## INSIGHTS ON SCHOLARLY PRIMITIVES FROM DIGITAL HUMANITIES RESEARCH IN SPAIN

#### CONTEXT AND OBJECTIVES

n order to provide the global community of scholars working in this field with a greater understanding of the current Spanish scenario, LINHD has recently promoted a research on the evolution of Digital Humanities in Spain in the last 25 years, a timeframe comparable with Unsworth first formulation of scholarly primitives.

More than 1,000 records have been mapped, distributed as follow: 577 researchers; 368 projects; 88 resources; 9 post-graduate courses; and 8 specialised journals. Digital resources (i.e. repositories of documents, collections of artefacts, crowdsourcing platforms, dictionaries, databases, etc.), which are the objet of this poster, have been produced, most of the time, with the aim to publish a service to improve the basic of day-to-day research workflow in the Humanities.

#### Our initial objectives were:

- to classify and describe the digital resources mapped according with the classical and new scholarly primitives, in order to highlight presences, absence and recurring associations of these categories;
- To visualize the relationships between scholarly primitives and other dimensions in our data, like discipline and typology.
- to identify how the introduction of digital tools and methods has affected the basic functions of research in the Humanities in Spain over time.

### DATA ANALYSED

|                    | PHILOLOGY | LINGUISTICS | HISTORY | ARCHEOLOGY | ART HISTORY | HERITAGE | MUSICOLOGY | DOCUMENTATION | COMMUNICATION | EDUCATION | TOTALS |
|--------------------|-----------|-------------|---------|------------|-------------|----------|------------|---------------|---------------|-----------|--------|
| DIGITAL<br>LIBRARY | 12        |             |         |            |             |          | 1          | 1             |               |           | 14     |
| DATABASE           | 17        | 2           | 3       | 2          | 1           |          | 1          |               |               |           | 26     |
| REPOSITO-<br>RY    | 3         |             | 2       |            | 1           | 4        |            | 6             |               | 1         | 16     |
| CORPUS             | 1         |             |         |            |             |          |            |               |               |           | 1      |
| CATALOGUE          | 1         | 1           |         | 2          | 1           | 1        |            |               |               |           | 6      |
| CROWD-<br>SOURCING |           |             | 1       | 1          | 1           |          |            |               |               |           | 3      |
| PORTAL             | 4         | 1           | 2       | 1          | 1           | 1        |            | 1             | 1             |           | 12     |
| DICTIONARY         |           | 1           |         |            |             |          |            |               |               |           | 1      |
| MAP                |           |             |         | 1          |             |          | 1          |               | 2             |           | 4      |
| WEB APP            |           | 1           |         |            | 1           |          |            |               |               |           | 2      |
| MOBILE APP         |           |             |         | 2          |             |          |            |               |               |           | 2      |
| TOTALS             | 38        | 6           | 8       | 9          | 6           | 6        | 3          | 8             | 3             | 1         | 88     |

It takes more primitives to build a resource than to use it, as it takes more skills to write a book than to read it. J

# METHODOLOGY RESULTS

o perform this analysis, the digital resources collected in our database has been classified and described according to the following Scholarly Primitives (SP): Unsworth SP (2000): Discovering, Annotating, Comparing, Referring, Sampling,

- Palmers SP (2009): Searching Collecting, reading, Writing, Collaborating, Cross-cutting (Monitoring, Note-Taking, Translating, Data Practices).
- \* Additional SP: Software usage, Software Development (Coding), Data Modelling, Crowdsourcing.

Most of the digital resources analyses have been conceived and developed in the context of research projects; others have been more institutional initiatives. In both cases, we analysed which primitives were involved in the design and development of the resource (i.e. what type of research activities have been necessary to generate them) and then for what scholarly primitives each artefact has been conceived for (i.e. what type of research activity the resource is intended for, how can be exploited).

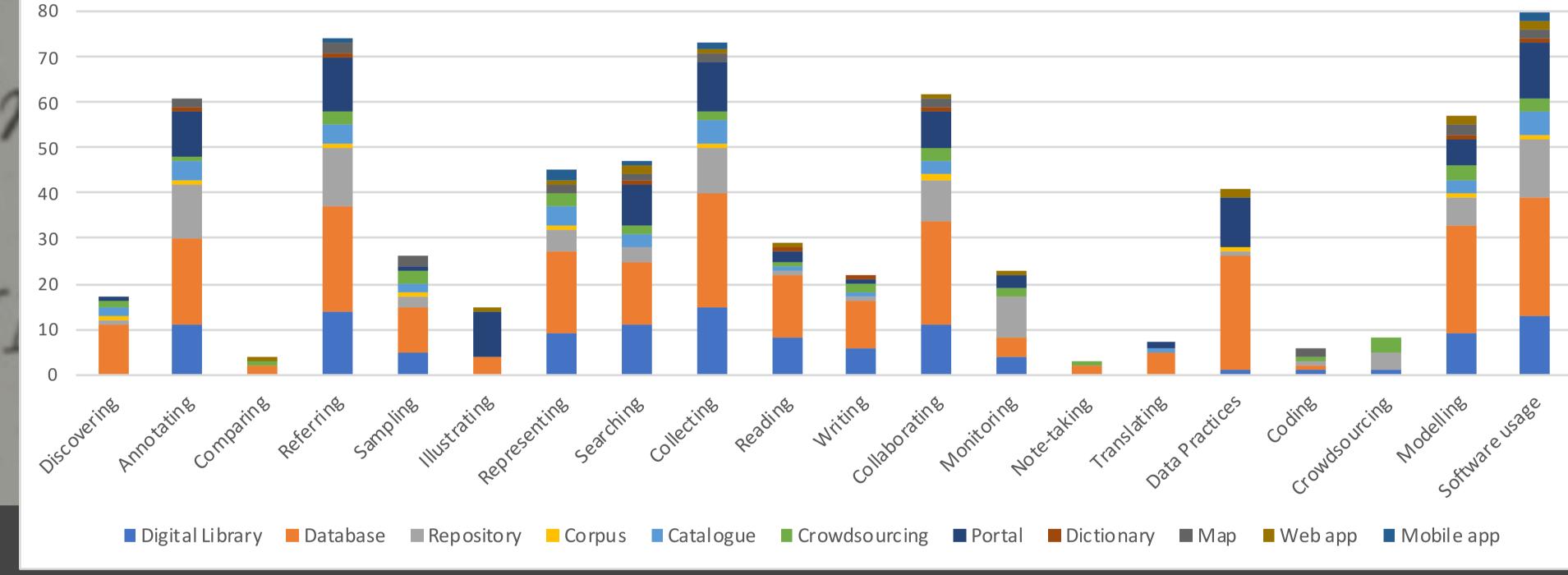
The vast majority of the resources have been classified based on the public evidence, since we can only speculate about the strategies adopted in those projects. Others, where we have been involved in the development phase, have been described based on hands-on evidence.

The methodology process followed has been:

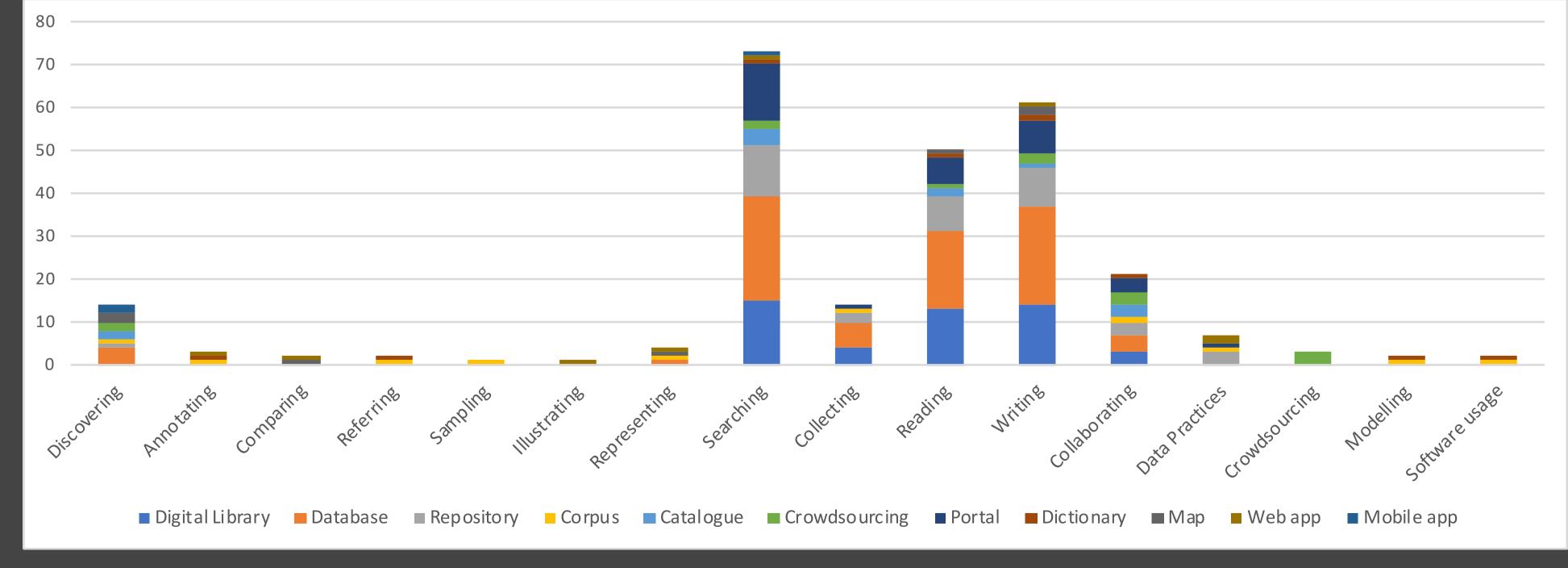
- bibliography review in relation to SP;
- incorporate SP into the database data model, as taxonomies; - cataloging of the digital resources in relation to the list of identified primitives;
- quantification and analysis of the outputs obtained.

### REFERENCES

- TOSCANO M., RABADÁN A., ROS S., GONZÁLEZ-BLANCO E.; Digital Humanities in Spain: historical perspective and current scenario, Profesional de la información, v. 29, n. 6, e290401, 2020, https://doi.org/10.3145/epi.2020.nov.01
- TOSCANO, M., Díaz, A. (2020). Mapping digital humanities in Spain 1993-2019 (Version v1.0) [Dataset]. Zenodo. http://doi.org/10.5281/zenodo.3893546
- 3) Unsworth (2000)
- Palmers SP (2009)
- Borek, L., Dombrowski, Q., Perkins, J., & Schöch, C. (2014, July). Scholarly Primitives Revisited: Towards a Practical Taxonomy of Digital Humanities Research Activities and Objects. Zenodo. http://doi.org/10.5281/zenodo.10866



reportable contributions involved in the implementation of different kinds of digital resources. It stands out that almost all primitives can be involved, at different stages in the design and implementation of these artefacts. Some association is obvious, such as databases with data modelling; digital libraries with collecting; portal with referring. Others are less, such as the collaborative dimensions of many of them or the vast usage of data curation (annotating). Type of resources that, in percentage, seems to require a larger variety of primitives are crowdsourcing platforms, databases and portals (~10 each); those with less are maps and mobile apps (~4 each).



cholarly primitives exploitable from different kinds of digital resources for DH in Spain. We can observe that the range of primitives that digital resources are built for is much narrow that those involved and needed for their design and development and some of them are not present at all. An interesting comparison can be made between Searching and Discovery. Searching is the traditional way of interacting with digital resources such as databases, repositories or digital library. Discovery imply a different frontend approach, where content is dynamically presented to the user in a proactive manner. It is a much more recent tendency, way less consolidated, but already spread out across almost the full range of categories.

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