

TEXT, DATA AND LINK-MINING IN DIGITAL LIBRARIES : LOOKING FOR THE HERITAGE GOLD

Emmanuelle Bermès - BnF

IFLA Satellite Meeting 2017: Digital Humanities

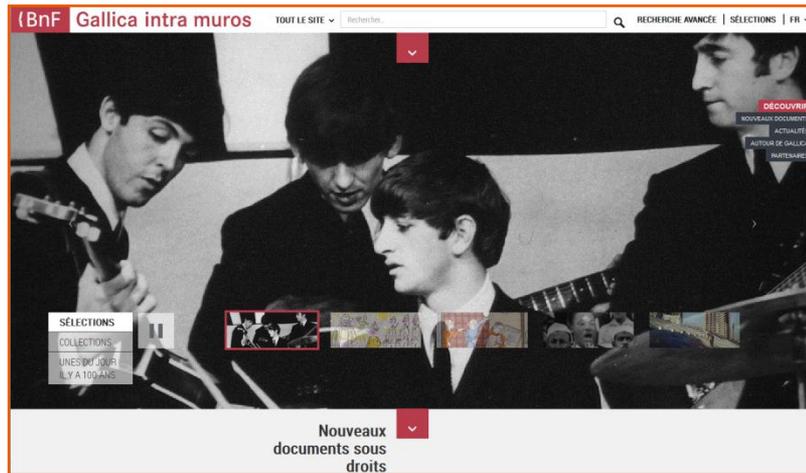
THE CORPUS PROJECT

- Part of the BnF's 4-year internal research programme 2016-2019
- Objectives :
 - designing a future service for providing access to digital corpora for researchers
 - Providing researchers with data and tools to analyse them, in agreement with IPR and privacy legislation
- 3 years of experimentation (web archives, digitization, metadata) + 1 year for conclusions

→ See: <http://c.bnf.fr/fom>



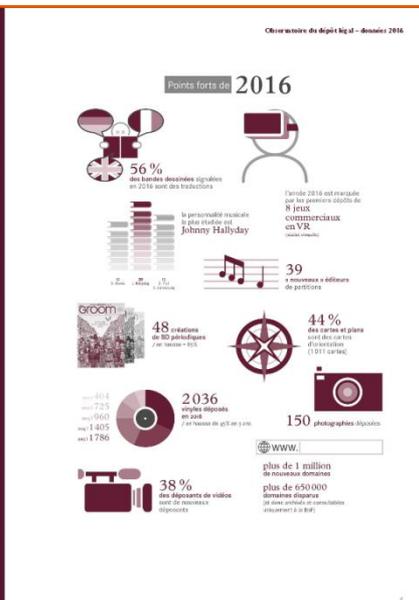
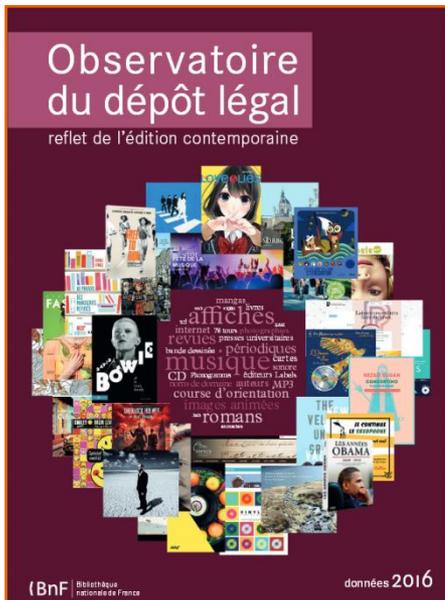
DIGITAL COLLECTIONS AT THE BNF



Gallica + Gallica intra muros
4.5 million digitized items
<http://gallica.bnf.fr>



Web archives
793 To



Metadata
More than 20 million records
<http://data.bnf.fr>

EPISTEMOLOGICAL QUESTIONS: THE EXAMPLE OF THE COMMONPLACES PROJECT



Clovis Gladstone, Glenn Roe, Robert Morrissey, and Mark Olsen, “Digging into ECCO: Identifying Commonplaces and other Forms of Text Reuse at Scale“, *Digital Humanities 2016*, Krakow, Poland, July 2016

- | | |
|-----------------------------------|--|
| 1. Shakespeare, William | 16. Gildon, Charles |
| 2. Horace | 17. Young, Edward |
| 3. Pope, Alexander | 18. Congreve, William |
| 4. Milton, John | 19. Rider, William |
| 5. Virgil | 20. Cibber, Colley |
| 6. Ayscough, Samuel | 21. Griffith, Mrs. (Elizabeth) |
| 7. Bysshe, Edward | 22. Fénelon, François de Salignac de... |
| 8. Ovid | 23. Goldsmith, Oliver |
| 9. Terence | 24. Fenning, Daniel |
| 10. Dryden, John | 25. Addison, Joseph |
| 11. Becket, Andrew | 26. Walker, John |
| 12. Thomson, James | 27. Voltaire |
| 13. Cicero, Marcus Tullius | 28. Garrick, David |
| 14. Jonson, Ben | 29. Cibber, Theophilus |
| 15. Chambers, Ephraim | 30. Enfield, William |

And like the baseless fabric of this vision, *The cloud-capped towers, the gorgeous palaces, The solemn temples, the great globe itself — Yea, all which it inherit—shall dissolve*, And like this insubstantial page faded, (...)

(Shakespeare, *The Tempest*, Act 4, Scene 1) ca. 1611

Of this obfervational Shakepear gives a beautiful example, in the passage lass quoted: *The cloud-capt the gorgeous pa- laces, The solemn temples, the great globe it- self, Yea all which it inherit, (hall dilt)* And like the bafeclfs fabric of a vision, l.c.ive not a rack behind.

James Elphinston (1771)

as in this well-known passage, where you may also mark the fine climax. *The cloud-capt Towers, The gorgeous Palaces, the great Globe itself, Yea, all which it inherits, shall diso/lve, And, like the baseless Fabrick of a Vision, Leave not a Wreck behind.*

Pratt, Mr. (1776)

Non diffimilc Lda quet'idea è quella di Shakespeare, in quei bei verli, Tlte cloid-capp'd *Towers, the gorgeous Palaces, The folemn Temples, the great Globe* itfel, YEa, all which it inherifitall diffilve, Aid. liie e btle l.j.les Fabric d'a vfioin, L'ave nol a ratc behind!

Giovanni Rucellai (1779)



BEFORE CORPUS... (THE CORPUS AS A SOURCE)

- The Europeana Newspapers project

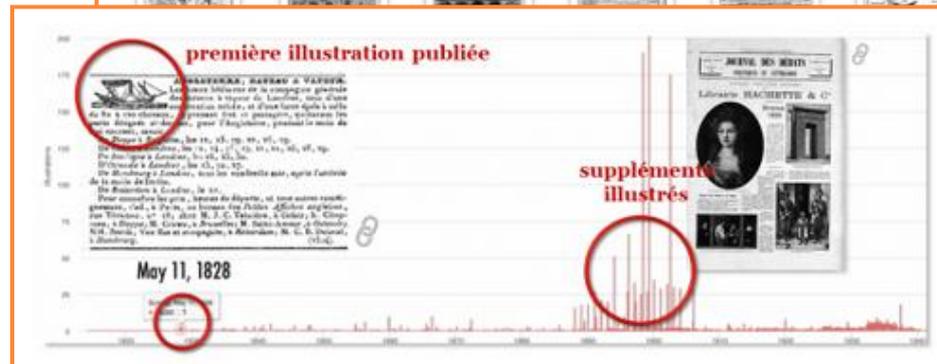
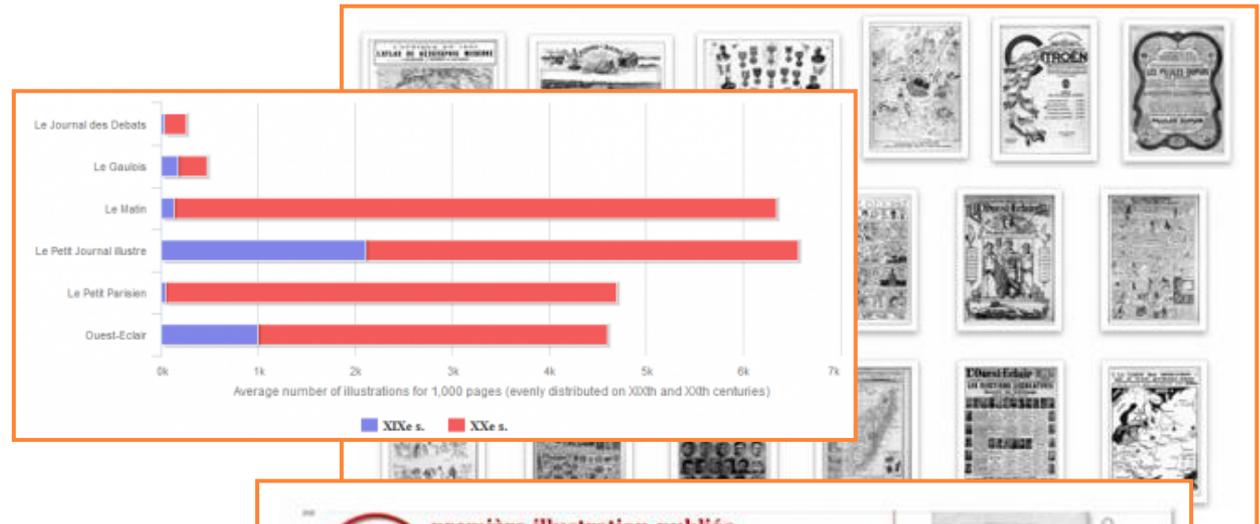
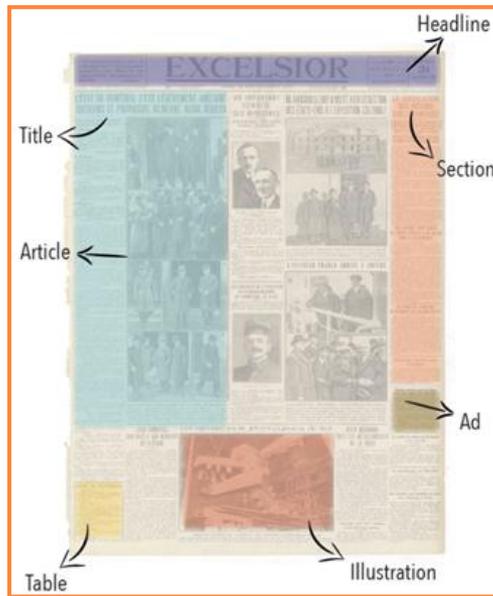


Figure 14. Nombre d'illustrations par fascicule (Journal des débats politiques et littéraires, 1814-1944)

JP Moreux, “Approches innovantes pour la presse ancienne numérisée : fouille et visualisation de données” in *Carnet de recherche à la bibliothèque nationale de France*, 3 décembre 2016 <https://bnf.hypotheses.org/208>

BEFORE CORPUS... (THE CORPUS AS A SANDBOX)

- ETIS : the ASAP project

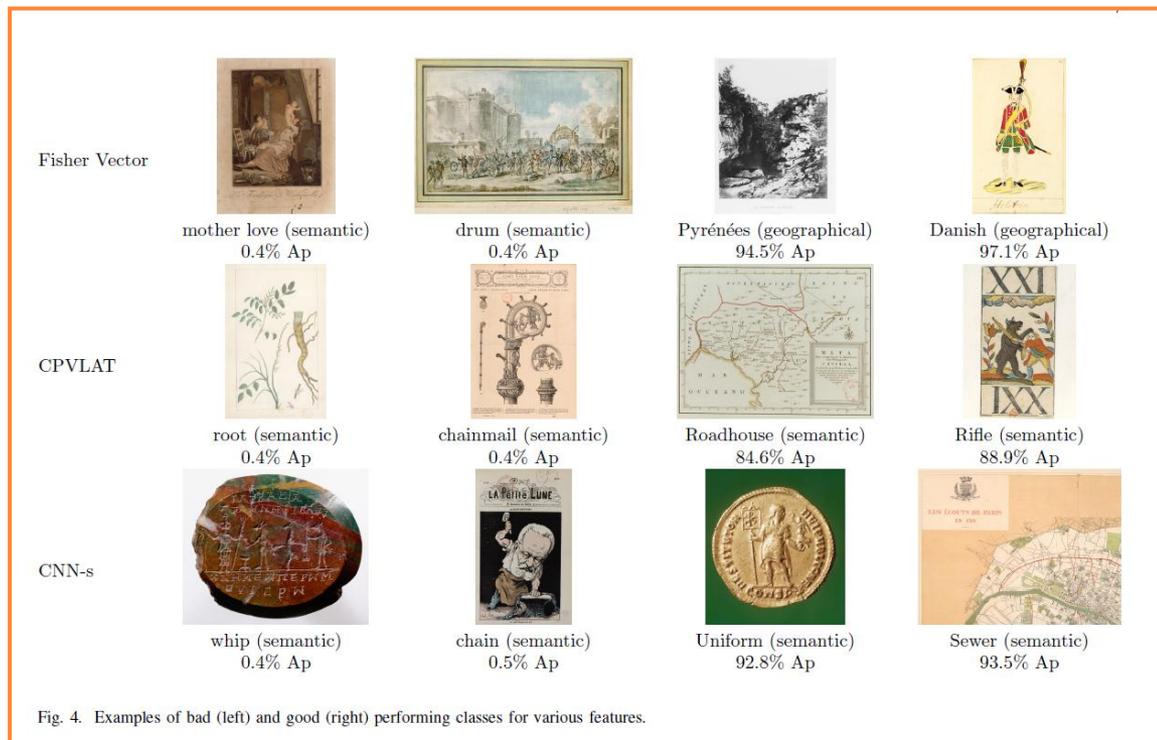


Fig. 4. Examples of bad (left) and good (right) performing classes for various features.

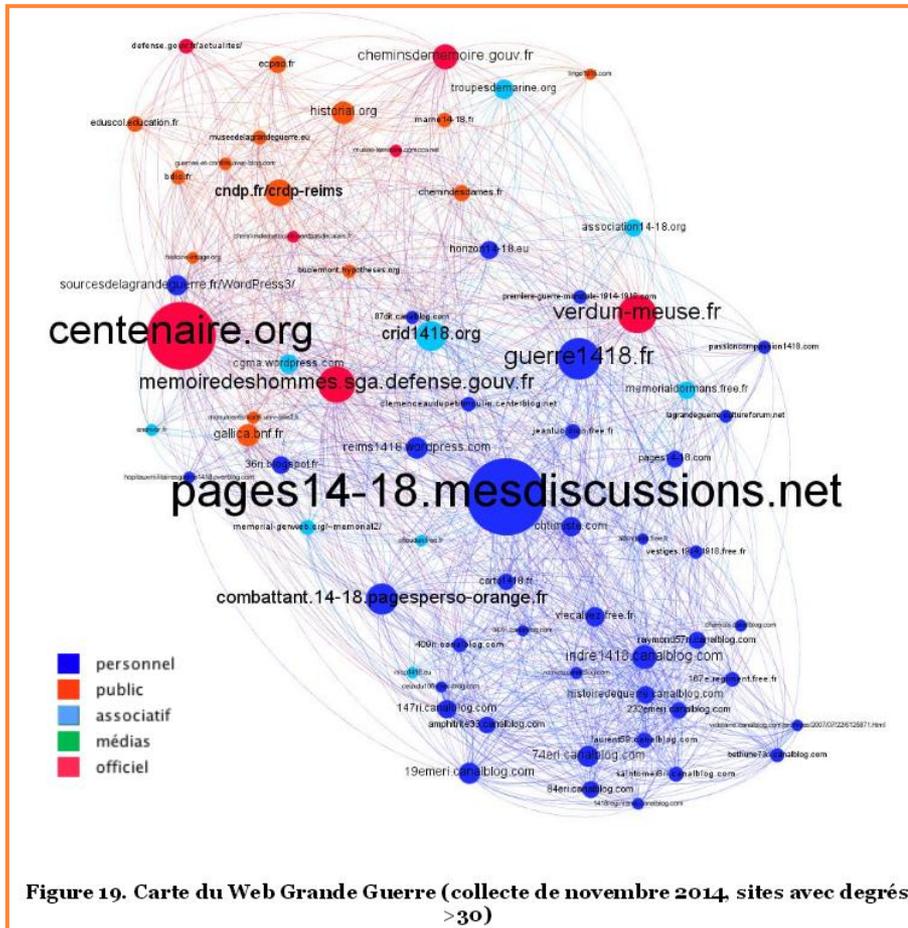
David Picard, Philippe-Henri Gosselin, Marie-Claude Gaspard. “Challenges in Content-Based Image Indexing of Cultural Heritage Collections.” *IEEE Signal Processing Magazine*, Institute of Electrical and Electronics Engineers, 2015, 32 (4), pp.95 – 102

Corpus from <http://images.bnf.fr>



BEFORE CORPUS... (THE CORPUS AS AN INTERFACE)

- Project « le devenir en ligne du patrimoine numérisé : l'exemple de la Grande Guerre » - Labex « les passés dans le présent »



Valérie Baudouin, Zeynep Pelhivan : *Cartographie de la Grande Guerre sur le Web : Rapport final de la phase 2 du projet "Le devenir en ligne du patrimoine numérisé : l'exemple de la Grande Guerre"*

<https://hal.archives-ouvertes.fr/hal-01425600>



THE CORPUS PROJECT, YEAR 1

- Study of web archives, in partnership with Web90 (CNRS/ISCC)

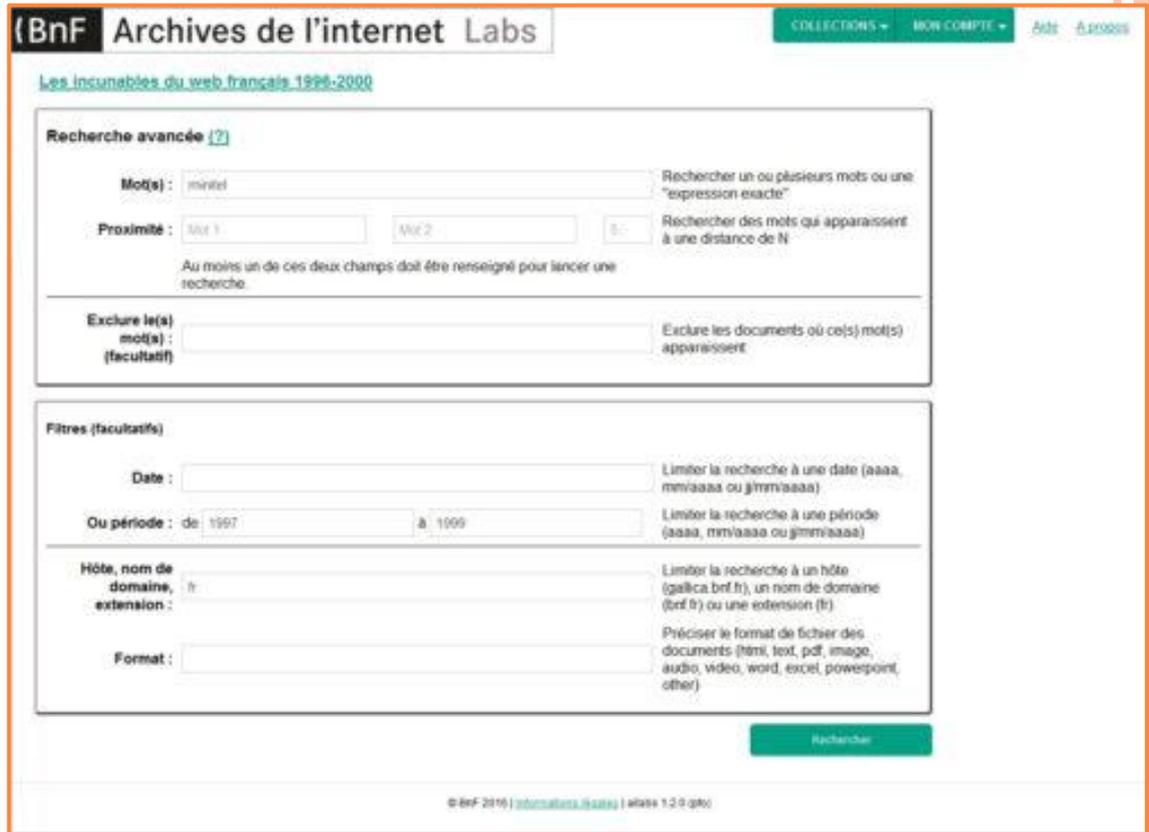


Les archives de l'internet comme sources : méthodes et représentations

Valérie BEAUDOUIN, enseignante-chercheuse (Télécom-ParisTech / Labex Les Passés dans le présent), Sophie GEBEIL, enseignante-chercheuse (Univ. Aix-Marseille), Francesca MUSIANI, enseignante-chercheuse (ISCC / Web90), Valérie SCHAFFER, enseignante-chercheuse (ISCC / Web90), Marie-Luce VIAUD, cheffe de projet recherche et développement (Ina), Dana DIMINESCU, enseignante-chercheuse (Télécom-ParisTech)



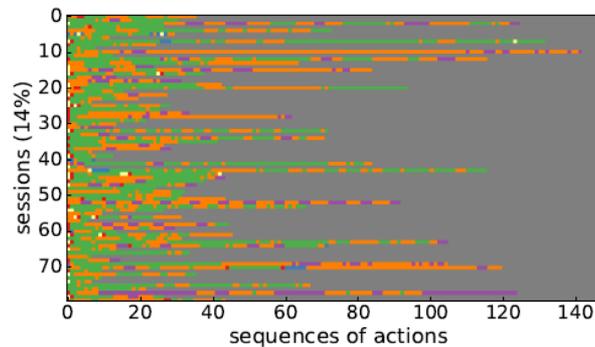
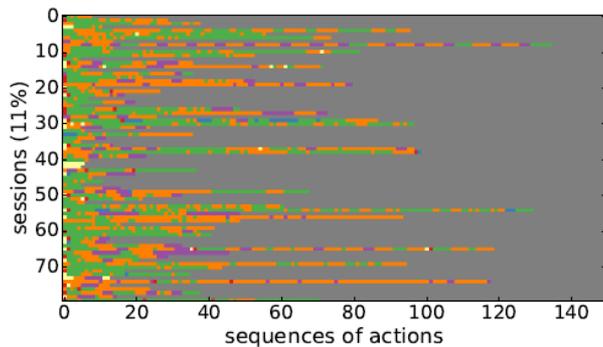
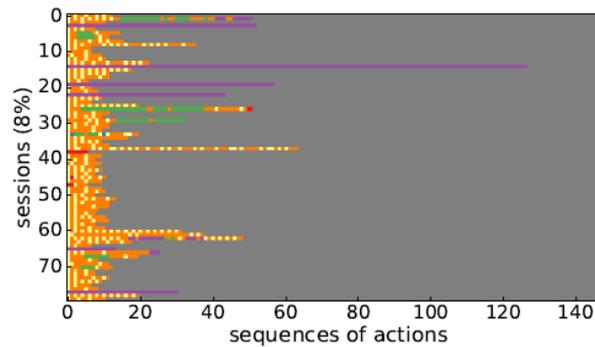
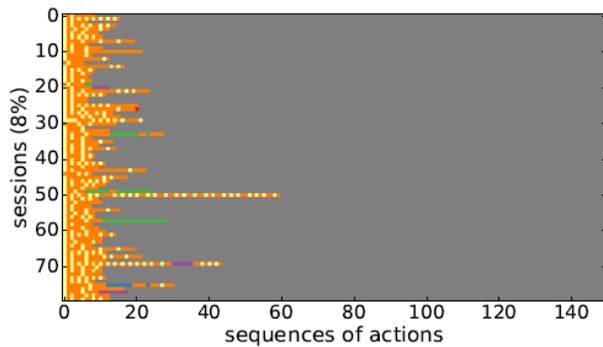
Durée : 59 min



Video recordings: <http://c.bnf.fr/fse>
 Weblog: <http://webcorpora.hypotheses.org/>

THE CORPUS PROJECT, YEAR 1: RELATED PROJECTS

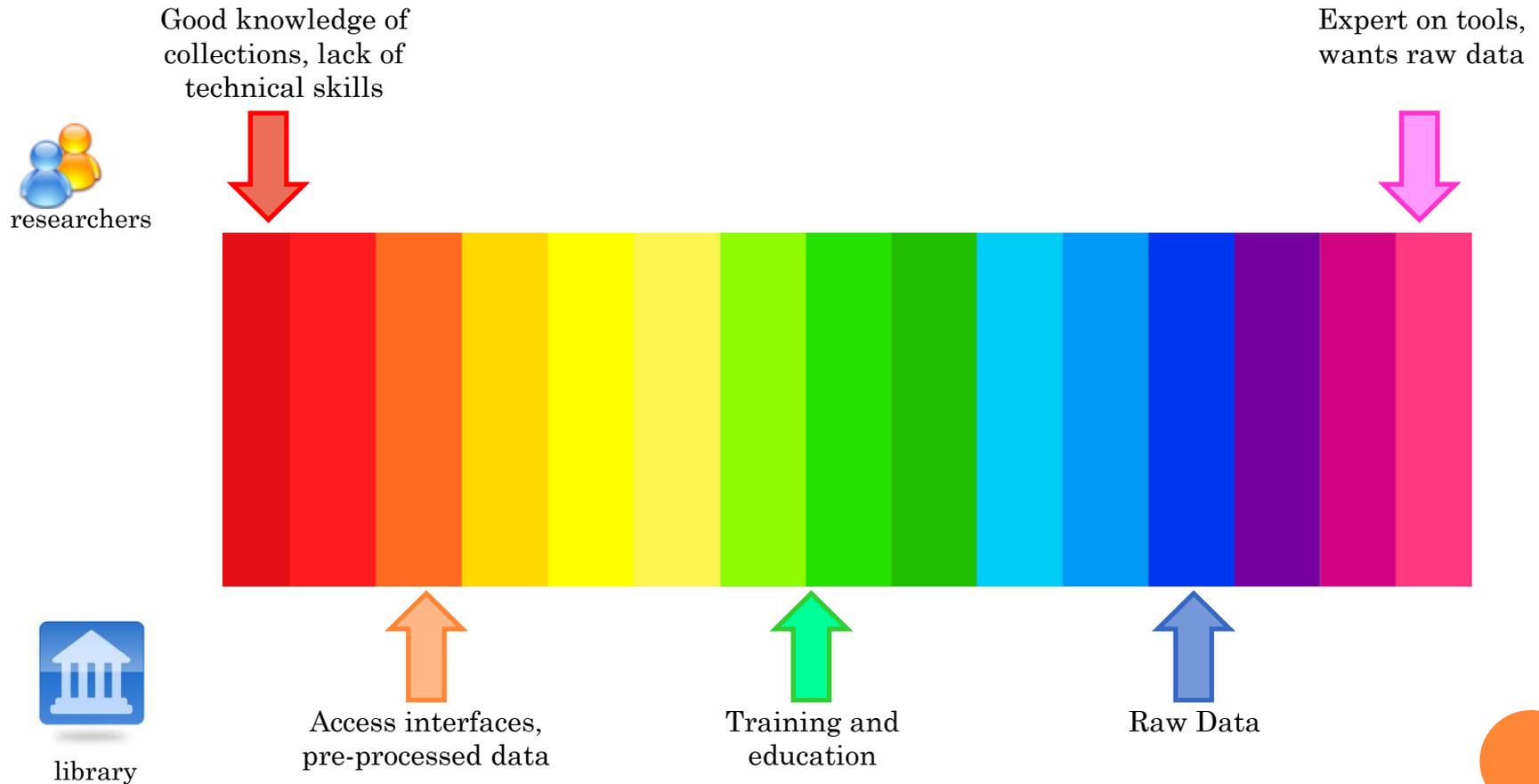
- Bibli-Lab : analysis of logs from Gallica



Etude réalisée par Adrien Nouvellet, Télécom Paristech



A WIDE ARRAY OF DIFFERENT SITUATIONS...



BUILDING THE FUTURE



Digital scholarship Lab

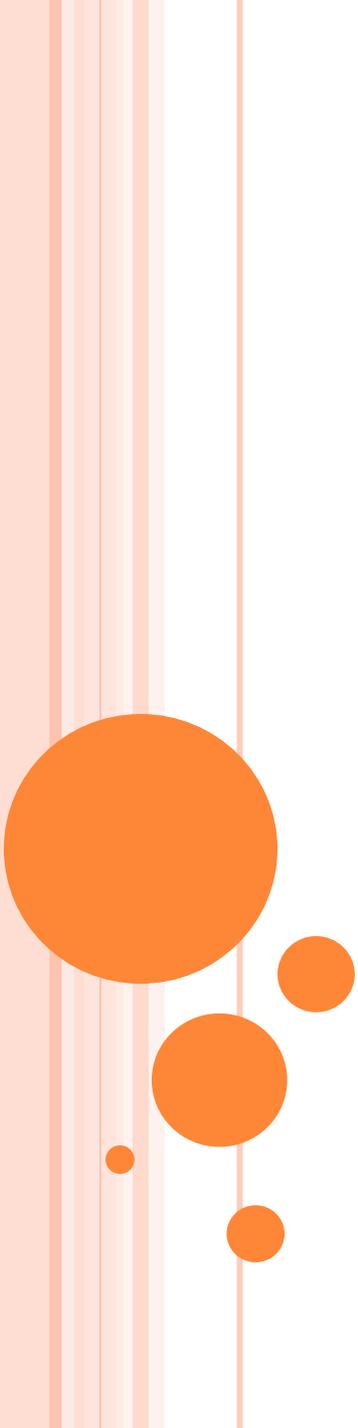
Offrir aux chercheurs, dans les emprises de la Bibliothèque, des outils de fouille et d'exploration de textes et de données sur des corpus numériques de la BnF

► Proposer des environnements scientifiques et techniques (plate-forme sécurisée, logiciels, assistance d'experts...) pour explorer, dans le respect des dispositions réglementaires, les corpus numériques de la BnF



CONTRAT D'OBJECTIFS
ET DE PERFORMANCE 2017-2021





THANK YOU !

emmanuelle.bermes@bnf.fr

 [@figoblog](https://twitter.com/figoblog)