



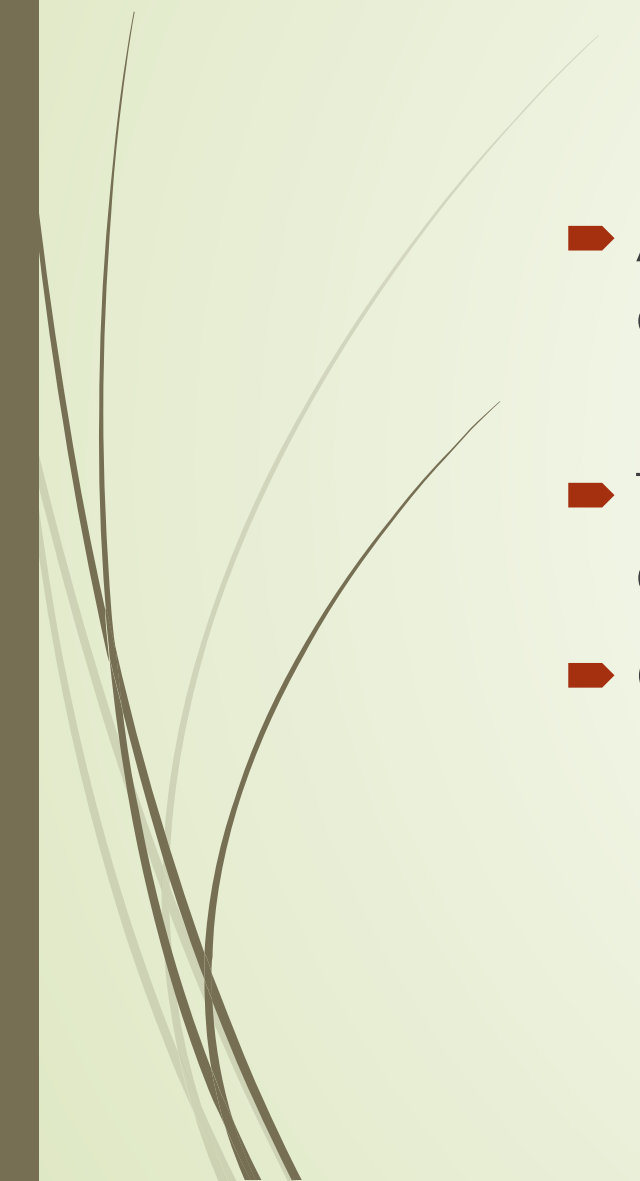
# Diachronic works in RDA

PCC Operations Committee meeting

Library of Congress, 2 May 2019



# What is a diachronic work?

- ▶ A diachronic work is a work that is *planned* to be embodied *over time*, rather than as a single “act of publication”.
  - ▶ The essence of a diachronic work is a *plan* for the change of content.
  - ▶ Change of content = extension of content
- 



# How is content extended?

- By **accumulation** (the addition of content in discrete physical or logical units): *successive works*
- By **replacement** (new content is integrated with—and may replace—existing content): *integrating works*
- In RDA these methods are specified by the **extension plan** element of the **work** entity



# What is the **extension plan** element?

- ▶ The **extension plan** element is a categorization combining values from two extension attributes of the *RDA/ONIX Framework for Resource Categorization*:
  - ▶ Extension mode (succession or integration)
  - ▶ Extension termination (whether or not period of extension has a predetermined end: determinate or indeterminate)
  - ▶ There is an additional category for resources with a *static* (non-diachronic) plan



# How are the values of the **extension plan** element recorded?

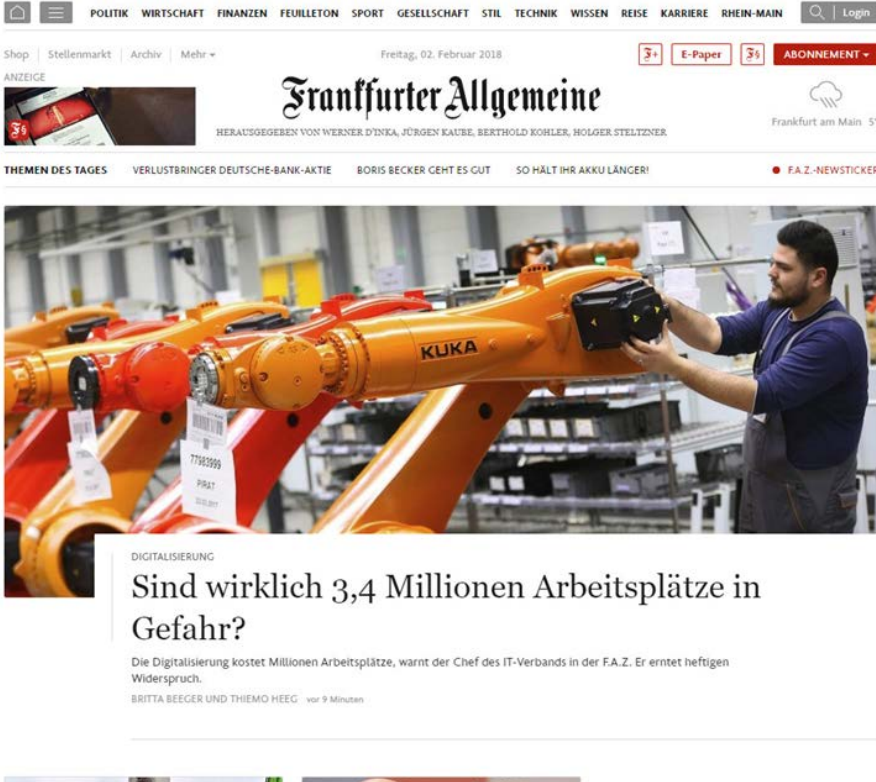
- ▶ There is an RDA vocabulary encoding scheme (VES) for extension plan, with five possible values:
  - ▶ Integrating determinate plan
  - ▶ Integrating indeterminate plan
  - ▶ Static plan
  - ▶ Successive determinate plan
  - ▶ Successive indeterminate plan

# Integrating determinate plan



- ROF extension mode
  - INTEGRATION
- ROF extension termination
  - DETERMINATE
- RDA extension plan
  - INTEGRATING DETERMINATE

# Integrating indeterminate plan



The screenshot shows the homepage of the Frankfurter Allgemeine newspaper. The main headline is "Sind wirklich 3,4 Millionen Arbeitsplätze in Gefahr?" (Are 3.4 million jobs really in danger?). The sub-headline reads "Die Digitalisierung kostet Millionen Arbeitsplätze, warnt der Chef des IT-Verbands in der F.A.Z. Er erntet heftigen Widerspruch." (Digitalization costs millions of jobs, warns the head of the IT association in the F.A.Z. He is reaping fierce opposition.). The byline is "BRITTA BEEGER UND THIEMO HEEG vor 9 Minuten". The article is categorized under "DIGITALISIERUNG". The image shows a worker in a blue shirt and grey overalls working on a yellow KUKA robotic arm in a factory setting.

➤ ROF extension mode

➤ **INTEGRATION**

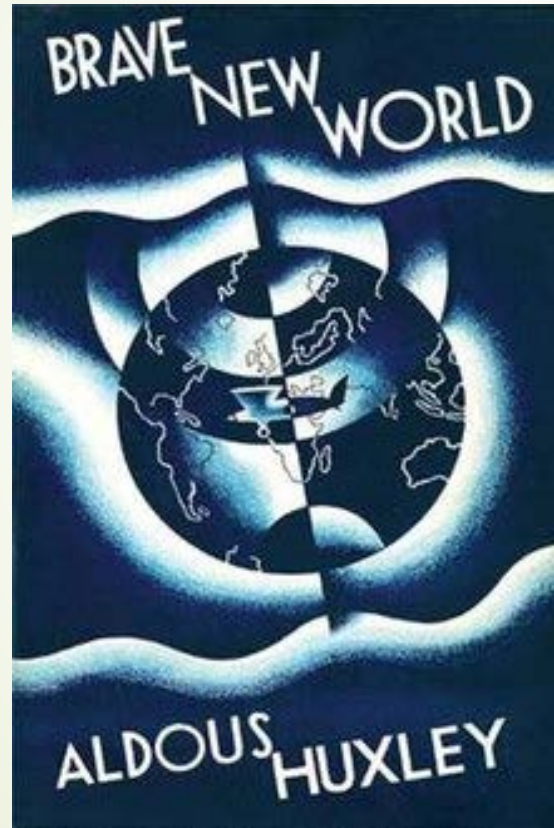
➤ ROF extension termination

➤ **INDETERMINATE**

➤ RDA extension plan

➤ **INTEGRATING  
INDETERMINATE**

# Static plan



- ROF extension mode
  - N/A
- ROF extension termination
  - N/A
- RDA extension plan
  - STATIC



# Successive determinate plan

Twelfth Census of the United States.

**CENSUS BULLETIN.**

No. 18. WASHINGTON, D. C. November 28, 1900.

POPULATION OF IDAHO BY COUNTIES AND MINOR CIVIL DIVISIONS.

This bulletin, prepared under the direction of Mr. WILLIAM C. HUNT, chief statistician for population, gives the aggregate population of Idaho by counties and minor civil divisions, according to the official count of the returns of the Twelfth Census, taken as of June 1, 1900.

Idaho was organized as a territory March 3, 1863, and admitted as a state July 3, 1890. Table 1 shows the population of Idaho at each census from 1870 to 1900, inclusive, together with the increase by number and per cent during each decade.

TABLE 1.—POPULATION OF IDAHO: 1870 TO 1900.

CENSUS YEAR.	Population.	INCREASE.	
		Number.	Per cent.
1900.....	161,772	77,867	61.7
1890.....	84,885	61,776	158.7
1880.....	22,610	17,611	117.4
1870.....	14,999		

The population of the state in 1900 is 161,772 as compared with a population in 1890 of 84,885. This shows an increase during the decade of 77,867, or 61.7 per cent. A part of this increase is due to the fact that there were 4,064 Indians and 99 other persons, or a total of 4,163 persons, on Indian reservations, etc., in Idaho, who were specially enumerated in 1890 under the provisions of the census act, but were not included in the general population of the state at that census. The population of Idaho in 1870 was 14,999, and in 1880, 22,610, showing an increase from 1870 to 1880 of 17,611, or 117.4 per cent. During the next ten years its population was increased by 61,776, or 158.7 per cent, giving a total population in 1890, as stated in the report for that census, of 84,885.

The population of Idaho in 1900 is more than ten times as large as the population given for 1870, the first census taken after its organization as a territory in 1863.

The total land surface of Idaho is, approximately, 84,500 square miles, the average number of persons to the square mile at the censuses of 1890 and 1900 being as follows: 1890, 1.0; 1900, 1.9.

(CP 134)

- ROF extension mode
  - SUCCESSION
- ROF extension termination
  - DETERMINATE
- RDA extension plan
  - SUCCESSIVE DETERMINATE


# Successive indeterminate plan




- ROF extension mode
  - **SUCCESSION**
- ROF extension termination
  - **INDETERMINATE**
- RDA extension plan
  - **SUCCESSIVE INDETERMINATE**
- → Serial work




## How does this relate to IFLA LRM?

- ▶ IFLA LRM (5.8 Modelling of serials) regards any serial as “a distinct instance of the work entity” [i.e. serials have a **WEM lock**] and uses specific relationships among these instances to connect them
  - ▶ The modeling of diachronic works in RDA is extrapolated from this modeling of serials in IFLA LRM
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So does a work with a *diachronic* extension plan have a WEM lock?

- ▶ Yes, any work with a ***diachronic*** extension plan may be realized in *one and only one* expression and embodied in *one and only one* manifestation, a 1:1 cardinality in each case
- ▶ Any work with a ***static*** extension plan adheres to the standard WEMI cardinality: it may be realized in one or more expressions and embodied in one or more manifestations, a 1:M cardinality in each case



# Come again?

- ▶ RDA explains this in terms of **transformation boundaries**
- ▶ A transformation boundary is a stage at which a work is treated as a new work separate from the existing work
  - ▶ For **static** works, a difference in content between two *expressions* is a *necessary* but *insufficient* indicator that each expression realizes a different work (no transformation boundary has necessarily been crossed)
  - ▶ For **diachronic** works, the *potential* for a difference in content (inherent in the fact that content is embodied over time) between two *manifestations* is sufficient in itself to indicate that each manifestation embodies a different expression and those expressions realize different works (the transformation boundary has been crossed)

# *Work is a transformation of Work* [LRM-R22]




- Transformation by audience
  - Carrier version
  - Language version
  - Regional version
- Transformation by genre
- Transformation by policy
  - Transformation by extension plan
- Transformation by style

# So how does this affect continuing resources?



- Not much
- For CR, RDA is simply implementing the IFLA LRM modeling of serials
- Aligns more closely with ISSN practice
- Pretty much reflects current CONSER practice
  - Preferred title of translations and languages editions = title proper



# What about multipart monographs issued over time?

- RDA treats any multipart monograph issued over time as a *diachronic* work with a successive determinate extension plan
- RDA no longer treats “multipart monograph” as a mode of issuance
  - Extension plan: successive determinate plan
  - Mode of issuance: multiple unit




# Can you give an example?



- *Encyclopædia Britannica* (3<sup>rd</sup> edition)
- Initially published from 1788 to 1797 in ca. 300 fascicles
- Volume title pages issued later, all with "1797" as date of publication

# Now it's getting personal...

- ▶  $w_1$  (static work): My dissertation
  - ▶  $e_1$  Typescript (with diskettes in pocket)
  - ▶  $e_2$  Typescript (without diskettes or pocket)
    - ▶  $m_1$  Microfilm
    - ▶  $m_{2+}$  Publish-on-demand from microfilm (several size and binding options)
    - ▶  $m_3$  Digitized microfilm (ProQuest online products)
- ▶  $w_2$  (diachronic work): My dissertation, slightly abridged and published under what I thought was a catchier title in the vain hope of attracting a wider audience (or indeed any audience at all)
  - ▶  $W_{2.1-2.2}$  Contributions to 2 successive issues of *Cataloging & Classification Quarterly*



How do I now bring together works that RDA might formerly have considered expressions of a single work?

- ▶ RDA permits closely related works to be treated as **work groups**
- ▶ Descriptions of these works might be brought together by recording an **appellation of work group** (assigned from a vocabulary encoding scheme) as part of the description of each work

# For example, *The Economist*



- ▶ Authorized access point for work group:  
**Economist (London, England : 1843)**
  - ▶ Drawn from LCNAF vocabulary encoding scheme (VES)
  - ▶ LCCN: no2019022928  
<http://id.loc.gov/authorities/names/no2019022928>
- ▶ Identifier for work group: **0013-0613**
  - ▶ Drawn from ISSN-L vocabulary encoding scheme (VES)
- ▶ IRI:  
<https://www.wikidata.org/wiki/Q180089>

# For example, *Encyclopædia Britannica*



- Authorized access point for work group:

## **Encyclopaedia Britannica**

- Drawn from LCNAF vocabulary encoding scheme (VES)
- LCCN: nr89013909  
<http://id.loc.gov/authorities/names/nr89013909>
- IRI:  
<https://www.wikidata.org/wiki/Q455>



# The future: relationships?

- ▶ Historically, we used uniform titles to bring together expressions and manifestations of works in the context of an alphabetical catalog. This has created a sizeable store of legacy data predicated on this mechanism for collocation
- ▶ Prospectively, appellations of work groups may serve this purpose (though the underlying semantics may be a bit messy)
- ▶ In a linked data environment, however, relationship matrices may increasingly serve this purpose:
  - ▶ **Work A** *transformation by extension plan of* **Work B**



## The present: pragmatic question (MARC / BIBFRAME)

- How will one identify an RDA **authorized access point for work group** (identifying the members of a work group) in MARC or BIBFRAME?
- Part of the larger question of mapping from RDA to MARC and/or BIBFRAME and vice versa
- Currently we map in our heads, which is not really a satisfactory Linked Data solution



# Fin

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