- **agency**

entity

- key object of interest to the user e.g.
- Astrid Lindgren

search: Astrid Lindgren

- **Astrid Lindgren Memorial Award**
- **Hej Astrid!**
- 21.08.2007 Lese- und Ausstellungsprojekt zum 100. Geburtstag von **Astrid Lindgren**
- Event at **Astrid Lindgren Elementary School**
September 8, 2005
- **Astrid Lindgren Association** which is an organization in operation to have **The Astrid Lindgren Club.**

search: Astrid Lindgren



Astrid Lindgren



Astrid Lindgren



entity

relationship

relationship



entity

name entity
Astrid Lindgren



bibliographic entities

known by

names and/ or identifiers

Ericsson, Anna

Lin'gedeng, Aosirui

Lin'gelun, Asitelide

Limdgren, Astrid

...

ID-number 999 999 999 999-7

controlled access points

Lindgren, Astrid, 1907-2002

basis for

ENTITY-RELATIONSHIP DIAGRAM'

fundamental basis for the conceptual model

Lindgren, Astrida, 1907-2002

Lindgr̄ ene, Astrida,|1907-2002

Lindgrenová, Astrid, 1907-2002

Lindgrena, Astrida, 1907-2002

Lindgrene, Astrida, 1907-2002

Lindjrin, Astrid, 1907-2002

Lindgrin, Astrid, 1907-2002

Lingran, Ästrid, 1907-2002

attributes:

14.11.1907

28.1-2002

author

female

Vimmerby

Stockholm

Sweden

Swedish

Children's literature

Right Livelihood Award 1994

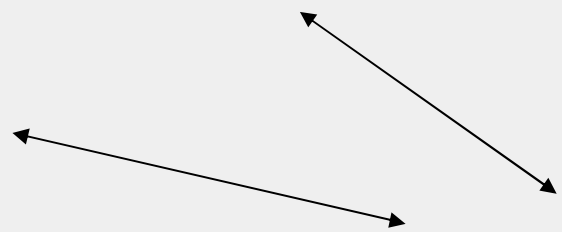
H.C.Andersen Award

1907-2002

1907-2002

1907-2002

NAME AUTHORITY FILE
Lindgren, Astrid



•relationships between an entity and specific instances of the "name" by which that entity is known

an **authority record** is defined as the aggregate of information about an instance of an entity whose name is used as a controlled access point for bibliographic records in a library catalogue or bibliographic file

Lindgren, Astrida, 1907-2002

Lindgr̄ ene, Astrida,|1907-2002

Lindgrenová, Astrid, 1907-2002

Lindgrena, Astrida, 1907-2002

Lindgrene, Astrida, 1907-2002

Lindjrin, Astrid, 1907-2002

Lindgrin, Astrid, 1907-2002

Lingran, Ästrid, 1907-2002

Lindgirin, Astrid, 1907-2002

Lindgran, Astrid, 1907-2002

Lindjrin, Astrid, 1907-2002

Lindgrin, Astrid, 1907-2002

Rindoguren, Asutoriddo, 1907-

Lingelun, Asitelide, 1907-2002

Rinduguren, Asut'uridu

NAME AUTHORITY FILE

Lindgren, Astrid, 1907-2002



management of the identification of the entity,

which is known by one or several names, name variations, name forms etc.

As a result users are able to get at the same time the aggregate of names or name forms related to the entity and identify the entity

Lindgren, Astrid, 1907-2002

Relationships

e.g.

earlier name

Ericsson, Astrid

variant name

Ericsson, Anna

later name

Lindgren, Astrid

variant names and alternative linguistic forms

Lindgren, Astrid (Anna Emilia)

Lin'gedeng, Aosirui

Lin'gelun, Asitelide

Limdgren, Astrid

Rindüğüren, Asüt'üridü

Authority record:

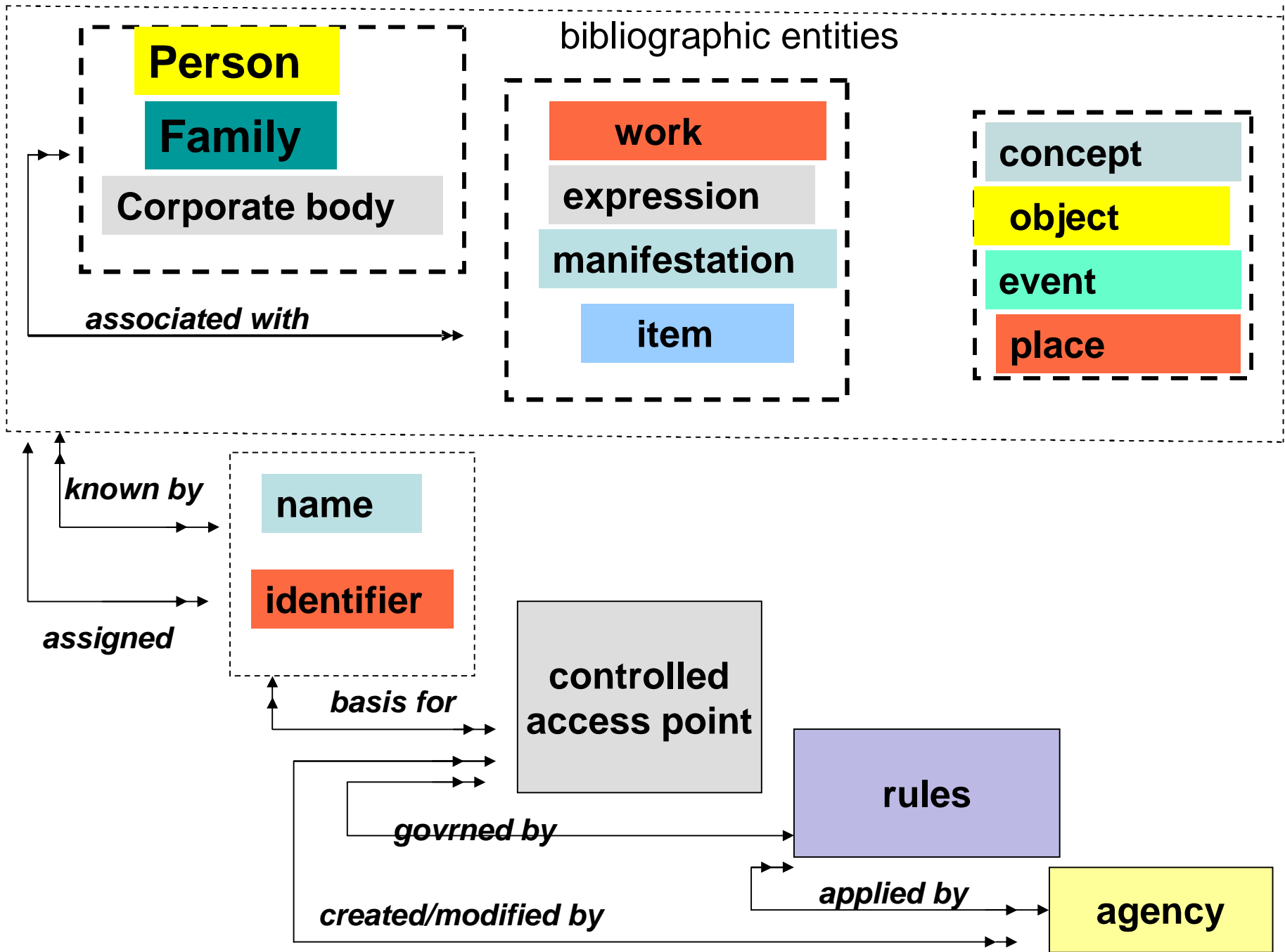
authorized form of name for the entity as the preferred form

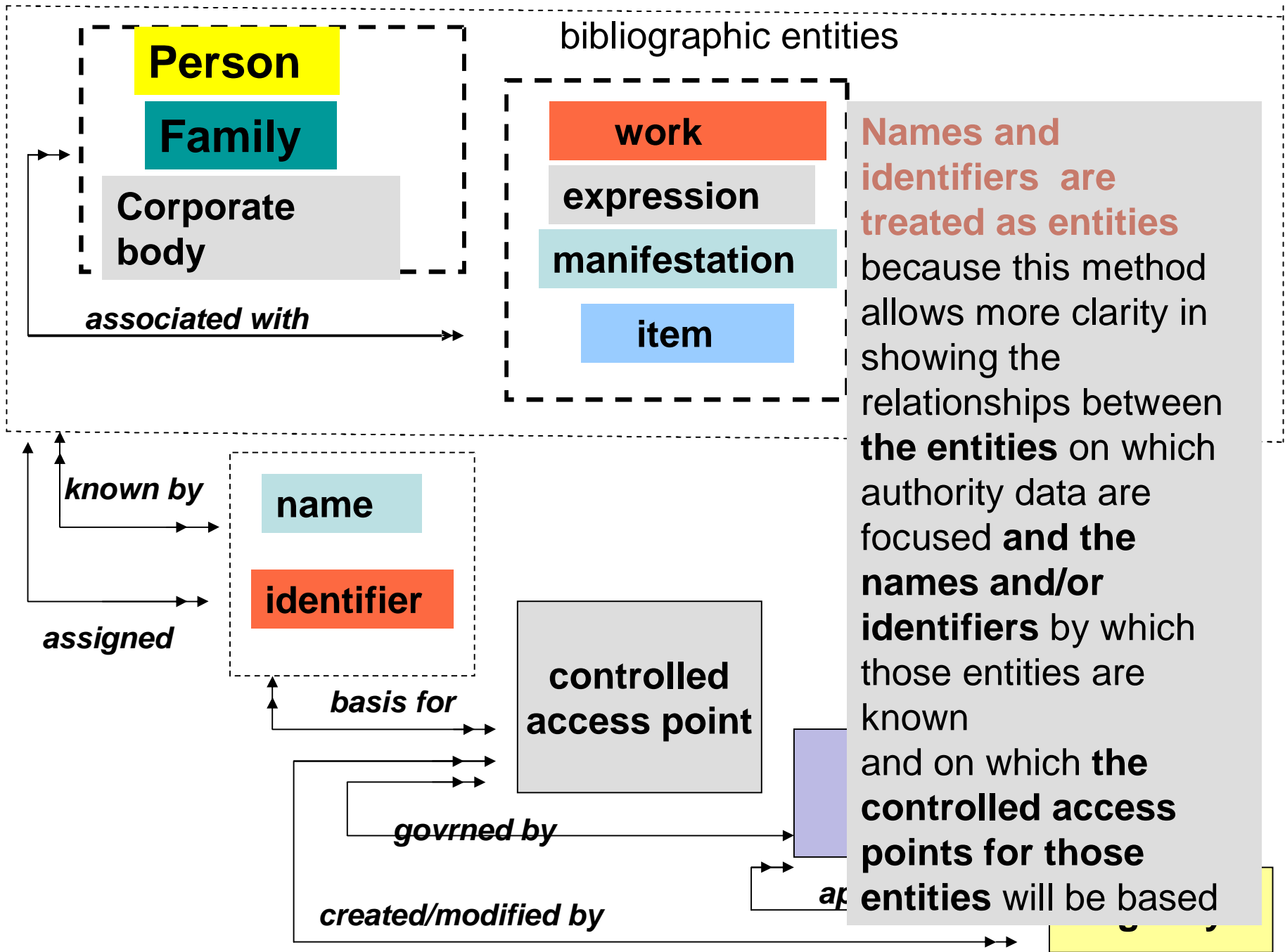
variant forms of name and related names

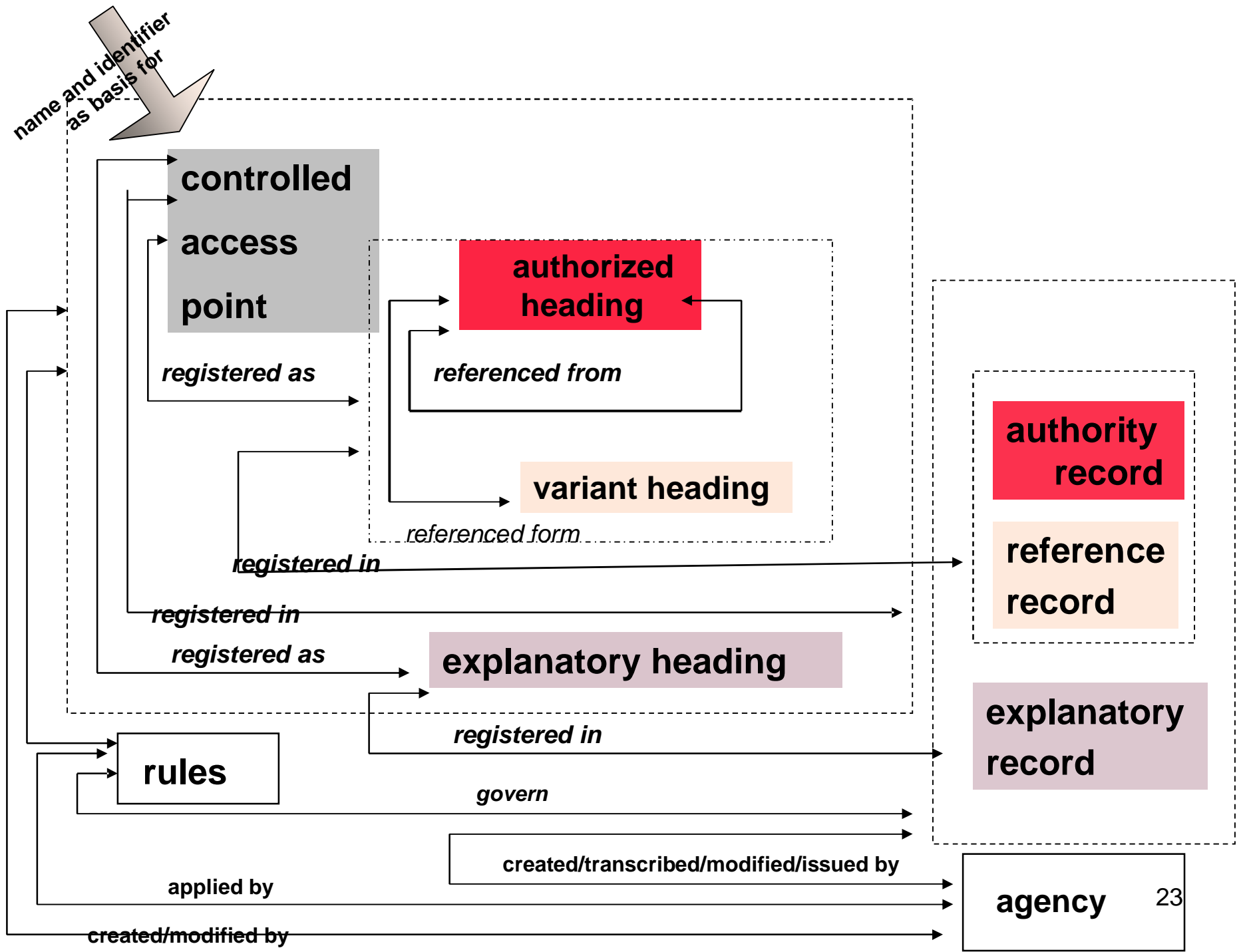
also used

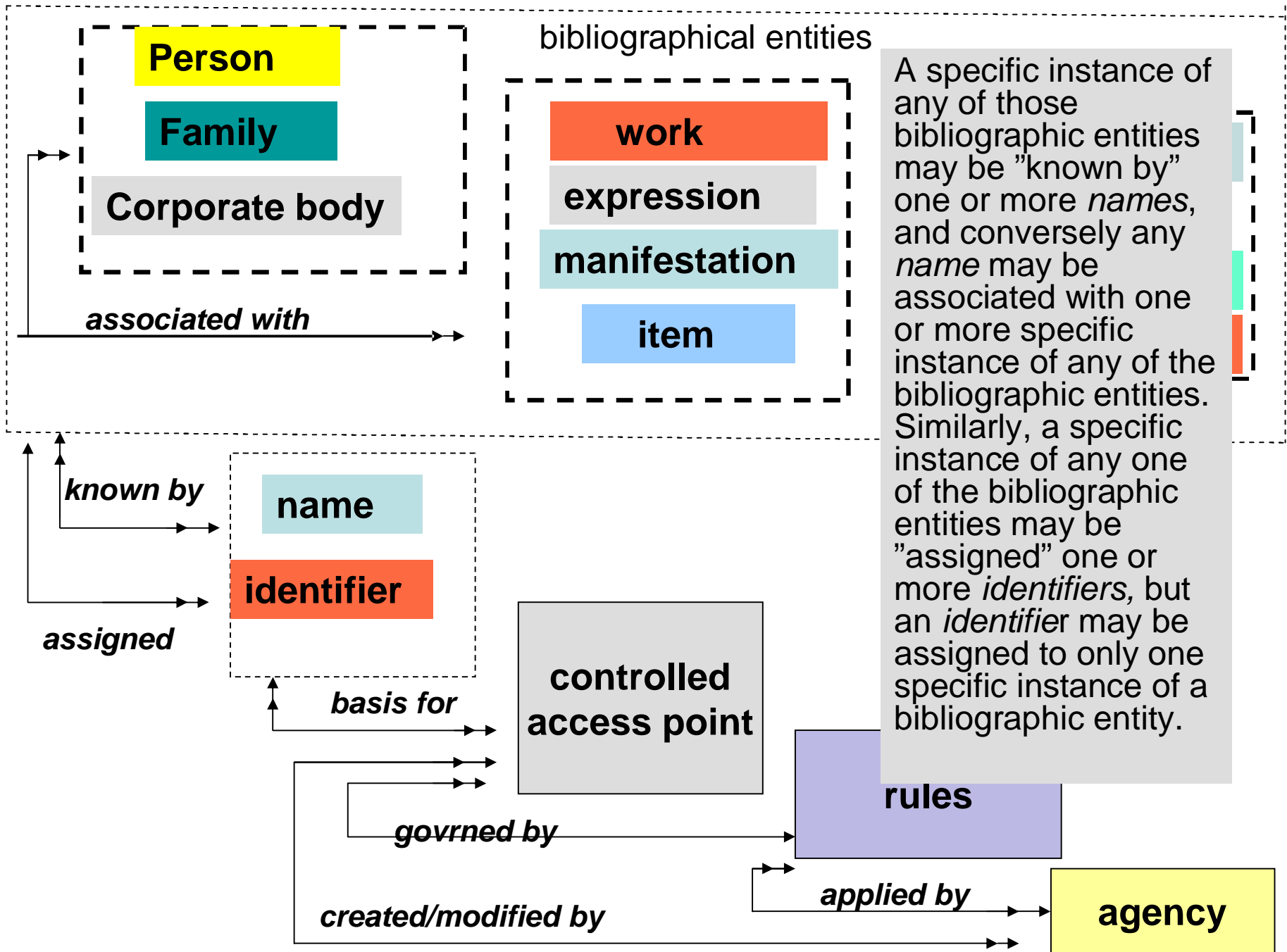
as controlled access points





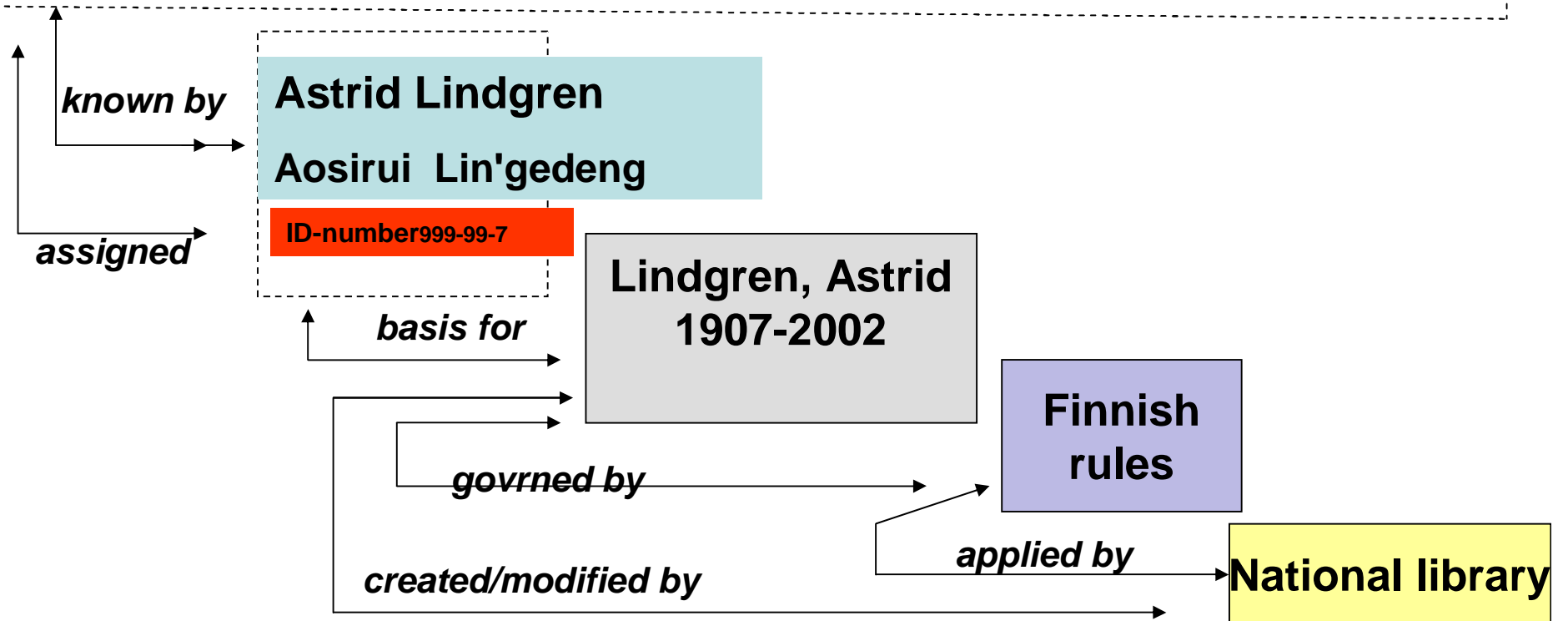
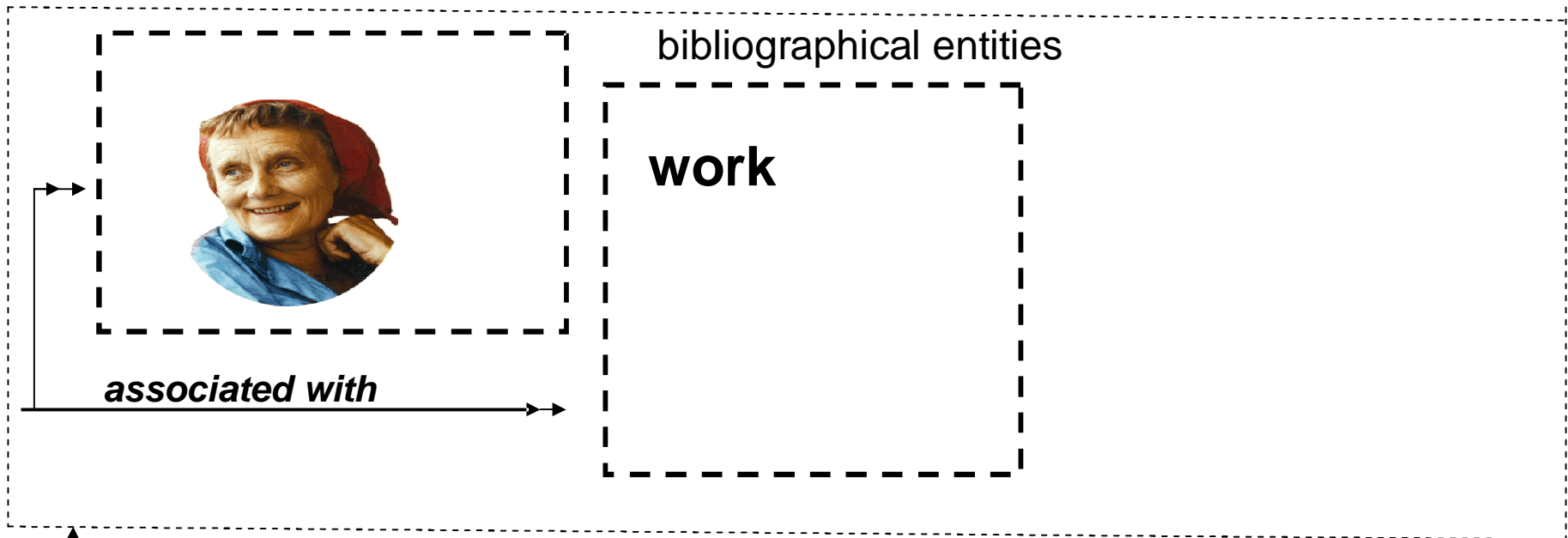


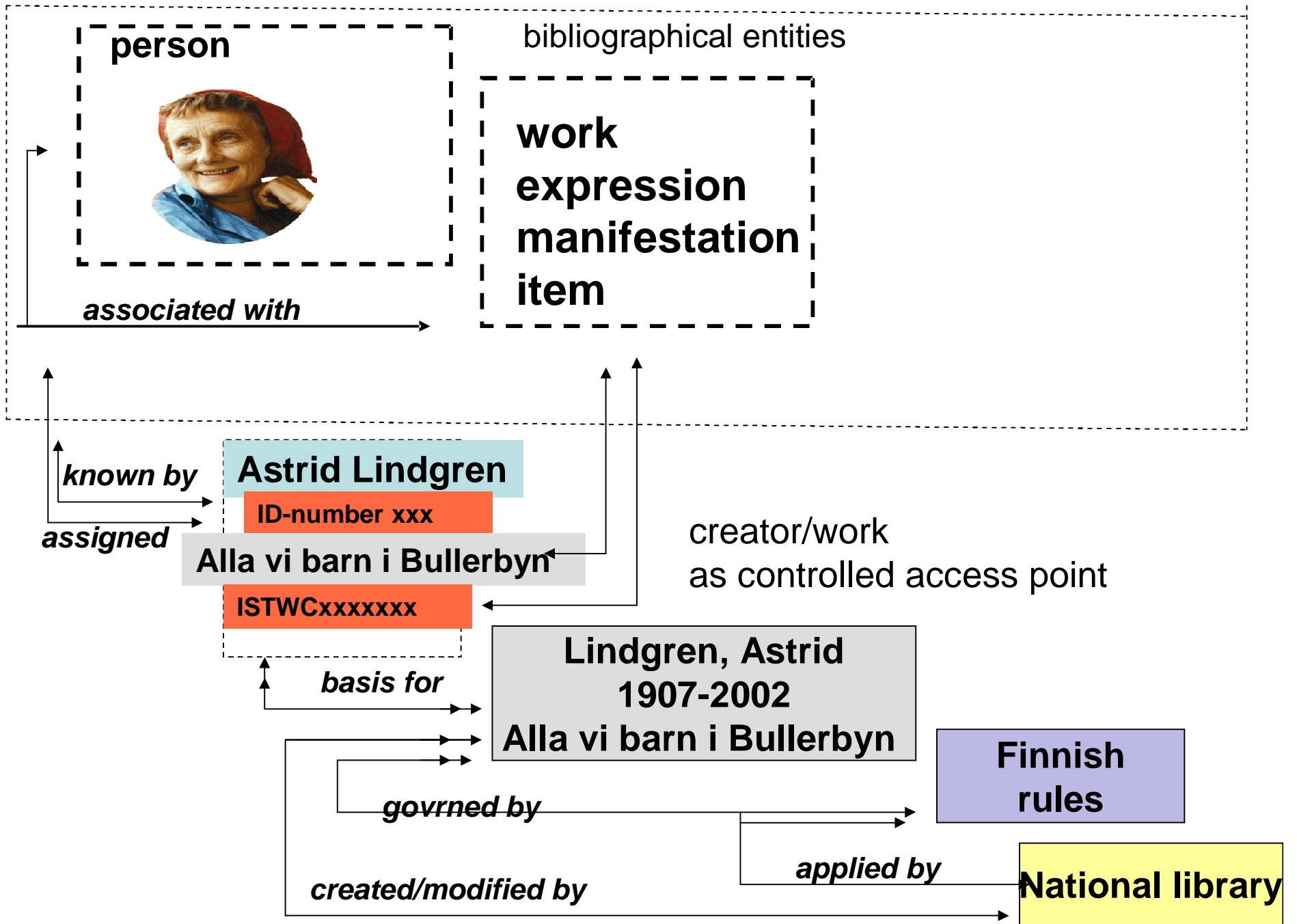




Why persons, families, corporate bodies (bibliographic entities) and the names and identifiers are treated as entities ?

- **for getting much more flexibility** in the controlled naming
- **for eliminating redundancies** that would occur if these entities were modeled as attributes
- because **the names** e.g. for the entities persons and corporate bodies **can be controlled in an authority record and linked to other authority records or to bibliographic records or holding records as needed**

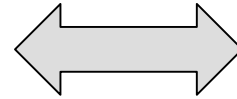




attributes

- are defined at a "logical" level i.e. as characteristics of the entities to which they belong
- in certain cases, the characteristics of a given entity may change over time
- (e.g. the field of activity in which a person is engaged).
- but, this model does not make an explicit distinction between such attributes and those that are not subject to change

entity: person



entity: name

"known by" relationship

attributes of a person

dates associated with the person
title of person
other designation associated with
the person
gender
place of birth
place of death
country
place of residence
affiliation
address
language of person
field of activity
profession/occupation
bibliography/history

attributes of a name

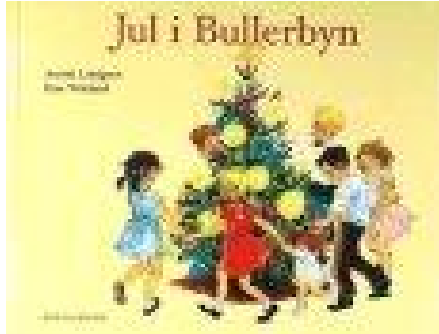
type of name
scope of usage
dates of usage
language of name
script of name
transliteration scheme of name

work:

known by

name

Jul i Bullerbyn



assigned

identifier

attributes of a work

form of work

date of the work

medium of performance

subject of the work

key

place of origin of the work

original language of the work

history

other distinguishing characteristic

The "title of work" is treated as an attribute of the name by which that work is known.

Through the relationship, however, the attributes of name and identifier function in the same way as if they were defined as attributes of the associated entity.

Relationships between **persons,** **families, corporate bodies** and **works**

Entity Type	Sample Relationship Types
Person ↔ Person	<ul style="list-style-type: none"> §pseudonymous relationship §attributive relationship §collaborative relationship §sibling relationship §parent/child relationship
Person ↔ Family	§membership relationship
Person ↔ Corporate Body	§membership relationship
Family ↔ Family	§genealogical relationship
Corporate Body ↔ Corporate Body	<ul style="list-style-type: none"> §hierarchical relationship §sequential relationship

Work $\bar{\circ}$ Work

§equivalence relationship

§descriptive relationship

§whole/part relationship

§accompanying relationship (part-to-part)

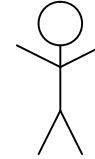
§sequential relationship

§derivative relationship

§shared characteristic relationship

relationships between persons

pseudonyms relationship



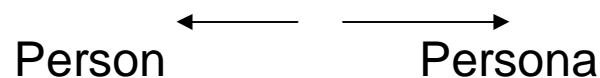
- under some cataloguing rules
- entity person as 1) real individual

- under other cataloguing rules
- 2) a specific instance of the bibliographic entity person may correspond to a persona adopted by an individual

-
-
-



-
-



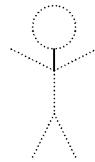
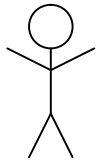
- The relationship between a persona Kristian Korppi and that person's real name Mika Waltari
-

- usually expressed in authority data through links between authorized names given to each entity (see also references) and/or information notes

relationships **between** persons

- Person A Person B Persona

-



Mika Waltari

Armas J. Pulla

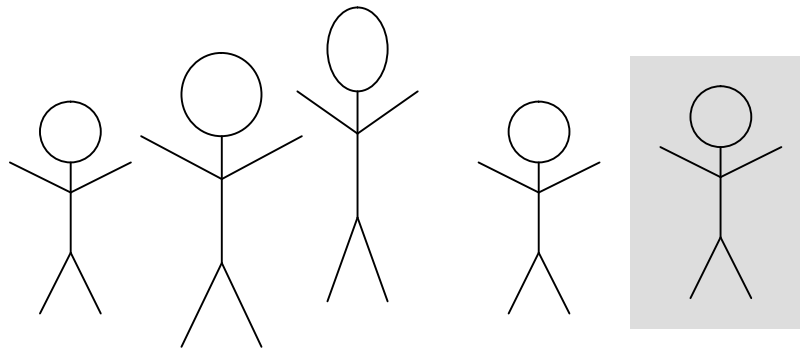
Kapteeni Leo Rainio
shared pseudonym

other relationships **between persons**

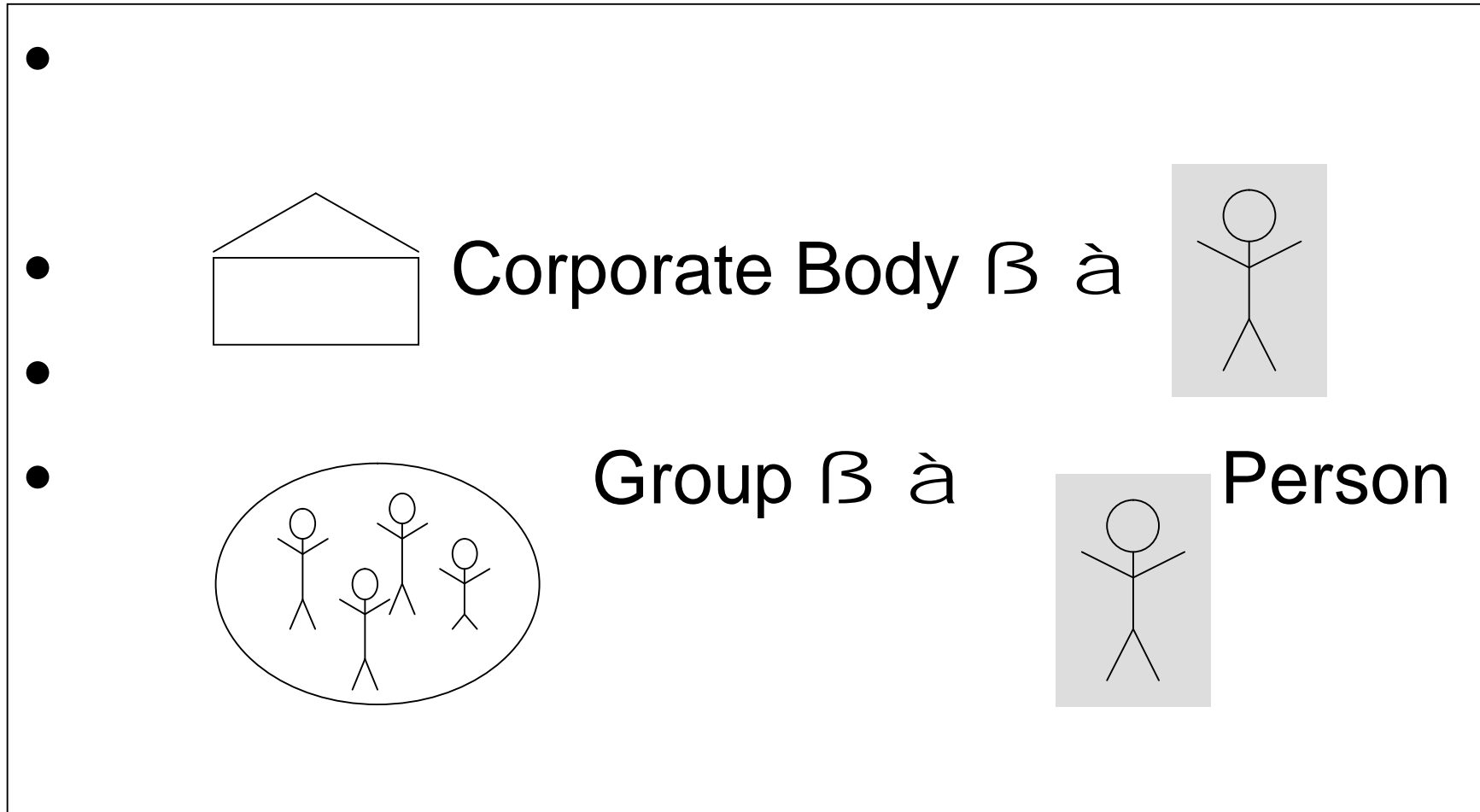
- attributive relationships
- collaborative relationships
- sibling relationships
- parent/child relationships

relationships between **persons and families**

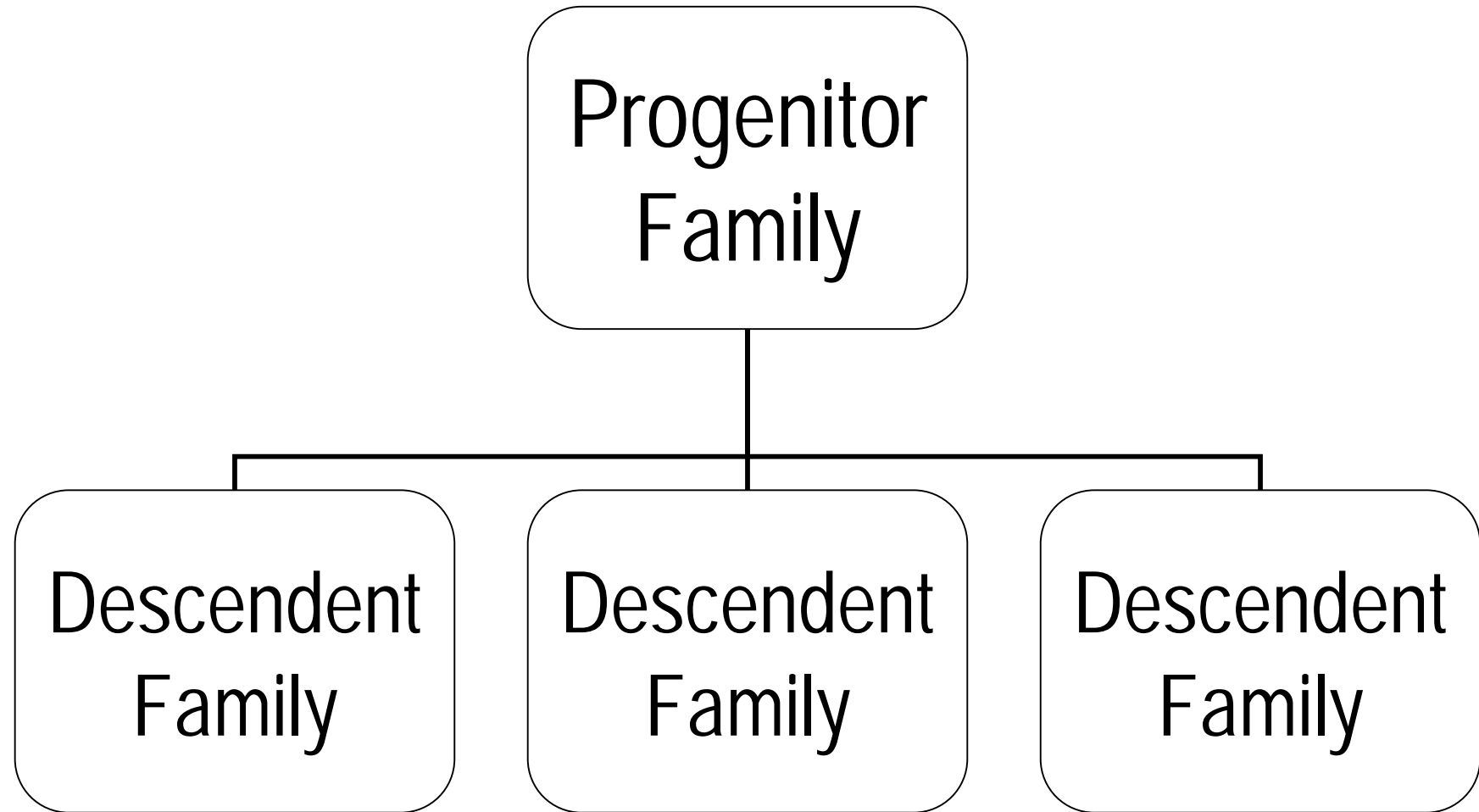
- ***Membership relationship***
- The relationship between a person and a family of which the person is a member.
- **Example**



relationship between persons and corporate bodies

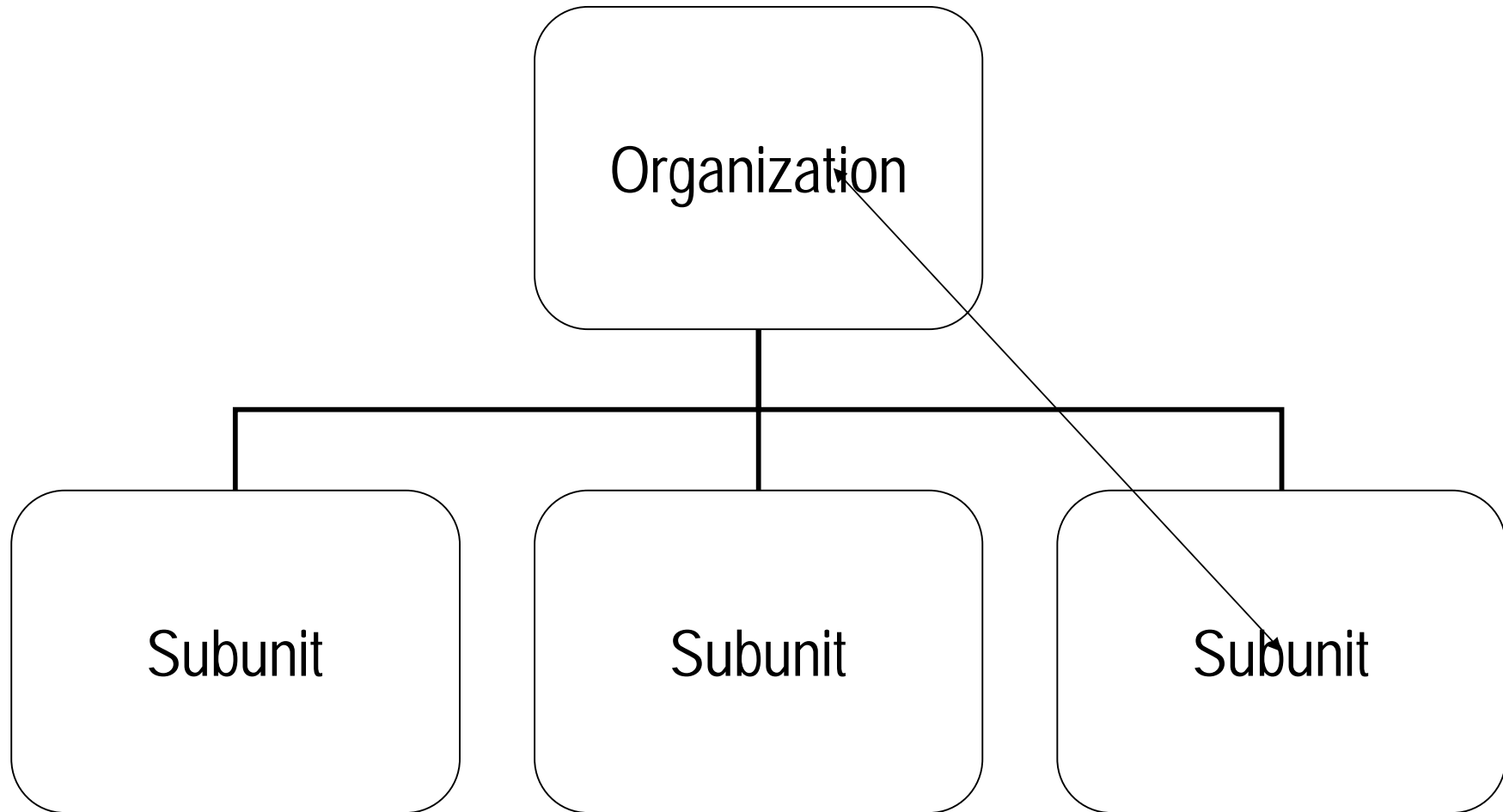


relationships **between families**



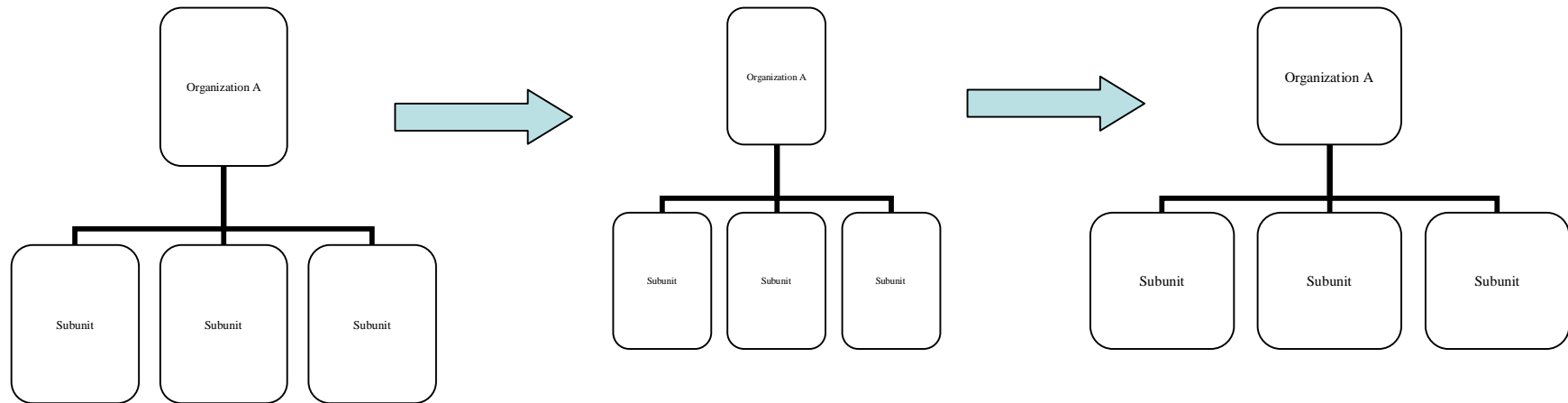
genealogical relationship

relationships **between corporate bodies**



hierarchical relationship

sequential relationship



Body A

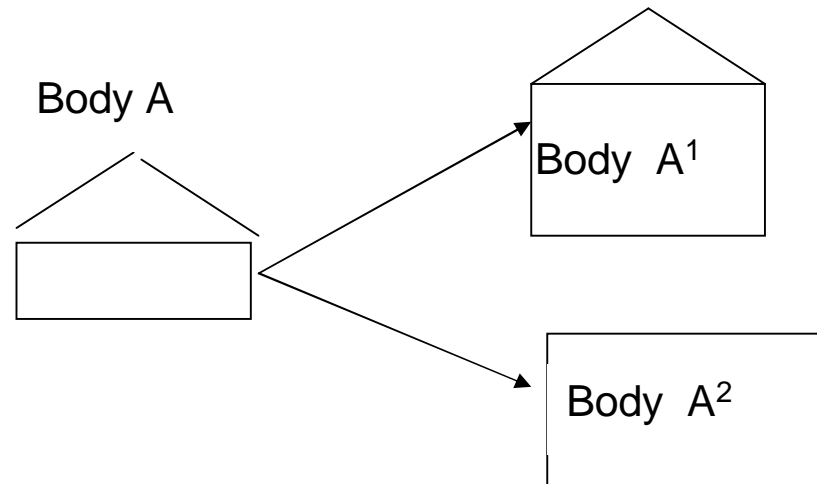
Body B

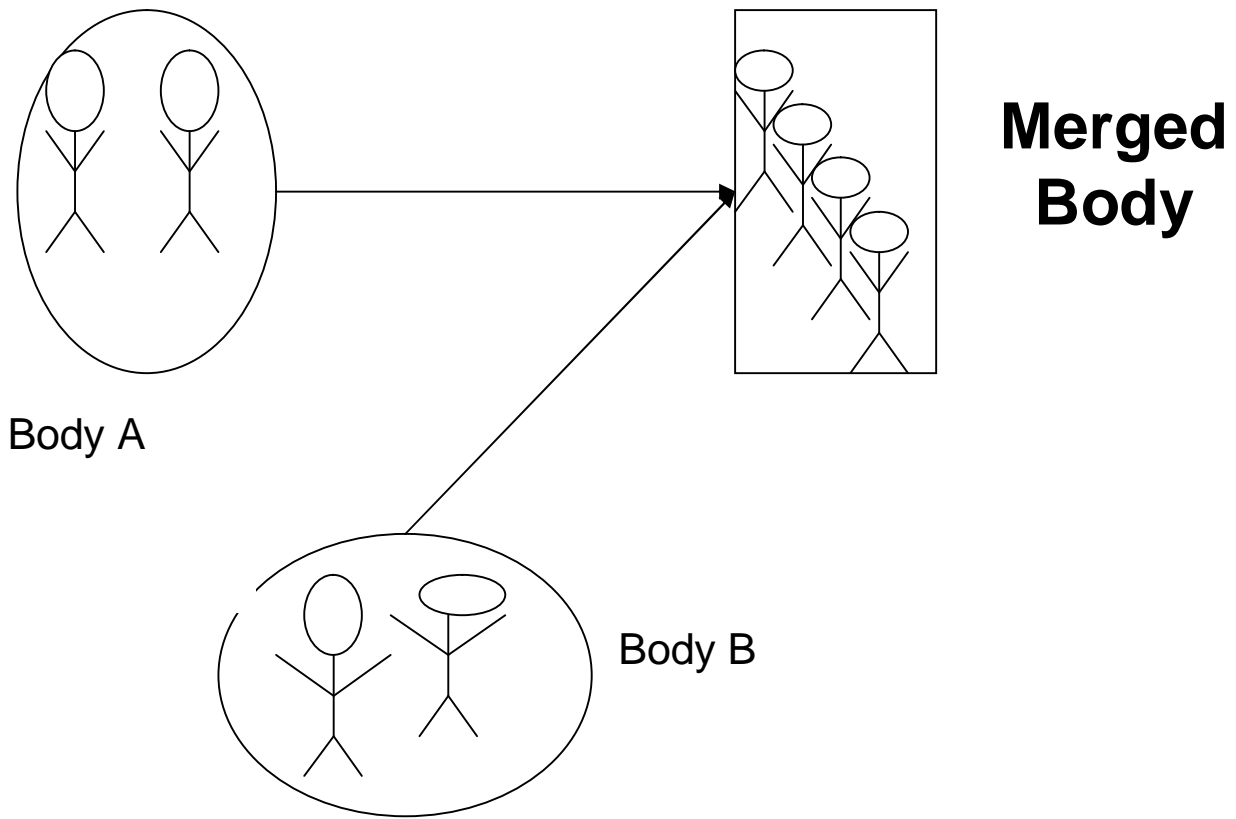
Body C

sequential relationship

-
-
-

Split
Body





Relationships between **Names** and **Persons, Families, Corporate bodies, and Works**

- | • Entity Type | Sample Relationship Types |
|------------------------|--|
| • Person Õ Name | |
| • <i>Name Õ Name</i> | |
| • | real name relationship |
| • | pseudonym relationship |
| • | secular name relationship |
| • | name in religion relationship |
| • | official name relationship |
| • | earlier name relationship |
| • | later name relationship |
| • | alternative linguistic form relationship |
| • | other variant name relationships |
| • Family Õ Name | |
| • | alternative linguistic form relationship |

Relationships between **Names** and **Persons, Families, Corporate bodies, and Works**

- **Corporate Body ↔ Name**
 - expanded name relationship
 - acronym / initials / abbreviations relationship
 - pseudonym relationship
 - alternative linguistic form relationship
 - other variant name relationships
- **Work ↔ Name**
 - alternative linguistic form relationship
 - conventional name relationship
 - other variant name relationships

Relationships between controlled access points

- | Entity Type | Relationship Type |
|--------------------------|--|
| • Access Point | |
| • \bar{O} Access Point | |
| • | Parallel language relationship |
| • | Alternate script relationship |
| • | Different rules relationship |
| • | Name/corresponding subject term
or |
| • | Classification number relationship
Name/identifier relationship |

Relationships in this category *may be made explicit by means of linking devices such as linking fields and control subfields*

some examples

work

expression

Jul i Bullerbyn [Text] /av Astrid Lindgren ; med bilder av Ilon Wikland].- **Stockholm : Rabén & Sjögren, 1963. – 32 s. : ill.**

subject udk:839.7-3(024.7)

manifestation

5 L b L c 0100 h Underv j Barnb

item

creator – work/expression -relationship

Lindgren, Astrid, 1907-2002

work/expression

Jul i Bullerbyn [Text], 1963

Wikland, Ilon, 1930-

subject

udk:839.7-3(024.7)

Lindgren, Astrid, 1907-2002
Jul i Bullerbyn [text].1963. Slovene

Božič v Hrupni vasi / Astrid Lindgren ;
ilustrirala Ilon Wikland ; prevedel Marjan
Marinšek . - Maribor : Rotis, c1993. - : [31] s.
: färgill. – (Zbirka Astrid ; v 7).

Wikland, Ilon, 1930-

Marinšek, Marjan

subject

udk:839.7-3(024.7)

Zbirka Astrid

Lindgren, Astrid, 1907-2002

subject

udk:839.7-3(024.7)

work/expression

Jul i Bullerbyn [Text] Finnish

Melukylän joulu / kirjoittanut Astrid Lindgren ; kuvittanut Ilon Wikland. - Porvoo : Söderström, 1964 ; (Hälsingborg : Hälsingborgs litogr.). [32] s. : ill.

Wikland, Ilon, 1930-

collocating function

Lindgren, Astrid, 1907-2002

Jul i Bullerbyn [text] Danish, 1963

Jul i Bullerbyn [text] Dutch, 1980

Jul i Bullerbyn [text] Greenlandic, 1978

Jul i Bullerbyn [text] Icelandic, 1968

Jul i Bullerbyn [text] Japanese, 1967

Jul i Bullerbyn [text] Lithuanian, 1970

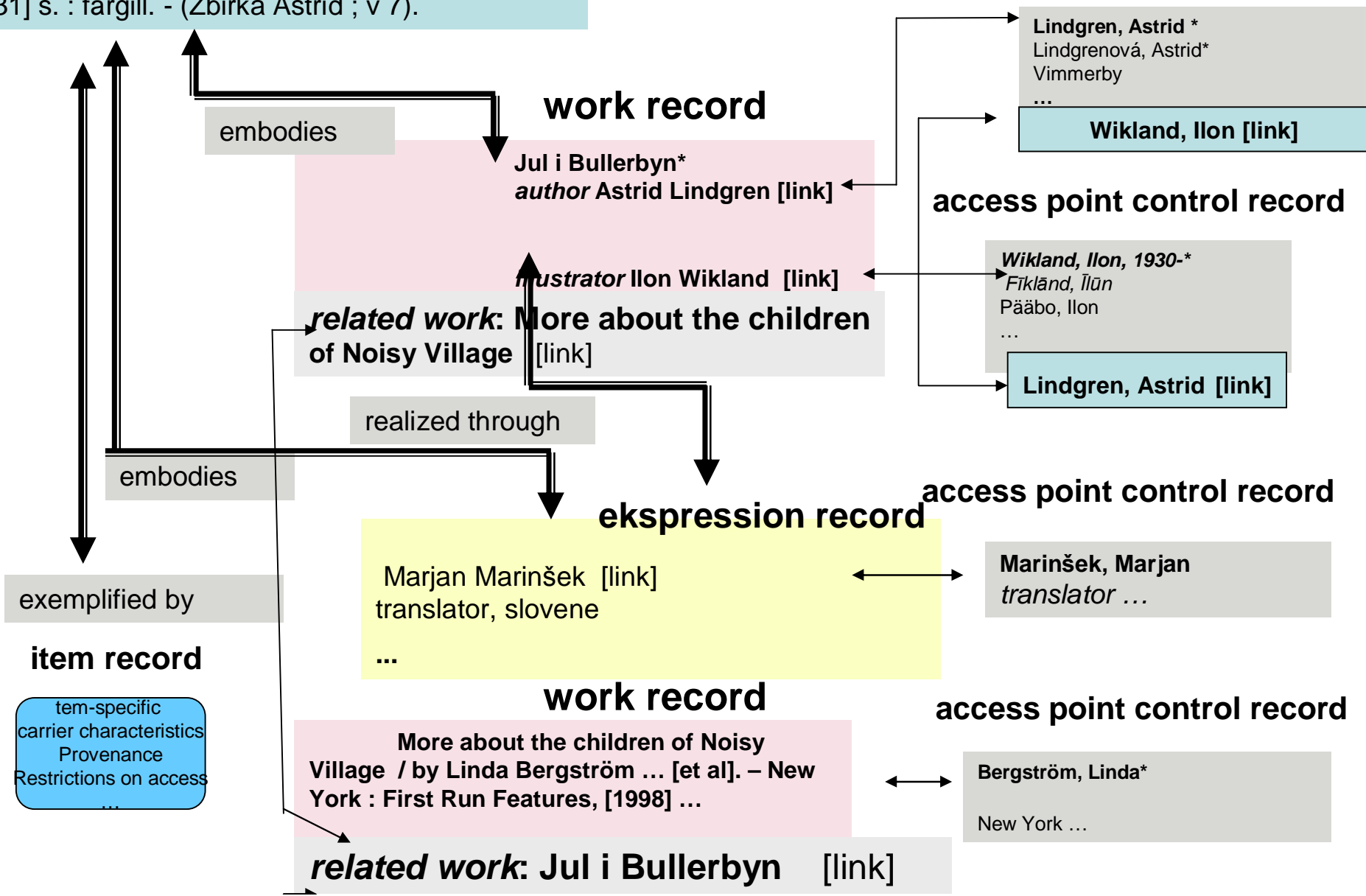
Jul i Bullerbyn [text] Norwegian, 1964

Jul i Bullerbyn [text] Polish, 1985

manifestation record

Relational/object-oriented database structure according to Tom Delsey

Božič v Hrupni vasi / Astrid Lindgren ;
ilustrirala Ilon Wikland ; prevedel Marjan
Marinšek . - Maribor : Rotis, c1993.
[31] s. : färgill. - (Zbirka Astrid ; v 7).



conclusion

- FRBR and FRAD support together the idea to have access to the content of the works in the language, script and form, which is most convenient for the user
- Using this kind of data modelling technique
- it is possible to provide data structure, which is as much as possible independent of today's formats and systems
- and as such open for future systems

- The WG decided to replace the structured examples and GARR formatting with textual statements that describe the situation which the example illustrates. For example, the current example for “Secular name relationship” in section 5.4.1 *Relationship between Persons and Names* will be changed to the phrase “The relationship between the pope known by the name ‘Pope John XXIII’ and that pope’s secular name ‘Angelo Giuseppe Roncalli.’”

Relationships between persons and names

- . For example, the French working group has noted that several of the relationships in section 5.4.1 *Relationship between Persons and Names* (particularly the “Earlier name” and “Later name” relationships) are not Person-to-Name relationships but are really Name-to-Name relationships. The Working Group has not fully resolved this issue pending the recasting of examples described above.