

Punctuation Without the Pain

Leveraging Leader/18 in Koha for Cleaner Records

Alexander Wagner Mark
Hofstetter
Karlsruhe, 2026-10-26

HELMHOLTZ

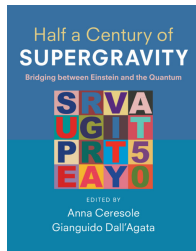


Overview



- > The Role of Punctuation in Cataloguing
- > Manual vs. Automated Approaches
- > Leveraging Ldr/18 in  Koha

Punctuation for Pedestrians



Half a century of supergravity : bridging between Einstein and the quantum / edited by Anna Ceresole, Gianguido Dall'Agata
Cambridge, United Kingdom : Cambridge University Press, 2026

Usage

Demarcate and provide context for **display**



Back to the Future: Punctuation Edition

> 2017: Migration from Aleph to **JOIN²**-Invenio

- Stripped punctuation: **automatic display**
- Celebrated: **Finally, clean data!**

> 2027: Migration to **Koha**

- Set Ldr/18 = c: display broken
- Advise: **"Just add punctuation during migration!"**



By Kilyann Le Hen - Own work, CC BY-SA 4.0
<https://commons.wikimedia.org/w/index.php?curid=136291182>

> **The Paradox:**

- 1970s: ISBD rules for **card catalogs**
- 2017: Data-first, clean imports/exports
- 2027: Add punctuation manually for **readability**
- German union catalogues: **no punctuation** → we decorate



Issues with Punctuation

- > Complex rules prone to error
 - > Driven by **display** (ISBD)
 - > Useless from a **data** point of view
 - ⇒ data needs cleaning (e. g. for exports)
- 1 Punctuation **does** follow rules
 - 2 Computers **are** good at applying rules

Why not...

...make the **computer** implement the rules for the vast majority of **standard records** and leave only **complex cases** to skilled **cataloguers**?

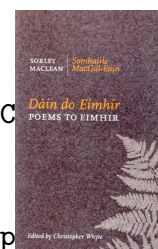


Display-driven Cataloguing

Manual Punctuation

```
000 .....a.....
245 10 |a Dàin do Eimhir =
      |b Poems to Eimhir /
      |c Somhairle MacGill-Eain = Sorley MacLean ; edited by Christopher Whyte.

245 10 |a Dàin do Eimhir /
      |c Somhairle MacGill-Eain =
      |b Poems to Eimhir / Sorley MacLean ; edited by Christopher Whyte.
```



Complex cases like this are hard to handle automatically.

Leave it to the experts and **set Ldr/18 to a.**

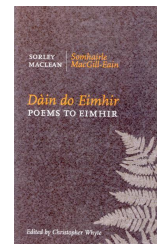


Data-driven Cataloguing

Automatic Punctuation

Same example from K10plus:

```
000 .....C.....
245 10 |a Dàin do Eimhir
      |b = Poems to Eimhir
      |c Somhairle MacGill-Eain. Ed. by Christopher Whyte
100 1 |a MacGill-Eain, Somhairle
      |d 1911-1996
      |0 (DE-588)118839136
```



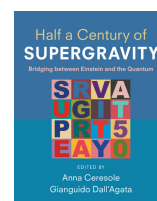
- > Authority record resolves name transliteration to English (Somhairle → Sorley, MacGill-Eain → MacLean)
- > Punctuation for display: automatic
- > Cataloguing rules: RAK



Data-driven Cataloguing in Practice

RDA record from K10plus

```
000 .....C.....
245 10 |a Half a century of supergravity
      |b bridging between Einstein and the quantum
      |c edited by Anna Ceresole, Gianguido Dall'Agata
260 |a Cambridge, United Kingdom
      |b Cambridge University Press
      |c 2026
```



Almost all our records!

Should we really invest time in adding punctuation manually?

For all fields...

Leave it to the computer the Ldr/18 is already set to c.

Make  Koha do it!



Recommendations for Punctuation in Records

- 1 RDA (2010) recommends omission
- 2 PCC: *Guidelines for Minimally Punctuated MARC* (2020) (e. g. *Best Practices*¹)
- 3 Library of Congress (2020) opts for punctuation-light MARC (*Modern MARC*¹)
- 4 Use Ldr/18 (enables records to *know* if they hold punctuation)

Minimal ISBD punctuation [at LoC]

In line with [...] PCC policies [...] records will continue to retain full ISBD punctuation in only the 245 and 264 fields, partial ISBD punctuation in 250 and 490, but will have minimal ISBD punctuation in other parts [...] Ldr/18 will be coded "i"



German Union Catalogues

- > storage format may not be MARC21
- > no punctuation in MARC21 exports
- > Ldr/18 coded "c"



¹ Links will break over time.

Has anyone in the library world ever heard about this new concept called *Repositories* to publish stuff with so-called *persistent IDs*? Brand new stuff, they only came about some 25 years ago — 10 years after some physicist started a thing called arXiv in 1991. They seem to be related to this "Open Access" stuff some people talk about.

Still, probably worth a look if time allows...



Ldr/18: How Koha Should Handle It

- > #: Non-ISBD
- > u: unknown
- > a: AACR 2
- > i: ISBD punctuation included (PCC: also set if final punctuation is omitted)
- > c: ISBD punctuation omitted (PCC: set if final and medial punctuation is omitted)
- > n: Non-ISBD punctuation omitted

Koha should improve standard compliance by

- > adding punctuation automatically if required: Ldr/18 = c | n
- > displaying the record as *is*: Ldr/18 = a | i, but also for # | u
(Note: PCC/LoC semantics for i is ambiguous; some punctuation may be missing if not added automatically.)
- > stop silently forcing punctuation in some fields
(XSLT function chopPunctuation; cf. Bug 21303, Bug 40300)



The Solution: isbd4marc-punctuation

- > Implements **all recommendations** of the *Revised Final Report PCC ISBD and MARC Task Group*
- > Covers **all examples** as tests
- > adds a `MarcFilter()` to inject punctuation dynamically
- > acts only on records with `Ldr/18 = c|n`
- > requires  **Koha** 25.11.05 or later (or Bug 40972)



Download



<https://github.com/HKS3/koha-isbd4marc-punctuation>

(or install in  **Koha** Admin interface)



Handling Ldr/18 with isbd4marc-punctuation

RDA Record with `Ldr/18 = c`,
vanilla  **Koha**:

Half a century of supergravity bridging between Einstein and the quantum
by Ceresole, Anna, 1961- [HerausgeberIn] | Dall'Agata, Gianguido [HerausgeberIn]
Language: English
Publisher: Cambridge, United Kingdom Cambridge University Press 2026

⇓
`MarcFilter()`
⇓

Half a century of supergravity : bridging between Einstein and the quantum
by Ceresole, Anna, 1961- [HerausgeberIn] | Dall'Agata, Gianguido [HerausgeberIn]
Language: English
Publisher: Cambridge, United Kingdom : Cambridge University Press, 2026

- > Inject punctuation **on-the-fly**
- > **Before** XSLT rendering

Downstream, the record holds
full punctuation, exactly as
 **Koha** silently assumes.



Thank you!

Contact

Deutsches Elektronen-
Synchrotron DESY

www.desy.de

Alexander Wagner
 0000–0001–9846–5516
Central Library
alexander.wagner@desy.de
+49–40–8998–1758
[10.3204/PUBDB-2026-02834](https://doi.org/10.3204/PUBDB-2026-02834)



Typeset by lua^AT_EX

