KOHACON23 – HELSINKI

UNIMARC and LRM transition

Paul POULAIN
BibLibre
Licence CC:BY-SA

KOHACON23 – UNIMARC HISTORY
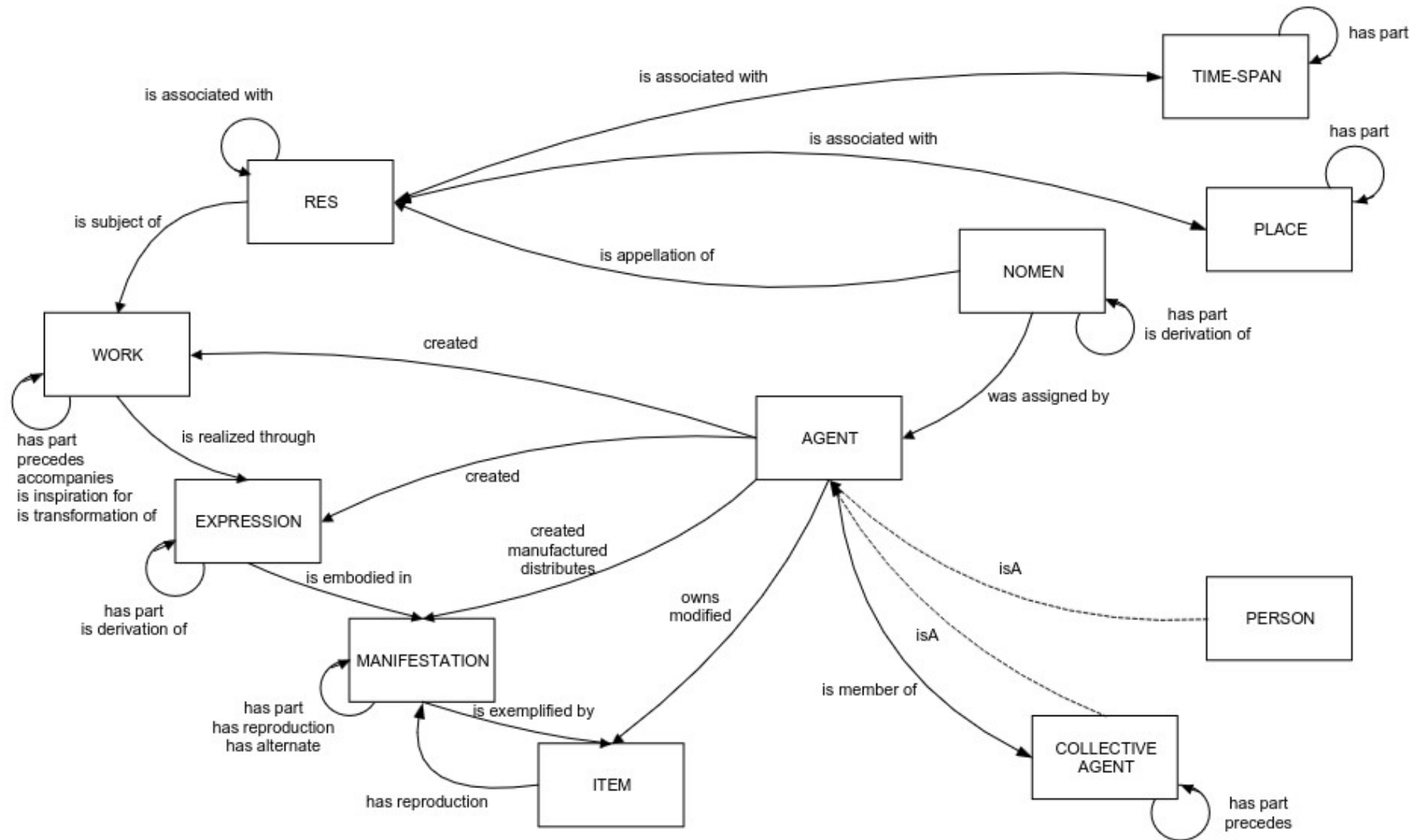
> (very) Quick history :

>> Format created in 1977

>> Developed and maintained by IFLA

>> Evolutions by PUC (Permanent Unimarc Committee)

>>> In the last years, evolutions proposed only by CfU (Comité Français de l'Unimarc)

> UNIMARC is used in France, by 95 % of the libraries

KOHACON23 – UNIMARC HISTORY

- Technically : MARC

  - Leader

  - Fields

  - Subfields

- Semantically : not a declination of MARC21

  - Organization is 99 % different (exception: 856)

    - Title is in 200$a, authors are in 7XX

- Another big difference:

  - links (bib <> auth and bib<>bib) contain a $3 field including the auth/bib number.

KOHACON23 – UNIMARC > LRM

> How to move from Unimarc to LRM ?

>> Marc bibliographic records "splitted" in Work, Expression, Manifestation, Item (WEMI)

>>> Goal: identify the work / expression / manifestation in a MARC bibliographic record

>> Marc authorities transformed in Nomen, Agent, Place, Time-span

>>

KOHACON23 – UNIMARC > LRM

➤ How to move from Unimarc to LRM ?

➤ Easy decisions for Authorities: extend them, link them using $3 in links

➤ Biblios

➤ Example:

```
101 0. $a fre
102 .. $a FR
105 .. $a ||||z 00|||
106 .. $a r
181 .0 $6 01 $a i $b xxxe
181 .. $6 02 $c txt $2 rdacontent
182 .0 $6 01 $a n
182 .. $6 02 $c n $2 rdamedia
200 1. $a Notre-Dame de Paris $b Texte imprimé $f Victor Hugo
210 .. $a [Paris] $c Librairie générale française $d 1973 $e Paris $g impr. Crété
215 .. $a 1 vol. (443 p.) $d 22 cm
225 |. $a Les Chefs-d'œuvre des lettres
300 .. $a Rel
410 .0 $0 34266307 $t Chefs-d'œuvre des lettres $v 21
500 11 $3 11967596 $a Notre-Dame de Paris $m français $2 lien automatique
700 .| $3 11907966 $o ISNI0000000121200982 $a Hugo $b Victor $4 070
```

language

title

support

edition

size

author

KOHACON23 – UNIMARC > LRM

> **How to identify W / E / M / I ?**

  > Title and author => Work

  > Langage => Expression

  > Support, edition, size => Manifestation

  > (no Item in my example)

> **What kind of record must/can/should we create ?**

> **French lesson :**

  > Work = Oeuvre

  > Expression and Manifestation = French words

  > Item = we use the term Item even if it's not French

  > OEMI = WEMI

KOHACON23 – UNIMARC > LRM

➤ What's happening in France :

   ➤ 2 major institutions:

      ➤ BNF (National Library)

      ➤ SUDOC (national catalogue of academic libraries)

   ➤ A working group, and a website:

      ➤ Www.transition-bibliographique.fr

      ➤ CfU is a part of the process

A la une de la Transition bibliographique

Un datathon autour de données LRMisées, le 30 novembre 2023
28/07/2023

Décision du CSB du 28 juin 2023 : report du projet FNE
07/07/2023

KOHACON23 – UNIMARC > LRM

> **Some decision already taken**

> > Work and Expression will be authorities

> > Manifestation will be bibliographic records

> > Link records using new fields

> > > Create a "UNIMARC-ER" (Entity-Relation) flavor / declination of UNIMARC

Zones Unimarc B	Catalogage historiq	œuvre	expression	Manifestation	Item
182 – Zone de données codées : Type de médiation (2016)	h		e		
183 – Zone de données codées : Type de support (2019)	h			m	
200 – Titre et mention de responsabilité (mise à jour 2019)	h			m	
203 – Forme du contenu et type de médiation (mise à jour Ifla 2016)	h			m	
205 – Mention d'édition (2010)	h		e	m	
206 – Zone particulière à certains types de ressources : Ressources cartographiques – Données mathématiques (2019)	h		e	m	
207 – Zone particulière à certains types de ressources : Ressources continues – Numérotation (2010)	h			m	
208 – Zone particulière à certains types de ressources : Musique notée – Présentation musicale (2010)	h			m	
210 – Publication, production, diffusion, etc. (mises à jour Ifla 2012 et 2019)	h			m	
211 – Date de publication prévue (2011)					

Zones Unimarc B	Catalogage historiq	œuvre	expression	Manifestation	Item
182 – Zone de données codées : Type de médiation (2016)	h		e		
183 – Zone de données codées : Type de support (2019)	h			m	
200 – Titre et mention de responsabilité (mise à jour 2019)	h			m	
203 – Forme du contenu et type de médiation (mise à jour Ifla 2016)	h			m	
205 – Mention d'édition (2010)	h		e	m	
206 – Zone particulière à certains types de ressources : Ressources cartogra... es – Données mathématiques (2019)	h		e	m	
207 – Zone particulière à certains types de ressources : Ressources c... Numérotation (2010)	h			m	
208 – Zone particulière à certains types de ressources : Musiqu... entation musicale (2010)	h			m	
210 – Publication, production, diffusion, etc. (mises à jour ...)	h			m	
211 – Date de publication prévue (2011)					

200 field is an "historical" field

200 field still used in UNIMARC-ER. It contains the title of the manifestation

10

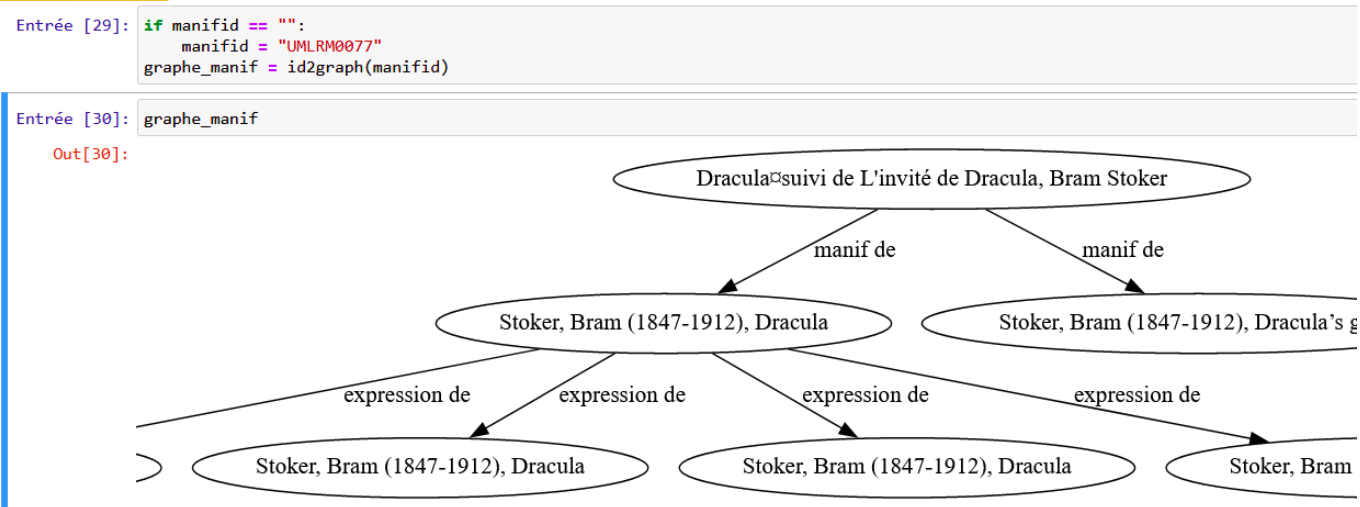| Zones Unimarc B	Catalogage historiq	œuvre	expression	Manifestation	Item
500 – Titre uniforme (mise à jour Ifla 2012)	h				
501 – Rubrique de classement (2011)	h				
503 – Titre de forme (2010)	h				
506 – Point d'accès autorisé – Identification d'une œuvre (mise à jour Ifla 2012)				m	
507 – Point d'accès autorisé – Identification d'une expression (mise à jour Ifla 2012)				m	
510 – Titre parallèle (mise à jour Ifla 2018)	h			m	

506 field link
to the Work

507 field link to
the Expression

KOHACON23 – UNIMARC > LRM

- ❯ Data sample :
  - ❯ https://zenodo.org/record/7358799#.Y4R-bt_jJPY
- ❯ 340 MARC records, related to vampire and dracula

```
Entrée [29]:   if manifid == "":
                   manifid = "UMLRM0077"
               graphe_manif = id2graph(manifid)

Entrée [30]:   graphe_manif
    Out[30]:
```

KOHACON23 – UNIMARC > LRM

```
total 452
-rw-rw-r-- 1 paul paul 205258 nov.  23  2022 UMA_Autres_Entites_Liees.mrc
-rw-rw-r-- 1 paul paul 167836 nov.  23  2022 UMA_Oeuvres_Expressions.mrc
-rw-rw-r-- 1 paul paul  65249 nov.  23  2022 UMB_Manifestations.mrc
-rw-rw-r-- 1 paul paul  18739 nov.  23  2022 UMH_Items.mrc
```

Nomen, places, …

A = authority
B = biblio
H = holding

Manifestation

```
01281ngm#a2200277#i#450#
001 UMLRM0003
071 41 $a DVD103 $b RDM vidéo
073  0 $a 3125127221033
100    $a 20220924d2012####x##y0frey50######ba
102    $a FR
115    $a c###aaizxuxz###bkxxc
181  0 $6 01 $a b $b xa2ea#
181    $6 02 $c tdi $2 rdacontent
182  0 $6 01 $a g
182    $6 02 $c v $2 rdamedia
200 1  $a Nosferatu $f Réalisation Friedrich W. Murnau $g d'après le roman "Dracula" de Bram Stoker $g scénario et adaptation Henri
k Galeen $g avec Max Schreck, Greta Schroeder, Gustav von Wangenheim... [et autres]
214  0 $a [Sannois] $c RDM vidéo $d [DL 2012]
214  2 $a [Sannois] $c RDM vidéo
214  4 $d 2011
215    $a 1 DVD vidéo $c monoface simple couche, 4/3, 24 im./s, PAL, toutes zones
225 2  $a Les trésors du cinéma
327 2  $a Contient aussi : Biographie et filmographie du réalisateur. Fiche technique
410  0 $0 FRBNF42648324 $t Les Trésors du cinéma $x 2259-4388 $d 2012
451  1 $0 UMLRM0176 $t Les grands classiques du cinéma allemand $c [Sannois] $n RDM vidéo $d [DL 2013] $p 7 DVD vidéo
507 1  $3 ULRM0002 $7 ba0yba0y $8 freger $a Nosferatu, eine Symphonie des Grauens $c film $l Version restaurée $w 60mn $o 1995 $m F
rançais
801  0 $a FR $b FR-751131015 $c 20220924 $g RDA-FR $h FRBNF42632683000000X
```

Link to the Expression

KOHACON23 – UNIMARC > LRM

Manifestation

```
451   1  $0 UMLRM0176 $t Les grands classiques du cinéma allemand $c [Sannois] $n RDM Vidéo $d [DL 2013] $p 7 DVD Vidéo
507 1  $3 ULRM0002 $7 ba0yba0y $8 freger $a Nosferatu, eine Symphonie des Grauens $c film $l Version restaurée $w 60mn $o 1995 $m Français
801   0 $a FR $b FR-751131015 $c 20220924 $g RDA-FR $h FRBNF42632683000000X
```

Expression

```
01357nx##a2200253x##450#
001 UMLRM0002
100     $a 20220924afrey0103\\\\ba0
101 1  $a fre $c ger
102     $a FR
104     $a d1995#####
105     $a ba
127     $a 010000
145     $a b $b xa2ea#
145     $a tdi $b rdacontent
147     $a a $e d $h a
152     $a RDA-FR
154     $a xb
232     $3 ULRM0001 $7 ba0yba0y $8 freger $a Nosferatu, eine Symphonie des Grauens $c film $l Version restaurée $w 60mn $o 1995 $
rançais
371     $f Film muet avec intertitres en français $f Version restaurée, restauration de 1995 : 60 min (24 im./s), musique de Gale
a Moravioff
502  1 $3 FRBNF14122771 $7 ba0yba0y $8 fre### $o ISNI 0000 0000 0886 412X $a Moravioff $b Galeshka $4 230
532     $5 xxq $3 UMLRM0175 $7 ba0yba0y $8 frefre $a Les grands classiques du cinéma allemand $k RDM vidéo $m Anglais, allemand,
nçais ; sous-titrage en français $n Image animée
640 5  $0 Date de restauration $f #1995#####
810     $a Nosferatu / réalisation Friedrich W. Murnau ; d'après le roman "Dracula" de Bram Stoker ; scénario et adaptation Henri
aleen ; avec Max Schreck, Greta Schroeder, Gustav von Wangenheim... [et autres]. - [Sannois] : RDM vidéo [éditeur, distributeur]
DL 2012]. - [Image animée : (video)
810     $a Wikipédia : https://fr.wikipedia.org/wiki/Nosferatu_le_vampire (2020-12-28) $b Version restaurée
```

KOHACON23 – UNIMARC > LRM

Manifestation

```
451  1 $0 UMLRM0176 $t Les grands classiques du cinema allemand $c [Sannois] $h RDM Video $d [DL 2013] $p 7 DVD Video
507 1  $3 ULRM0002 $7 ba0yba0y $8 freger $a Nosferatu, eine Symphonie des Grauens $c film $l Version restaurée $w 60mn $o 1995 $m Français
rançais
801  0 $a FR $b FR-751131015 $c 20220924 $g RDA-FR $h FRBNF42632683000000X
```

Expression

```
191    $a xb
232    $3 ULRM0001 $7 ba0yba0y $8 freger $a Nosferatu, eine Symphonie des Grauens $c film $l Version restaurée $w 60mn $o 1995 $
rançais
371    $f Film muet avec intertitres en français $f Version restaurée, restauration de 1995 ; 60 min (24 im./s), musique de Ga...
```

Work

```
04287nx##a220 565###450#
001 UMLRM0001
033    $a https://data.bnf.fr/ark:/12148/cb11943761j $2 data.bnf.fr
033    $a https://www.wikidata.org/wiki/Q151895 $2 Wikidata
052    $a 0000-0000-4EBA-0000-H-0000-0000-N
100    $a 20220924afrey50######ba0
101 0  $a ger
102    $a DE
104    $a d1922#####
125 00 $a m
127 0  $a 013400
140    $a ic $b fffa $2 BnF-GenreFilm
145 0  $a b $b #a2ea#
145 0  $a tdi $b rdacontent
147 0  $a a $e a
152    $a RDA-FR
154    $a xa
231    $7 ba0yba0y $8 freger $t Nosferatu, eine Symphonie des Grauens $c film
```

KOHACON23 – UNIMARC > LRM

> Next steps:

> > BNF and ABES are working on tools to automatically create WEMI MARC records from current MARC record

> > > Long process, several iterations

> > > No planning (that I know)

> > Defining the final format (bibframe ? UNIMARC-ER ?)

> > > Work in Progress

> > > Different constraints for BNF and ABES

> > > > BNF has catalogers

> > > > ABES relies on libraries to catalog

KOHACON23 – NEXT STEP ?

> Which opportunities for Koha ?

>> Store UNIMARC-ER

>> Take profit of UNIMARC-ER in search

>> Long term: new tool to catalog

KOHACON23 – STORE

> Storing UNIMARC-ER means:

  > Having authorities types for Works and Expression

  > Adding new fields

> Good news:

  > the code is already able to handle that !

  > We just need to create authorities and update frameworks

> But that's the smallest step, more to work on...

KOHACON23 – SEARCH

❯ Changing the search

  ❯ How to improve the search module to improve user experience

    ❯ 1st goal: do not bother user with WEMI vocabulary and concepts ;)

    ❯ 2nd goal: that would be a pity to show that we have a given book, know in the database that we have it in another "form", and not showing that to the user, he may be interested. Or not !

  ❯ So ...

> ### Changing the search

>> #### User search "Harry potter and the phenix order"

>> #### Should we show:

Work

Harry Potter and the phenix order
We have it
- As a book, 1997, translated by John Doe, 250 pages, 30cm
- As a book, 2001, translated by John Doe, 280 pages, 15cm
- As a book, 2010, translated by Jean Martin, 300 pages, 35cm
- As a read book, 2004, read by Sophie Dupont, 4 hours

Expression/Manifestation

OR
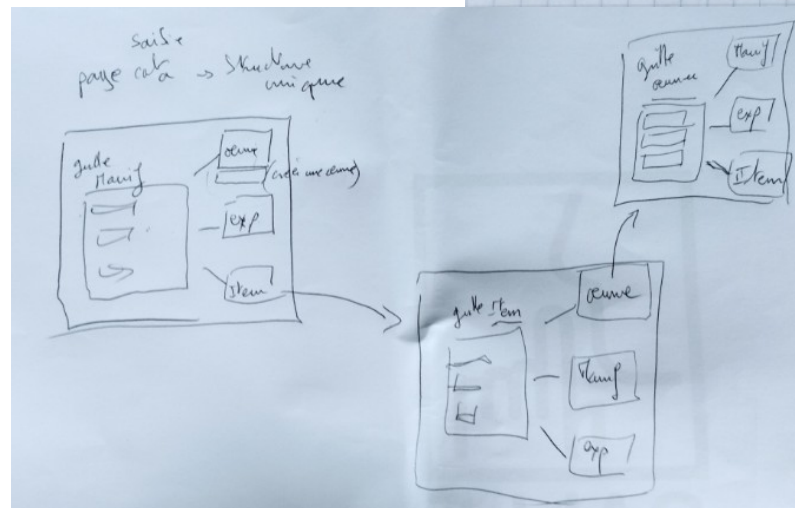
Harry Potter and the phenix order
We have it as a Book
- 1997, translated by John Doe, 250 pages, 30cm
- 2010, translated by Jean Martin, 300 pages, 35cm

We have it as a Read book
- 2004, read by Sophie Dupont, 4 hours

Work

OR

Harry Potter and the phenix order
We have it
- Translated by John Doe,
  - Book, 1997, 250 pages, 30cm
  - Book, 2001, 280 pages, 15cm
- Translated by Jean Martin,
  - Book, 2010, 300 pages, 35cm
  - read book, 2004, read by Sophie Dupont, 4 hours

Expression

Manifestation

KOHACON23 – SEARCH

❯ What about facets ?

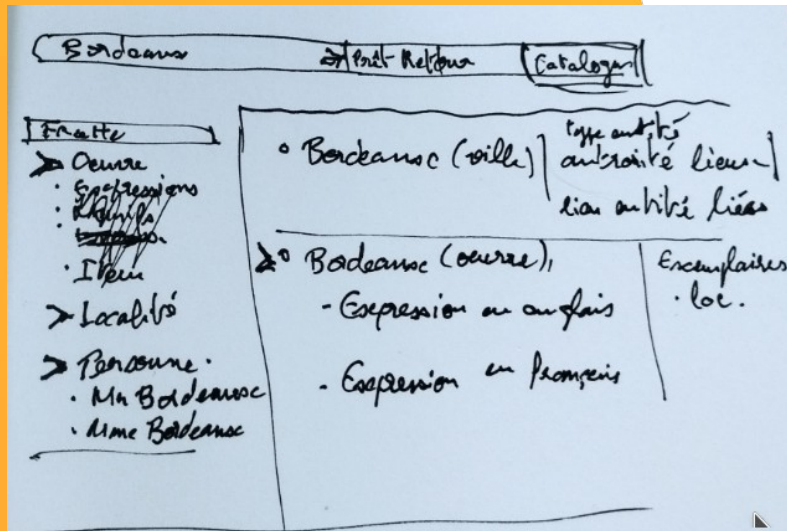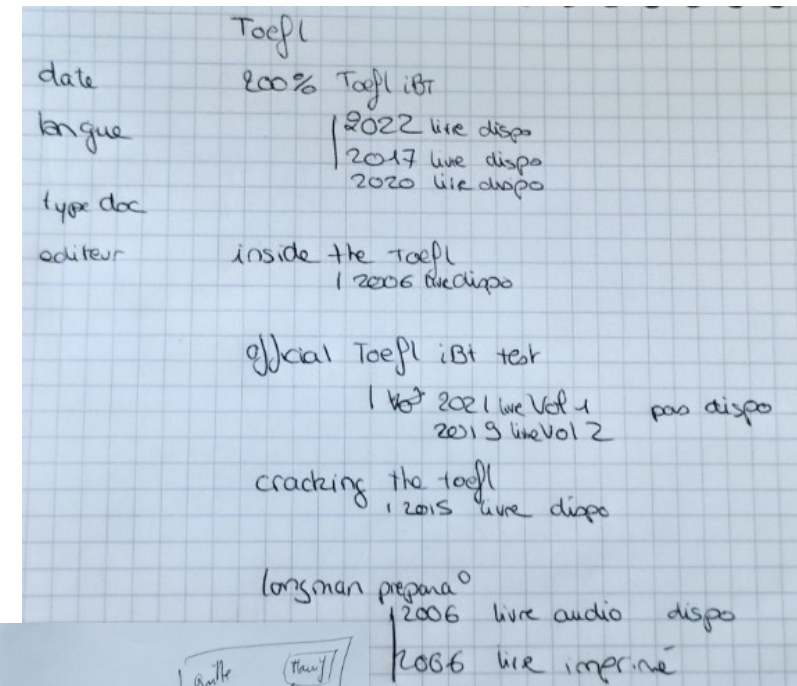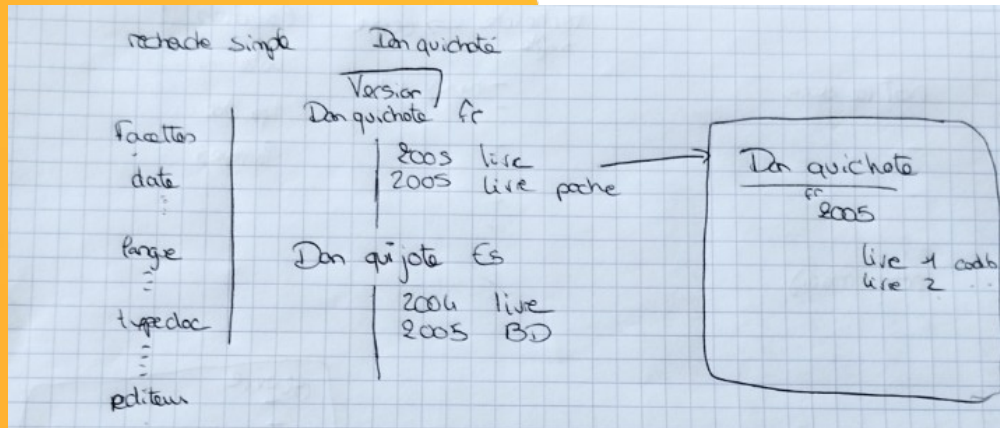|	
Date Language Format Support Editor	**Harry Potter and the phenix order** **We have it** • As a book, 1997, translated by John Doe, 250 pages, 30cm • As a book, 2010, translated by Jean Martin, 300 pages, 35cm • As a read book, 2004, read by Sophie Dupont, 4 hours

> BibLibre (internal) workshops

KOHACON23 – CATALOGING

❯ Very long term plan !

❯ Should we catalogate from W to M or from M to W ?

> From W to M:

> New record > search/create a work > search/create an expression > search/create a manifestation

> From M to W:

> New record > show an empty manifestation > link an expression > link a work

KOHACON23 – CATALOGING

> If we continue using UNIMARC–ER:

> Currently M to W:

> Koha > cataloging > new => a manifestation

> In the cataloging module, field 507 has the small icon to open authority search

> Link the authority expression

> What about W to M ?

> It has to be discussed with users

KOHACON23 – CATALOGING

> If we switch to bibframe

>> Write a completely new cataloging module

>> Database structure:

>>> We currently support only MARC

>>> BUT biblio_metadata contains **format**, **schema** and **metadata** field that can store anything

>>> In Koha, very frequently used data (title, publisher, publicationdate,...) are "decoded" from MARC and stored in "generic" fields (biblio.title). We could add a RDA/bibframe "decoder". Other module would work without change

> **Cataloging module:**

>> Must be written from scratch (hint: the BNF is writing such a module)

>> A HUGE work.

KOHACON23 – CATALOGING

> And MARC21 ?

>> Work & Expression will be bibliographic records

>>> Will be tricky to keep UNIMARC and MARC21 at the same level in Koha !

>>> This is a real challenge for Koha. Other ILS in France:

>>>> Are local => support UNIMARC only

>>>> Are international => support MARC21, with an additional quick (and sometimes dirty) UNIMARC layer

Bibliography

> https://www.transition-bibliographique.fr

> http://www.rda-rsc.org/sites/all/files/Lecomte_RDA%20and%20UNIMARC.pdf

> https://www.ifla.org/wp-content/uploads/2019/05/assets/cataloguing/frbr-lrm/ifla-lrm-august-2017_rev201712.pdf

> https://www.bnf.fr/fr/actualites-du-catalogue-no-56-juillet-2023

Credits:

> Sample UNIMARC-ER:
https://zenodo.org/record/7358799#.Y4R-bt_jJPY

> Etienne Cavalié (Lully) for his great work on the data sample

> https://bibliotheques.wordpress.com/2022/12/07/340-notices-en-unimarc-lrm-1-presentation-du-jeu-de-donnees-et-des-classes-dobjets/

Thank you !