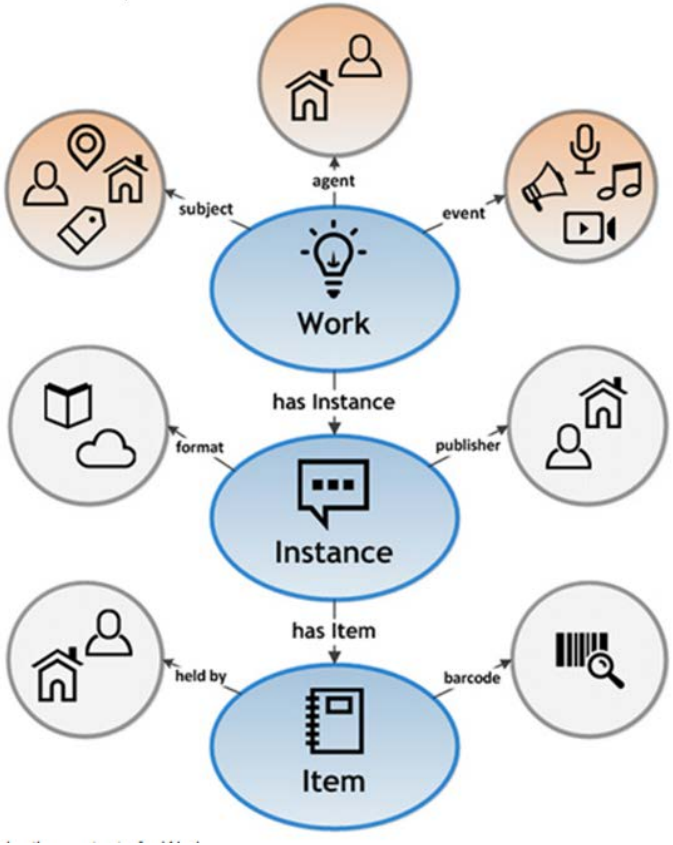
Possible extensions of BIBFRAME in modelling data

Tiziana Possemato, @Cult - Casalini Libri

3rd Annual European BIBFRAME workshop, 17th September

European BIBFRAME Workshop

The BIBFRAME 2.0 data model



Entity definitions: BIBFRAME

Hub

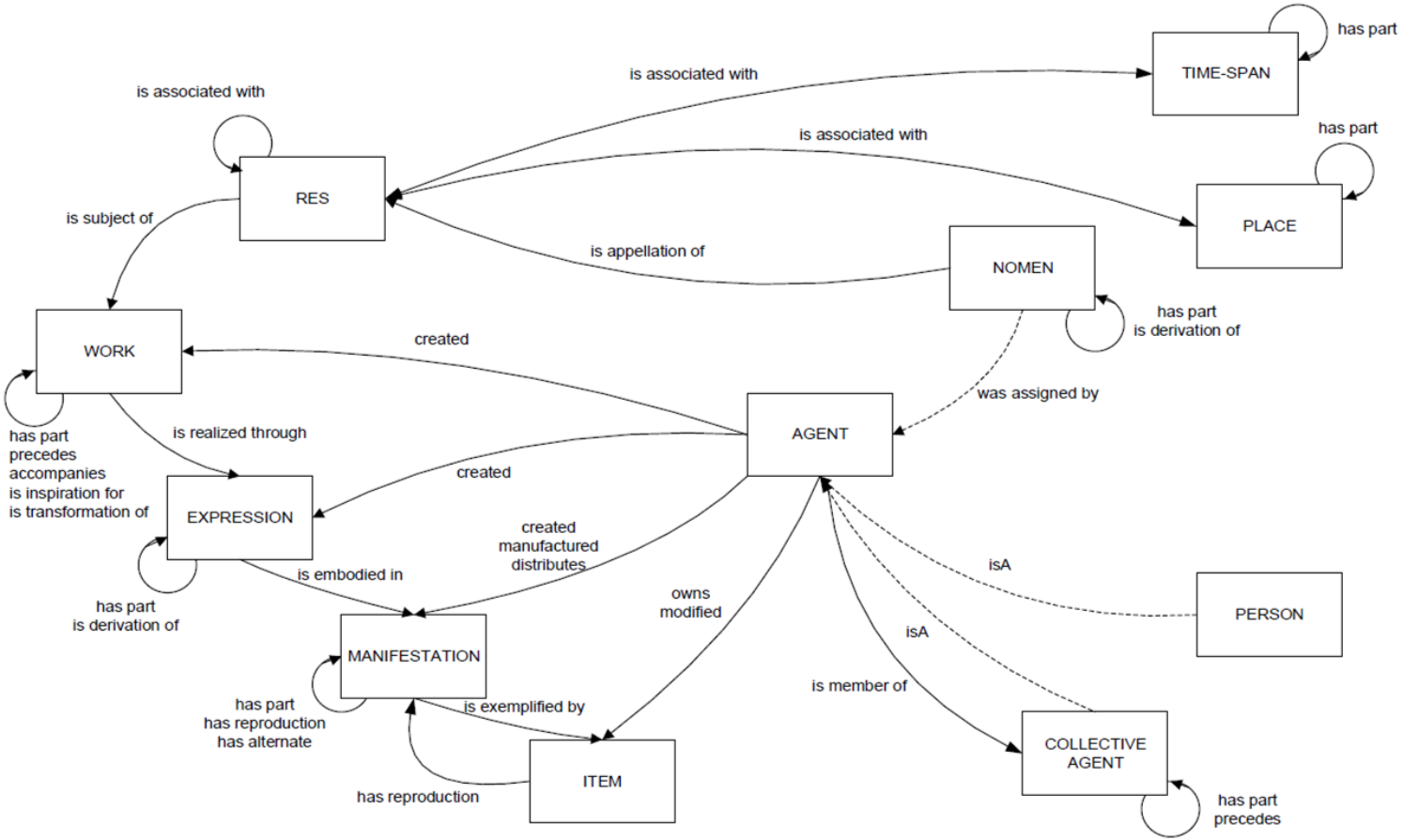
Work http://id.loc.gov/ontologies/bibframe.html#c_Work: resource reflecting a conceptual essence of a cataloging resource.

Instance http://id.loc.gov/ontologies/bibframe.html#c_Instance: resource reflecting an individual, material embodiment of a Work.

Item http://id.loc.gov/ontologies/bibframe.html#c_Item: single example of an Instance.

Source: http://id.loc.gov/ontologies/bibframe.html

The LRM data model



Entity definitions: IFLA-LRM

Work: the intellectual or artistic content of a distinct creation.

Expression: a distinct combination of signs conveying intellectual or artistic content.

Manifestation: a set of all carriers that are assumed to share the same characteristics as to intellectual or artistic content and aspects of physical form. That set is defined by both the overall content and the production plan for its carrier or carriers.

Item: an object or objects carrying signs intended to convey intellectual or artistic content.

Source: https://www.ifla.org/files/assets/cataloguing/frbr-lrm/ifla-lrm-august-2017_rev201712.pdf

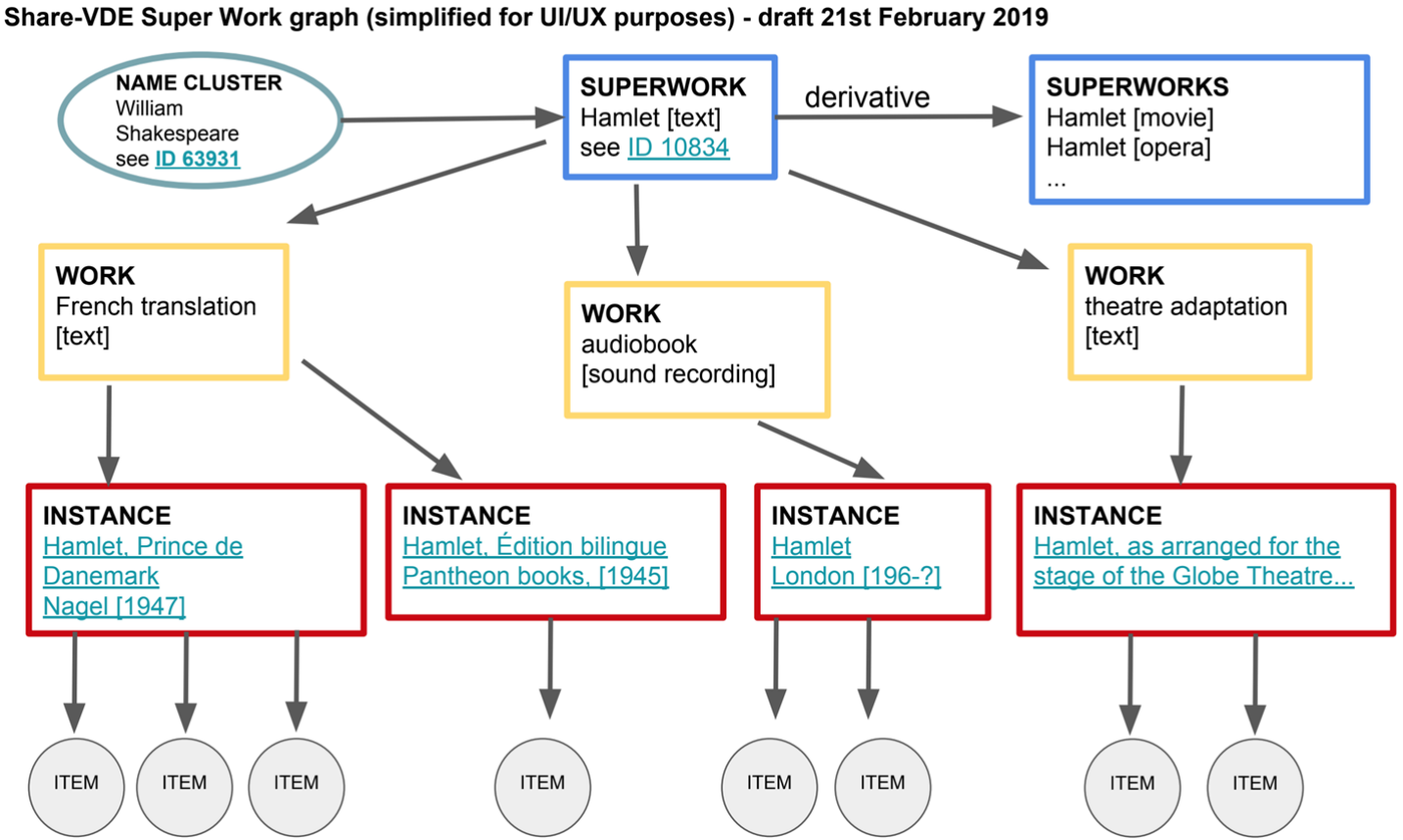
BIBFRAME vs. LRM

Work, Instance, Item (BIBFRAME)

vs.

Work, Expression, Manifestation, Item (LRM)

The first Share-VDE entities model draft



SuperWork Plain Language Description*

A new class is being tested for implementation in the Share-VDE and Linked Data for Production (LD4P) Cohort: the SuperWork entity

Share-VDE Work:

- is equivalent to a BIBFRAME Work, but is no longer the highest level of abstraction;
- identifiers for Share-VDE Work are created algorithmically based on unique constellations of elements for BIBFRAME Works (including RDA work and expression level elements);
- the types of Share-VDE Work and the definitions for which elements are used in its creation are outlined in the Work ID Cluster Mapping.

*Work Identification Working Group, SuperWork Plain Language Description

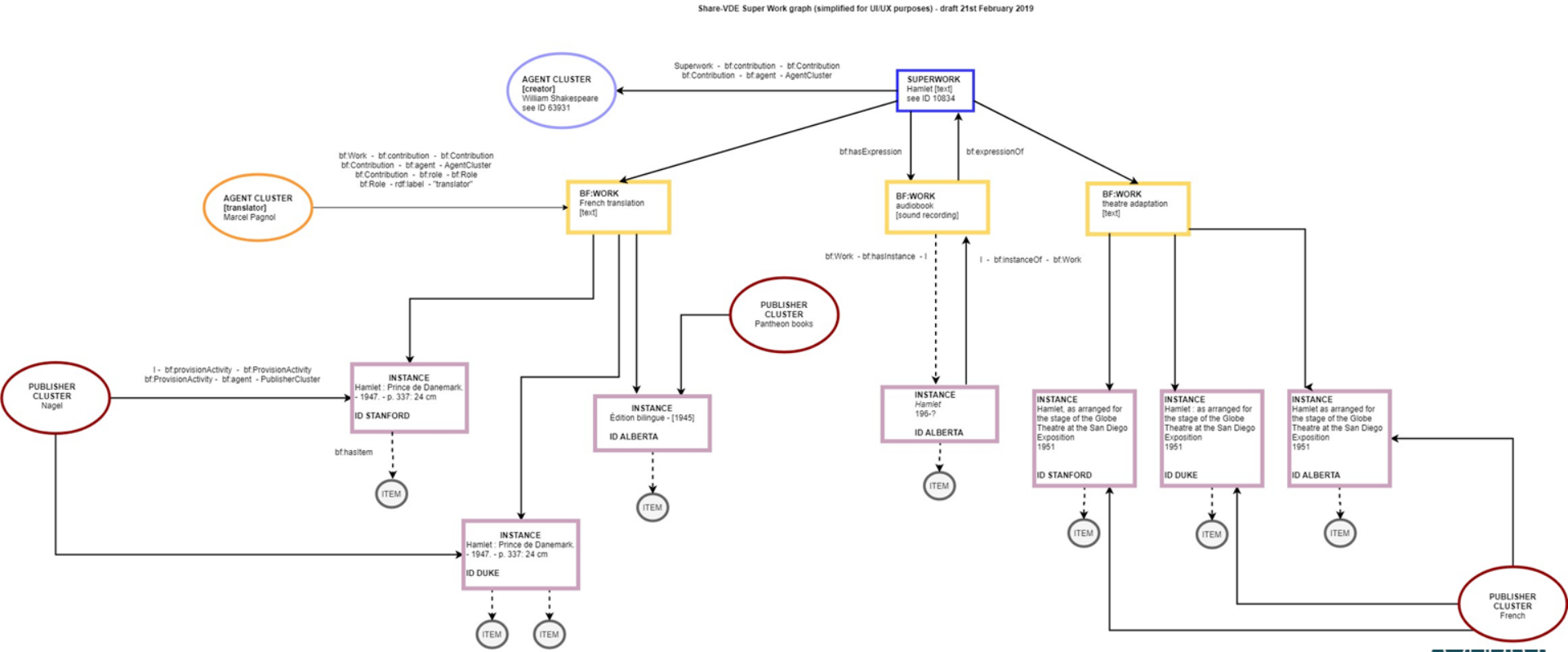
SuperWork Plain Language Description*

Share-VDE SuperWork:

- the highest level of abstraction in Share-VDE data model, the new SuperWork class (subclass of bf:Work) is meant to aggregate or group functional or near equivalent bf:Work clusters;
- identifiers for Share-VDE SuperWork are created algorithmically based on unique constellations of elements for BIBFRAME Works, minus RDA expression level elements.

*Work Identification Working Group, SuperWork Plain Language Description

The current Share-VDE entity model



http://bit.ly/SVDE_EM_current

SuperWork Plain Language Description*

Work, Instance, Item (BIBFRAME)

vs.

Work, Expression, Manifestation, Item (LRM)

=

SuperWork, Work, Instance, Item (Share-VDE)

*Work Identification Working Group, SuperWork Plain Language Description

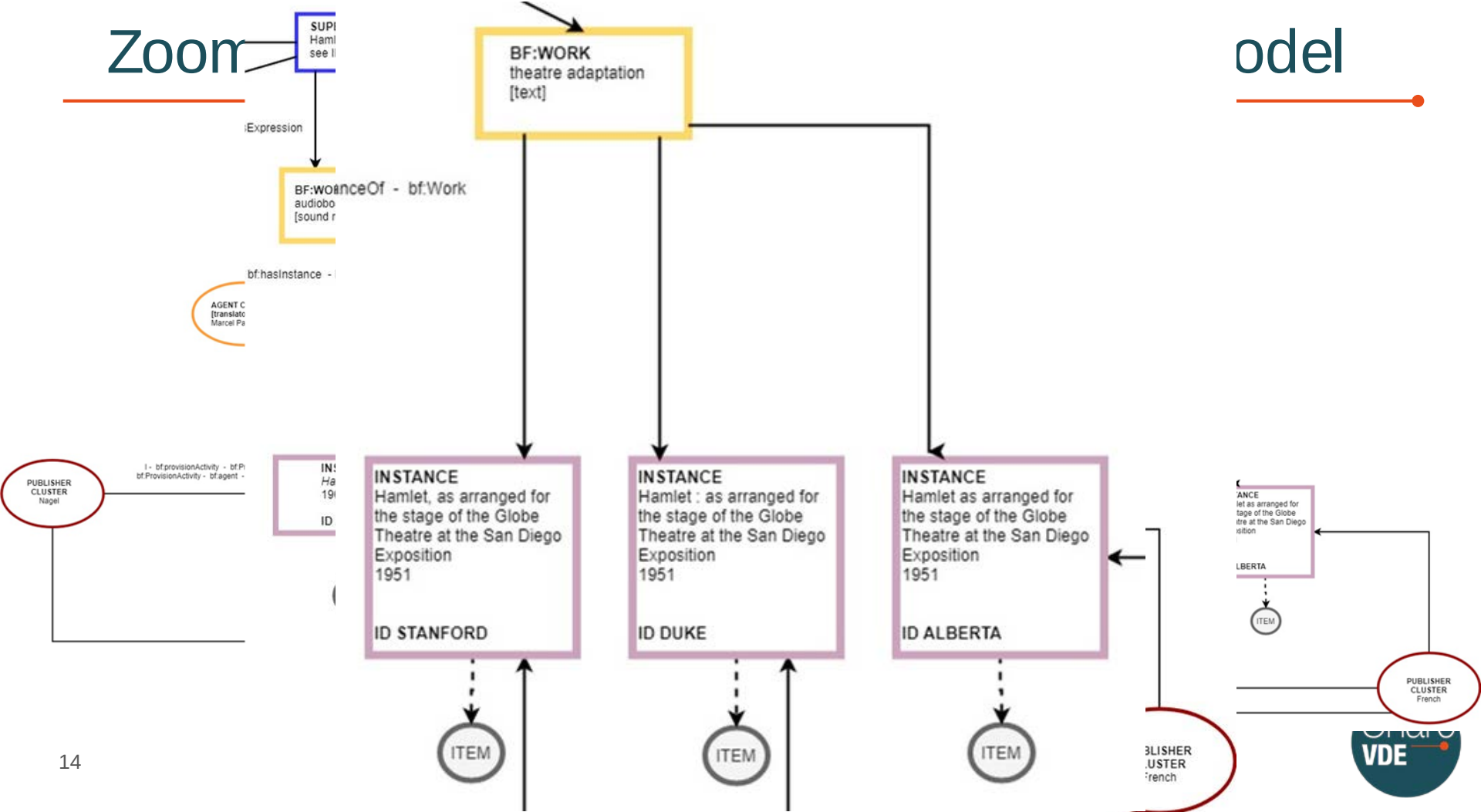
How to manage Instances
in a shared environment?

Instance vs. Manifestation

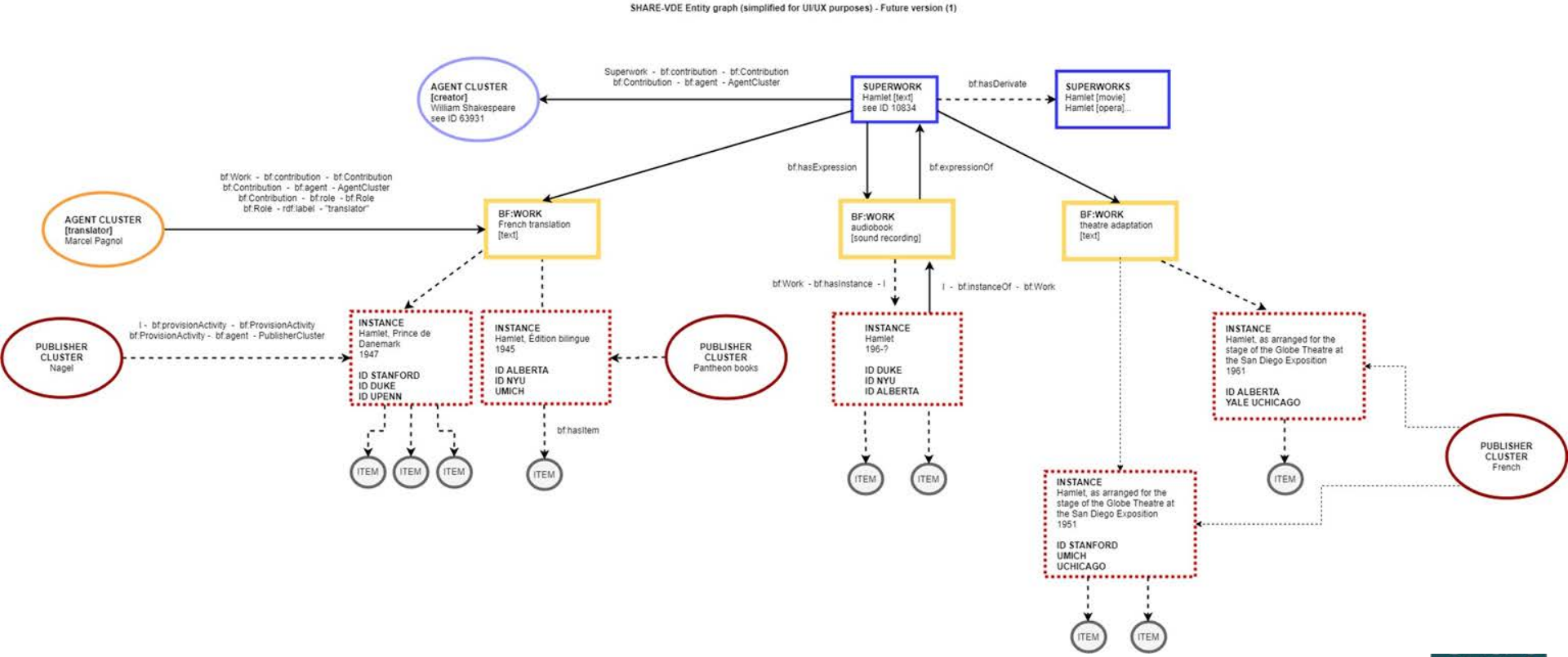
Instance (in BIBFRAME): a Work may have one or more individual, material embodiments, for example, a particular published form. These are Instances of the Work. An Instance reflects information such as its publisher, place and date of publication, and format.

Manifestation (in LRM): a set of all carriers that are assumed to share the same characteristics as to intellectual or artistic content and aspects of physical form. That set is defined by both the overall content and the production plan for its carrier or carriers.

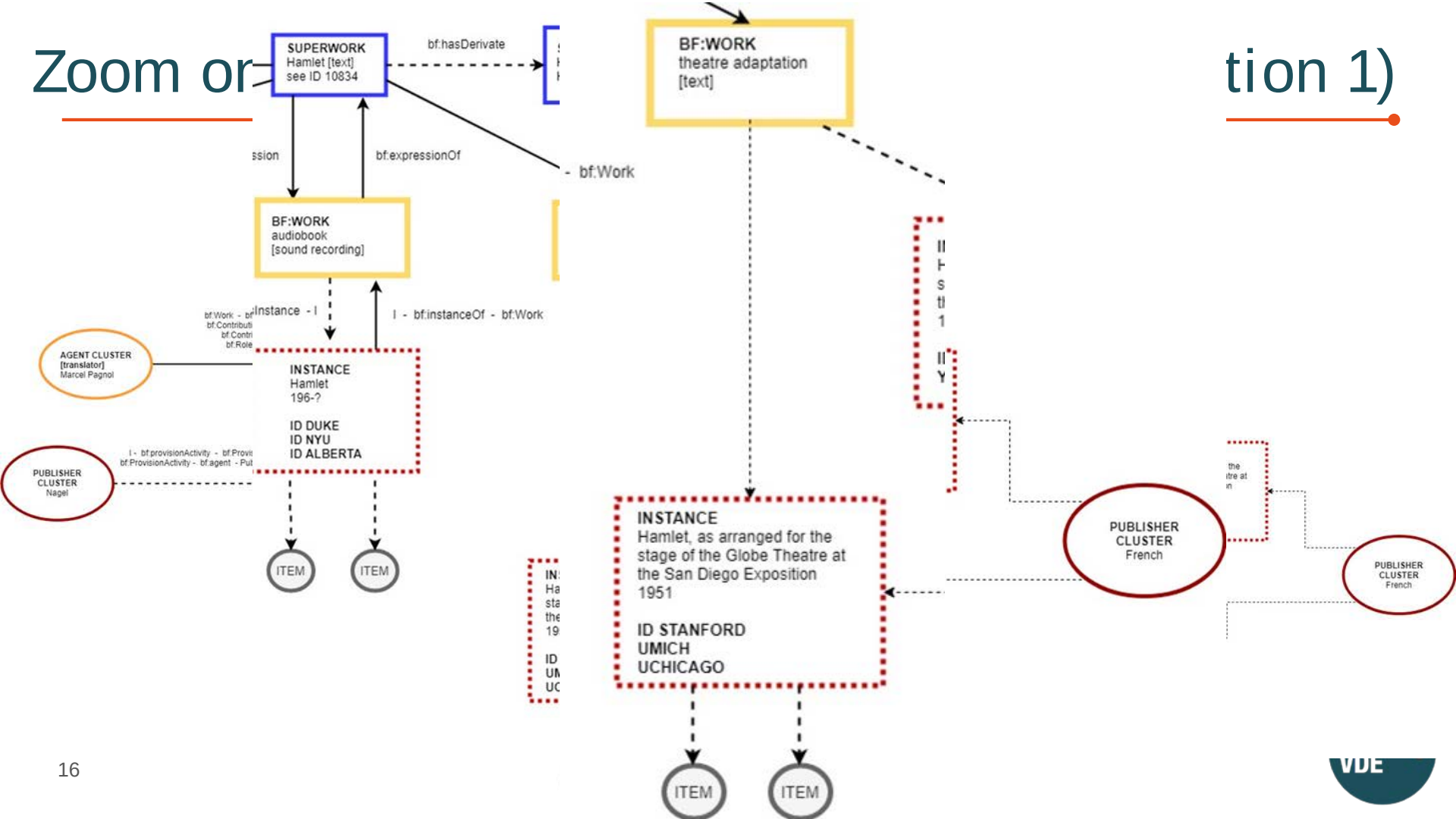
Zoom odel


BF:WORK
theatre adaptation
[text]
INSTANCE
Hamlet, as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
ID STANFORD
INSTANCE
Hamlet : as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
ID DUKE
INSTANCE
Hamlet as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
ID ALBERTA
ITEM
ITEM
ITEM
PUBLISHER CLUSTER Nagel
PUBLISHER CLUSTER French
bf:hasInstance -
bf:Work
Expression

The Share-VDE future entities model (option 1)



Zoom or tion 1)



The Share-VDE future entities model (option 1)

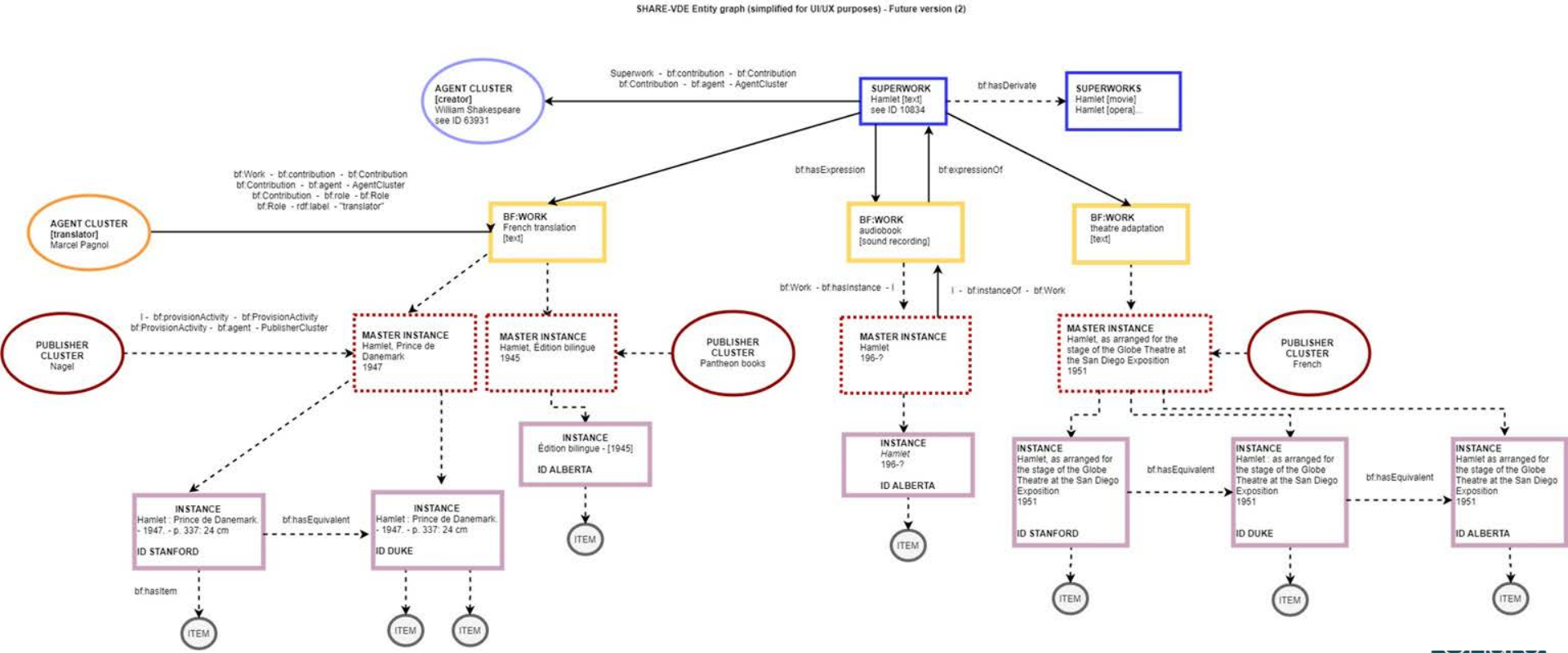
Key concepts of this model:

In this scenario the Instance assumes a Share-VDE ID (URI), which does not reflect the "owner" (=the original ID of the library) but an "ideal" Instance representing the "real" instance of BIBFRAME.

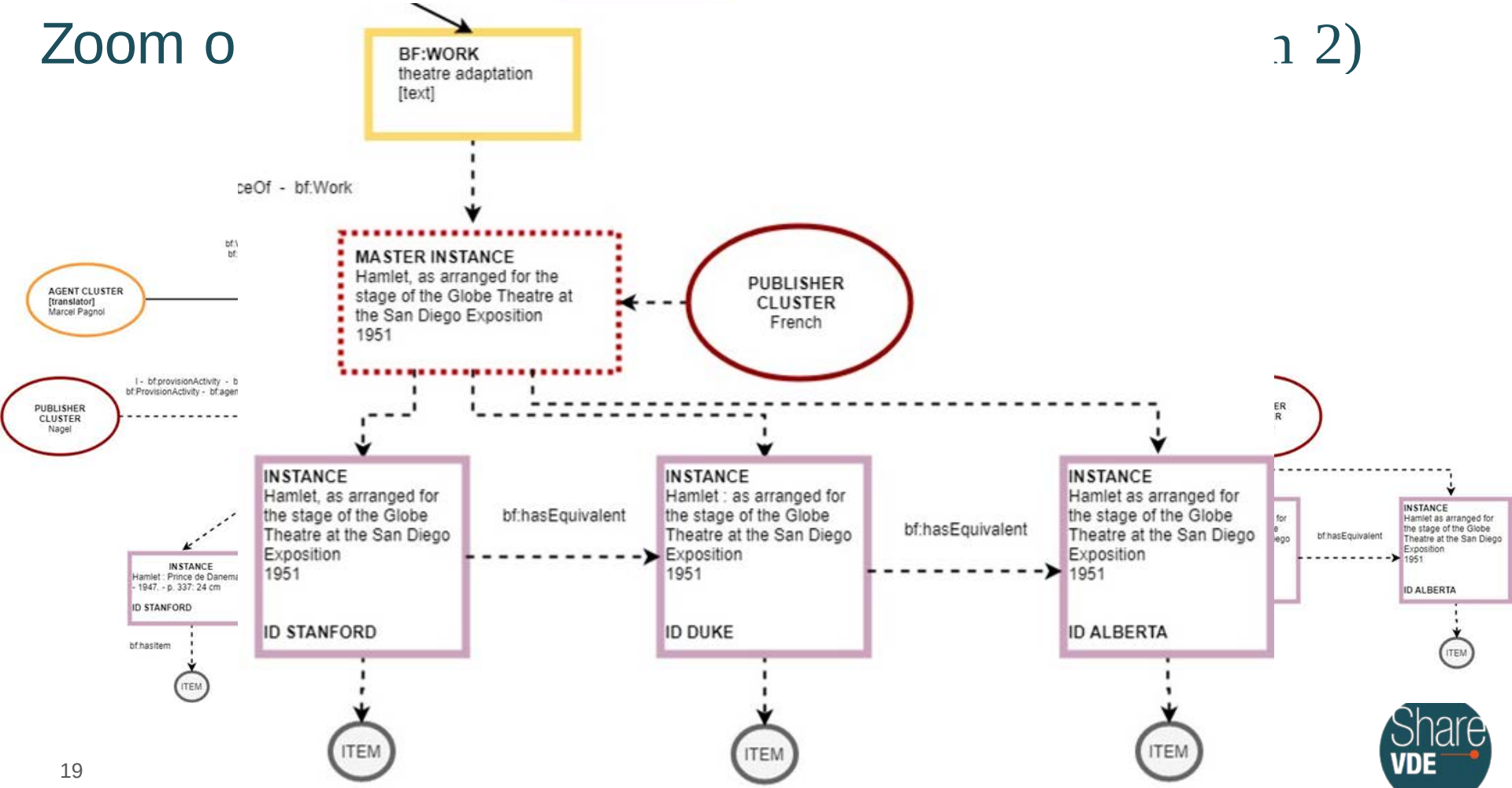
To link each of these instances to each library, we have (at least) two options (or perhaps both together):

- moving local data and information (library) to the Item level;
- including the Provenance to each triple to identify local description of the same Instance (in case the institutions were interested in preserving some specific attributes).

The Share-VDE future entities model (option 2)



Zoom o n 2)


BF:WORK
theatre adaptation
[text]
ceOf - bf:Work
MASTER INSTANCE
Hamlet, as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
PUBLISHER CLUSTER
French
AGENT CLUSTER
[translator]
Marcel Pagnol
PUBLISHER CLUSTER
Nagel
INSTANCE
Hamlet, as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
ID STANFORD
bf:hasEquivalent
INSTANCE
Hamlet : as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
ID DUKE
bf:hasEquivalent
INSTANCE
Hamlet as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
ID ALBERTA
bf:hasEquivalent
INSTANCE
Hamlet as arranged for the stage of the Globe Theatre at the San Diego Exposition 1951
ID ALBERTA
INSTANCE
Hamlet : Prince de Danem
- 1947. - p. 337: 24 cm
ID STANFORD
bf:hasItem
ITEM
ITEM
ITEM
ITEM
ITEM

The Share-VDE future entities model (option 2)

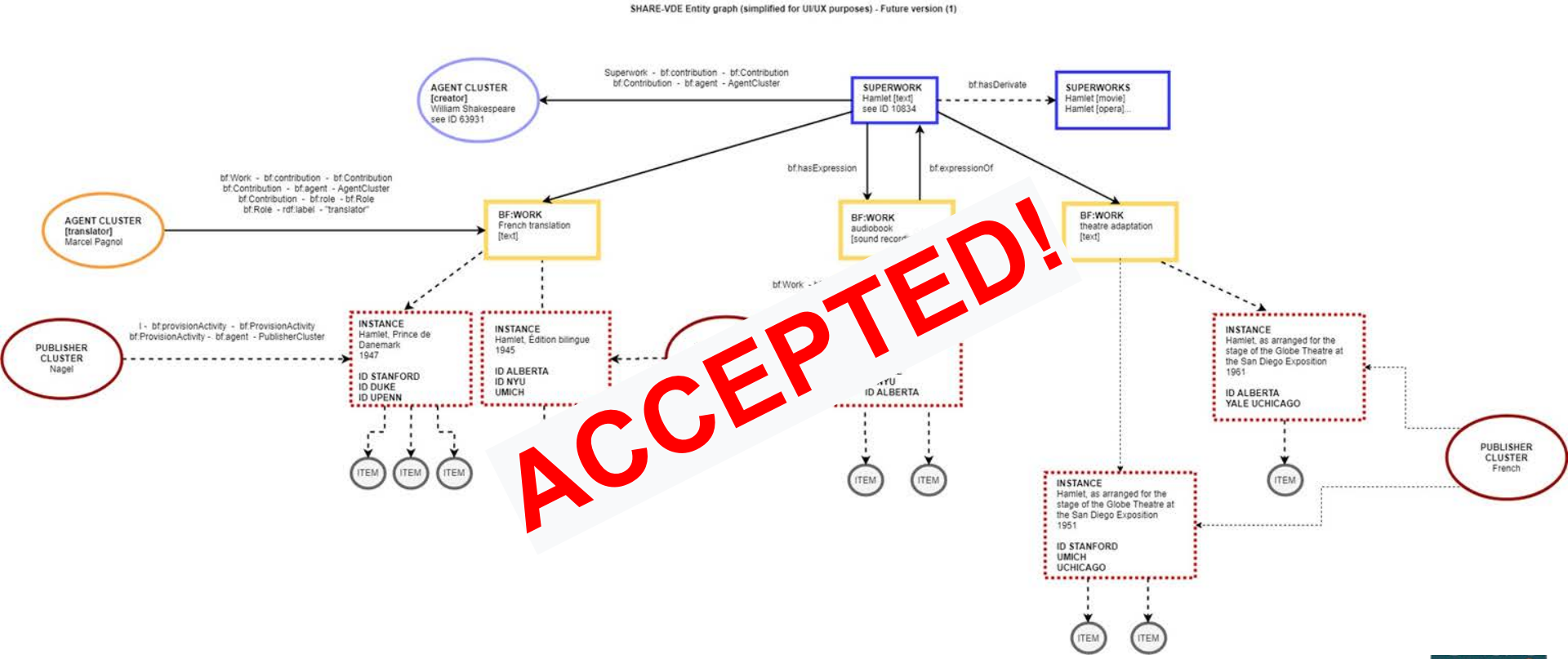
Key concepts of this model:

In this scenario a new level is introduced: the Master Instance, that corresponds completely to the BIBFRAME Instance. It assumes a Share-VDE ID (URI), which does not reflect the "owner" (=the original ID of the library) but an "ideal" Instance representing the "real" instance of BIBFRAME.

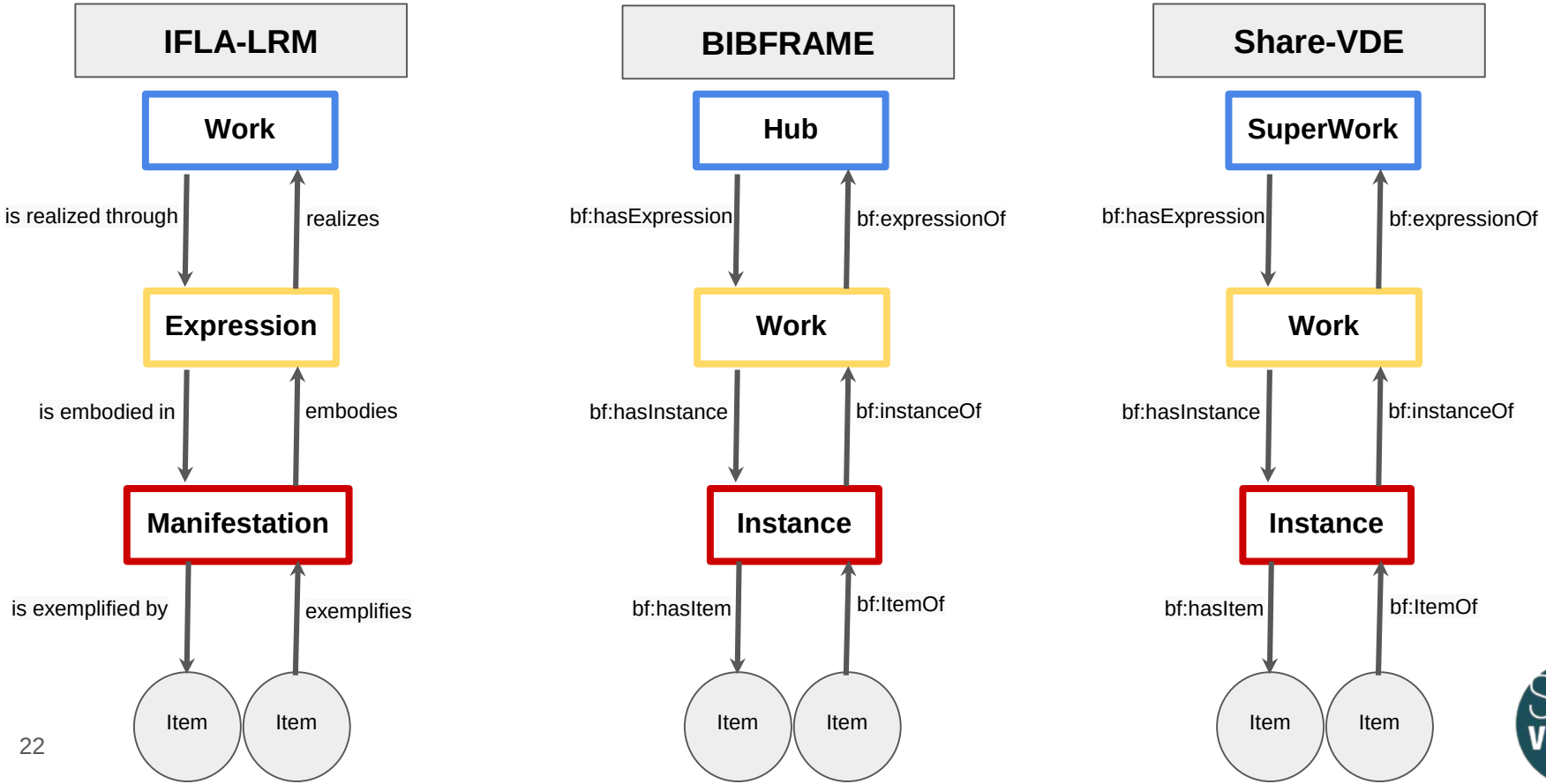
Under the Master Instance, this scenario proposes the Instances coming from each library, identified by a library ID (URI).

To link the Master Instance with the Instances we need to design a specific predicate (something like "has description") to express a possible "variant" form of the instance description coming from different libraries.

The Share-VDE future entities model (option 1)



Comparison IFLA-LRM BIBFRAME Share-VDE



Entity definitions: Share-VDE

The Work Identification Working Group is starting an interesting conversation around the topic, that is reported, to share opinions and feedback from participants, on an in progress document:

Introducing the OPUS:
A paper to discuss updated entity and model definitions for BIBFRAME and the relationship to IFLA-LRM

"In January 2019 a new SuperWork class was introduced in Share VDE data. Shortly after, just prior to ALA Annual 2019 LC introduced the Hub to their data. While further analysis and refinement of practice for these parallel processes is needed, ultimately they both serve the same function in BIBFRAME and are hereafter referred to as the Opus in this discussion [...]".

We all are participating and waiting for results to evaluate how much has to be maintained and how much has to be changed in the model, and in the related data!

Thank you!

tiziana.possemato@atcult.it
tiziana.possemato@casalini.it