



Antonio Rojas Castro

Ediarum in Spanish. Challenges in Software Localization

DARIAH Annual Event 2021, September 7-9

Persistent Identifier: [urn:nbn:de:kobv:b4-opus4-37727](https://nbn-resolving.org/urn:nbn:de:kobv:b4-opus4-37727)

Die vorliegende Datei wird Ihnen von der Berlin-Brandenburgischen Akademie der Wissenschaften unter einer Creative Commons Namensnennung 4.0 International Lizenz zur Verfügung gestellt.





Ediarum in Spanish. Challenges in Software Localization

Dr. Antonio Rojas Castro

Berlin-Brandenburgische Akademie der
Wissenschaften / Universidad Internacional
de la Rioja



Globalization, Internationalization, Localization, Translation (GILT process)

- **Globalization** (g11n) = organization of business processes (management, marketing, consumer care) to support internationalization and localization
- **Internationalization** (i18n) = development stages of a digital product to ensure that it will function internationally
- **Localization** (L10n) = adaptation of the product to the target locale by combining a sociocultural region (normally a country) and a language → includes translation

Source: Munday (2016)

Proyecto Humboldt Digital

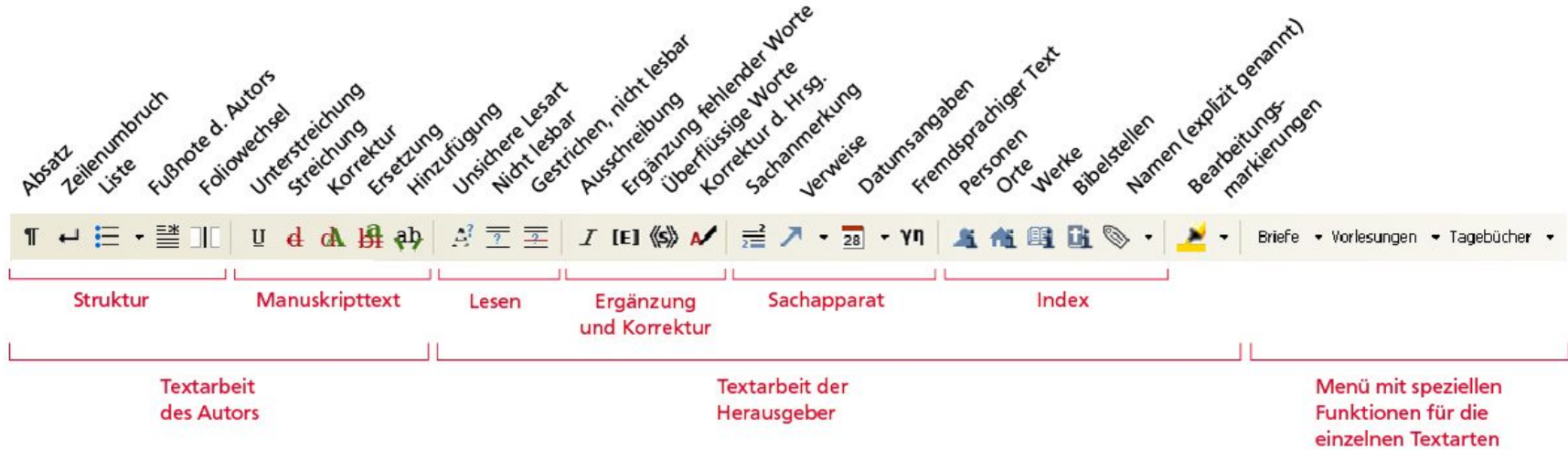
- It is a German-Cuban cooperation project involving two main institutions: the Berlin Academy of Sciences and Humanities (BBAW, Germany) and the Office of the Historian of the City of Havana (OHCH, Cuba).
- Funded by the German Foreign Office, Fritz Thyssen Foundation and Gerda Henkel Foundation.
- Main goals:
 - Implement a common workflow for digitising and editing texts.
 - Publish online a collection of TEI encoded documents related to Alexander von Humboldt's trip to Cuba and its reception (1800-1830).

What is ediarum?

“The goal was to create a software solution that was not just generally suitable for the research project, but customized to increase the user-friendliness of the work environment despite the complexity behind a critical edition. Besides the creation of multiple TEI P5-compatible schemata, the functions and toolbar of the Oxygen XML Author were also configured and supplemented with additional custom functions” (Dumont & Fechner, 2014: 4-5).

- Digital environment for editing and encoding TEI documents, storing, indexing, querying, collaborating and transforming for publication
 - Open source XML database (eXistDB) + commercial XML editor (Oxygen XML Author) + formatting language for print output (ConTeXt)
 - Developed by TELOTA in the Berlin-Brandenburgische Akademie der Wissenschaften (Germany) since 2013
-

ediarum.BASE.edit's toolbar by default



The problem with ediarum is...

that the interface is only available in German by default.

“What is holding back ediarum in its current state, is the lack of an English language interface for the default configuration and the lack of documentation for the two main modules. Non-German language projects [...] if they choose to adopt the more developed frameworks, will have to provide their own translations. [...] Such further development would make this ‘toolbox’ even more versatile and accessible.” (Mertgens, 2018).

Internationalizing the code

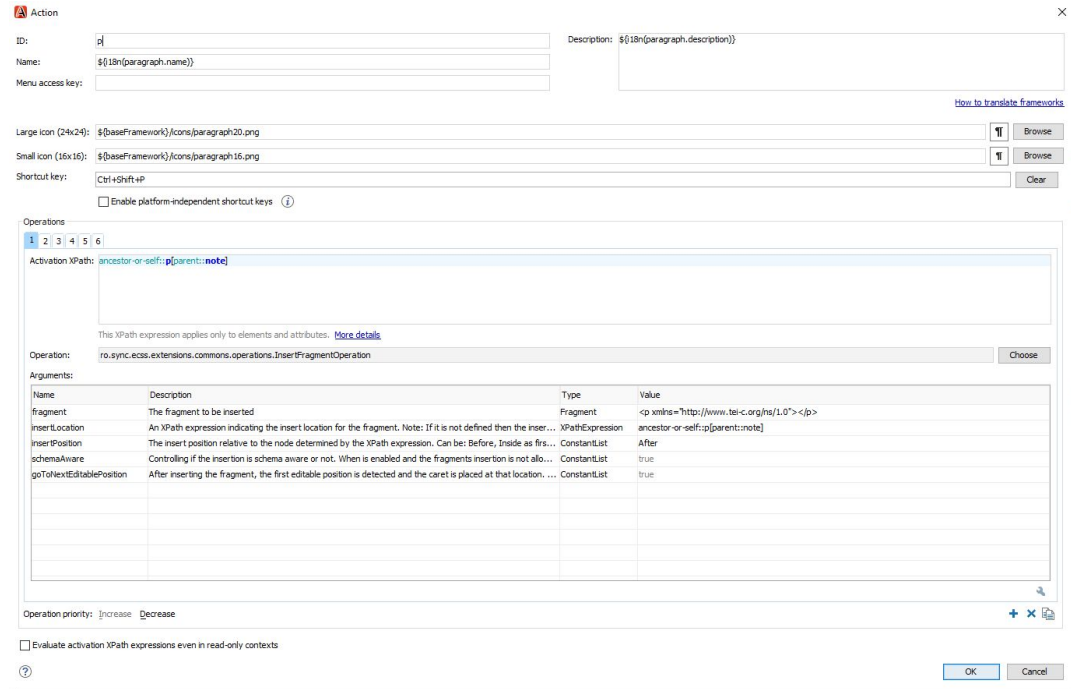
- Creation of resource files to store content that may require cultural and linguistic modification.
- In ediarum.BASE.edit, this means creating a i18n folder and a document called "translation.xml".

Name	Status	Änderungsdatum	Typ	Größe
css		17.06.2021 14:58	Dateiordner	
fonts		17.06.2021 14:58	Dateiordner	
i18n		17.06.2021 14:58	Dateiordner	
resources		17.06.2021 14:58	Dateiordner	
schemata		30.06.2021 13:51	Dateiordner	
templates		17.06.2021 14:58	Dateiordner	
attributes		10.05.2021 10:18	PNG-Datei	49 KB
ediarum.prohd.edit		01.09.2021 11:52	FRAMEWORK-Datei	1.034 KB
language_settings		10.05.2021 10:18	PNG-Datei	61 KB
PROHD		10.05.2021 10:18	oxygen XML proje...	3 KB
README		10.05.2021 10:18	Markdown File	7 KB

```
translation.xml x
translation key
19 <key value="hi[underline].name">
20   <val lang="de_DE">Unterstrichen</val>
21   <val lang="es_ES">Subrayado</val>
22 </key>
23 <key value="hi[underline].description">
24   <val lang="de_DE">Unterstrichene Textstelle</val>
25   <val lang="es_ES">Pasaje de texto subrayado</val>
26 </key>
27 <key value="paragraph.name">
28   <val lang="de_DE">Neuer Absatz</val>
29   <val lang="es_ES">Nuevo párrafo</val>
30 </key>
31 <key value="paragraph.description">
32   <val lang="de_DE">Neuer Absatz</val>
33   <val lang="es_ES">Nuevo párrafo</val>
34 </key>
35 <key value="item.name">
36   <val lang="de_DE">Listenpunkt einfügen</val>
37   <val lang="es_ES">Insertar un nuevo elemento en la lista</val>
38 </key>
39 <key value="item.description">
40   <val lang="de_DE">Listenpunkt einfügen</val>
41   <val lang="es_ES">Insertar un nuevo elemento en la lista</val>
42 </key>
43 <key value="itemizedlist.name">
44   <val lang="de_DE">Liste einfügen</val>
45   <val lang="es_ES">Insertar lista</val>
46 </key>
47 <key value="itemizedlist.description">
48   <val lang="de_DE">Liste einfügen</val>
49   <val lang="es_ES">Insertar lista</val>
50 </key>
51 <key value="seg.name">
52   <val lang="de_DE">Sachanmerkung einfügen</val>
```

Internationalizing the code

- Separation of translatable text string of the interface from executable code
- In ediarum.BASE. edit, this means giving keys to actions, menu entries, contextual menus, toolbars and static CSS content.
- Action names and descriptions had to be renamed according to “`#{i18n(translation_key)}`”



Localizing strings

- Translation of text taking into account the space constraints of the screen/page.
- Substitution of inappropriate cultural conventions
- At the moment the target locale is es_ES, but this has to be tested with real users and it may evolve into es_CU.

```
<key value="ask.enter_kalliope_uri">
  <val lang="de_DE">Kalliope-URI eingeben</val>
  <val lang="es_ES">Introducir un URI</val>
</key>
```

```
i18n/translation.xml
@@ -1829,11 +1829,11 @@
1829 1829 </key>
1830 1830 <key value="ask.margin_line">
1831 1831 <val lang="de_DE">Am Rand angestrichen</val>
1832 1832 - <val lang="es_ES">Subrayado al margen</val>
1833 1833 + <val lang="es_ES">Marcado al margen</val>
1834 1834 </key>
1835 1835 <key value="ask.kind_of_deletion">
1836 1836 <val lang="de_DE">Art der Streichung</val>
1837 1837 - <val lang="es_ES">Tipo de supresión</val>
1838 1838 + <val lang="es_ES">Tipo de eliminación</val>
1839 1839 </key>
@@ -2257,7 +2257,7 @@
2257 2257 </key>
2258 2258 <key value="ask.enter_authority_uri">
2259 2259 <val lang="de_DE">GND, VIAF etc. (URI) der Person</val>
2260 2260 - <val lang="es_ES">VIAF u otro identificador (URI) de persona</val>
2261 2261 + <val lang="es_ES">VIAF u otro identificador (URI) de persona</val>
2262 2262 </key>
2263 2263 <key value="ask.surname">
2264 2264 <val lang="de_DE">Nachname</val>
```


Results

prohd0014.xml [C:\Users\Rojas-Castro\Documents\prohd\editing\ediciones\prohd0014.xml] - oXygen® XML Author (Academic use only)

File Edit Find Project Options Tools ediarum Document Window Help

XPath 2.0 | Execute XPath on 'Current File'

Metadatos generales | Metadatos de cartas | Símbolos | styles

Rich text editor toolbar with various icons for text formatting and editing.

Project

Project Explorer showing a tree view of files:

- ediciones.xpr
 - ignition.e
 - CITATION.off
 - LICENSE
 - prohd001.xml
 - prohd002.xml
 - prohd003.xml
 - prohd004.xml
 - prohd005.xml
 - prohd006.xml
 - prohd007.xml
 - prohd008.xml
 - prohd009.xml
 - prohd010.xml
 - prohd011.xml
 - prohd012.xml
 - prohd013.xml
 - prohd014.xml
 - prohd015.xml

Outline

Outline showing element name filter and tree view:

- Element name filter
- TEI 'prohd0014'
- tei:header
- text 68

Main editing area showing XML content:

TEI text body div p

Resumen

Carta en la que Francisco de Arango y Parreño comunica a Alexander von Humboldt el envío a través de su primo de unos comentarios al 'Ensayo político sobre esta Isla', y expresa su admiración por el 'filósofo viajero'.

Resumen

Brief, in dem Francisco de Arango y Parreño an Alexander von Humboldt kommuniziert die Übersendung einiger Kommentare zum 'Ensayo político sobre esta Isla' durch seinen Cousin, und drückt seine Bewunderung für den 'reisenden Philosophen' aus.

Categorías

#correspondence
#manuscript

[tr](68.)

Mi muy apreciable ^{ami}amigo y ^sseñor:

encargué a mi primo ^{que} anticipase a ^{V. Usted} mi expresión ^{de} gracias ^{por} el favor ^{que} me hace en su preciosísimo Ensayo sobre esta Isla, y le añadí al propio tiempo ^{que} le ofreciera de mi parte algunas observaciones ^{sob}sobre los principales hechos ^{que} se mientan en la obra. Me la prestaron por desgracia con término muy angustiado, y en esa precipitación, no sé si me habré excedido, o si he dejado de decir todo lo ^{que} podía. De lo ^{que} estoy muy seguro es de mi buena intención, y ^{que} no he tenido otro estímulo ^{para} entender esas notas y enviar esos documentos, ^{que} le de mi eterna amistad y sincera gratitud al filósofo viajero ^{que} ^{adm}admira todas las naciones cultas, y tan de veras estima este en ap.^oapasionado ^{serv}servidor ^{que} ^{sus}sus m.^omanos ^bb. ^bb. ^bb.

Fran.^oFrancisco de Arango

Hav.^aLa Habana 30 de julio de [18]27

P.^oPara Barón von Humboldt

Text Grid Author

Conclusions

- The internationalization of the code requires technical expertise and sometimes collaboration with developers.
- The localization of the strings requires a deep knowledge of the target language, cultural conventions and domain expertise (scholarly editing terminology).
- Internationalizing and localizing software is an iterative process that needs constant testing with real users and further development.
- Oxygen XML Author's (v. 23.0) interface is only available in six languages (Chinese, English, Japanese, German, French and Dutch).

Bibliographic references

- Dumont, Stefan, y Martin Fechner. «Bridging the Gap: Greater Usability for TEI encoding». *Journal of the Text Encoding Initiative*, Issue 8 (28 December 2014). <https://doi.org/10.4000/jtei.1242>.
- Dunne, Keiran J. «Translation, Localization, and Internationalization». In *The Encyclopedia of Applied Linguistics*, edited by Carol A. Chapelle. Oxford, UK: Blackwell Publishing Ltd, 2012. <https://doi.org/10.1002/9781405198431.wbeal1226>.
- Mertgens, Andreas. «Ediarum. A Toolbox for Editors and Developers». *RIDE* 11 (2019). <https://doi.org/10.18716/RIDE.A.11.4>.
- Munday, Jeremy. *Introducing translation studies: theories and applications*. Fourth edition. London; New York: Routledge, 2016.

Related links

- Github: <https://github.com/humboldttdigital>
- TEI Encoding documentation in Spanish:
https://www.ediarum.org/docs/ediarum.BASE.manual_es/
- Digital Repository: <https://prohd.ohc.cu/xmlui/>
- Blog: <https://habanaberlin.hypotheses.org/>
- Twitter: <https://twitter.com/humboldttdigital>

Thank you!

Q & A?

Twitter: @RojasCastroA

Email: antonio.rojas-castro [at] bbaw.de