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# Biodiversity conservation in agricultural landscapes: statistical analysis method to understand media representation of policies and species

## Julie Delclaux

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### Research Objective

- Agricultural landscapes are the place of difficult trade-offs between conservation and production objectives
- The media contribute to public opinion and have an agenda-setting function (*McCombs and Shaw, 1972*)
- Understanding the media representation of policies and species could improve biodiversity conservation strategies (*Jacobson and al., 2012*)
- We sought to analyze topical content on newspaper coverage and the effect of time with a reproducible statistical method

### Content Analysis Method

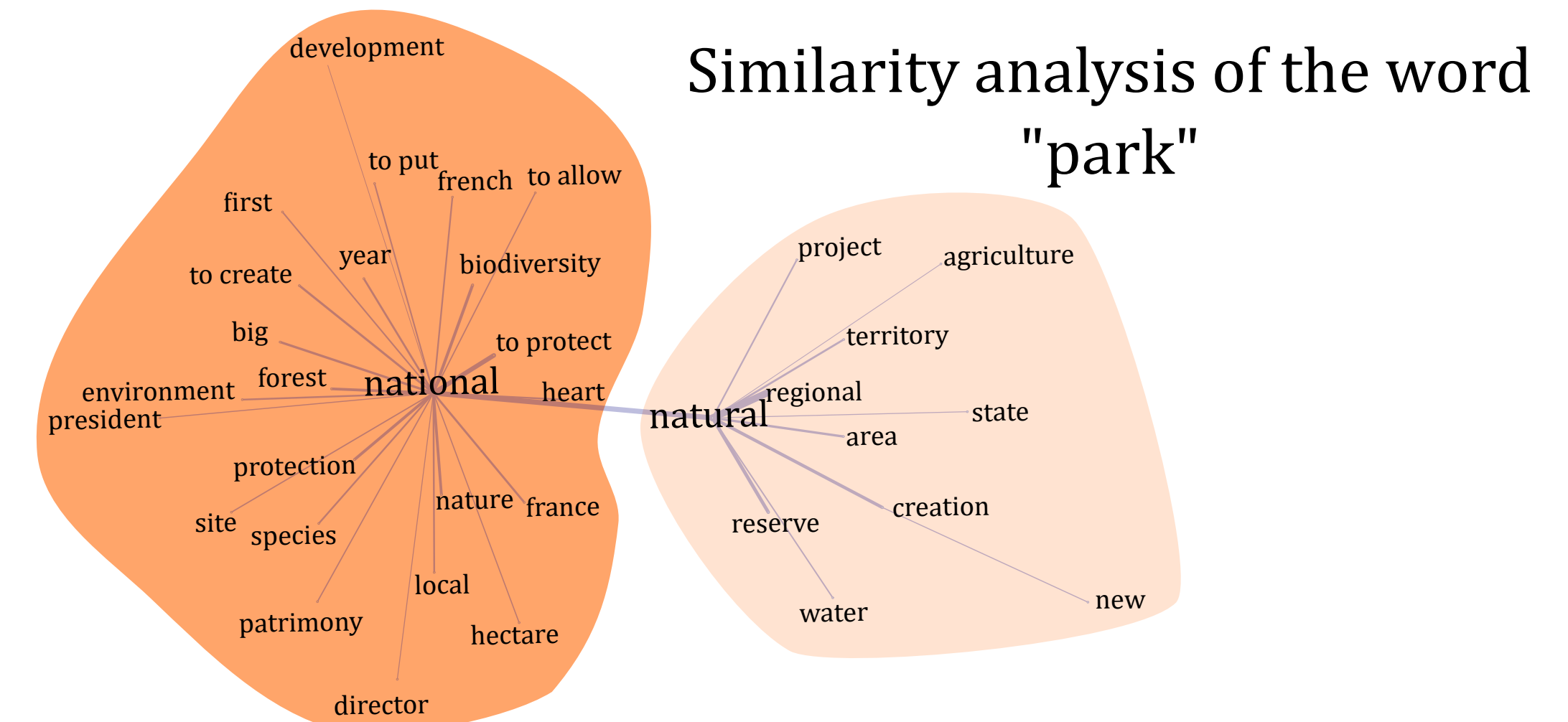
#### Data

- 2547 articles from 7 national French daily newspapers (*Le Monde, Libération, La Croix, Les Echos, Le Figaro, L'Humanité, La Tribune*) containing "agriculture" or "farmer" and "biodiversity" from 1999 to 2017 (Europresse database)

#### Method

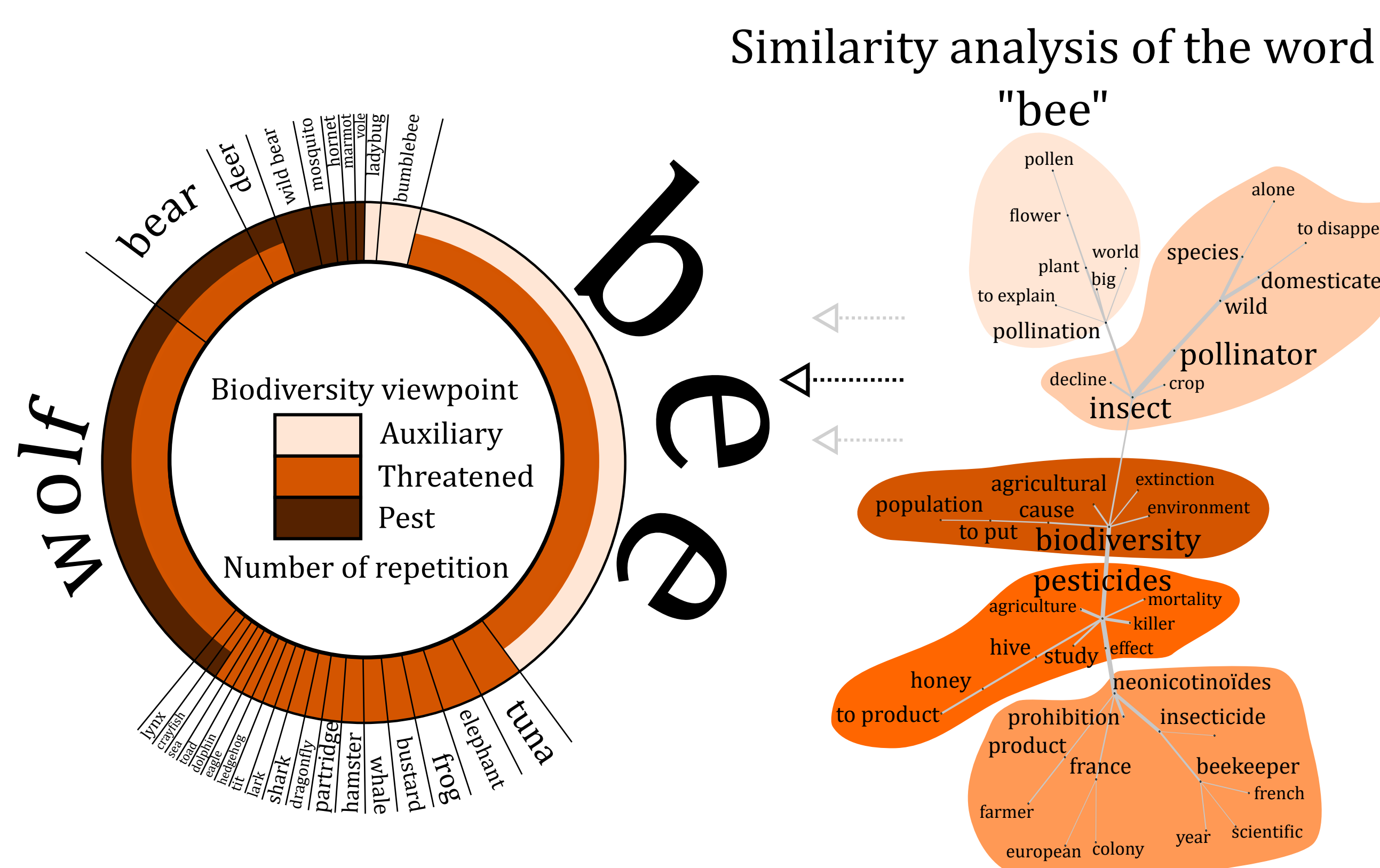
- Content analysis with an interface of R: Iramuteq (*Ratinaud and Déjean, 2009*)
  - Correspondant analysis on covariate "year"
  - Similarity analysis with co-occurrence index on sentence segments

### Policies Media Representation



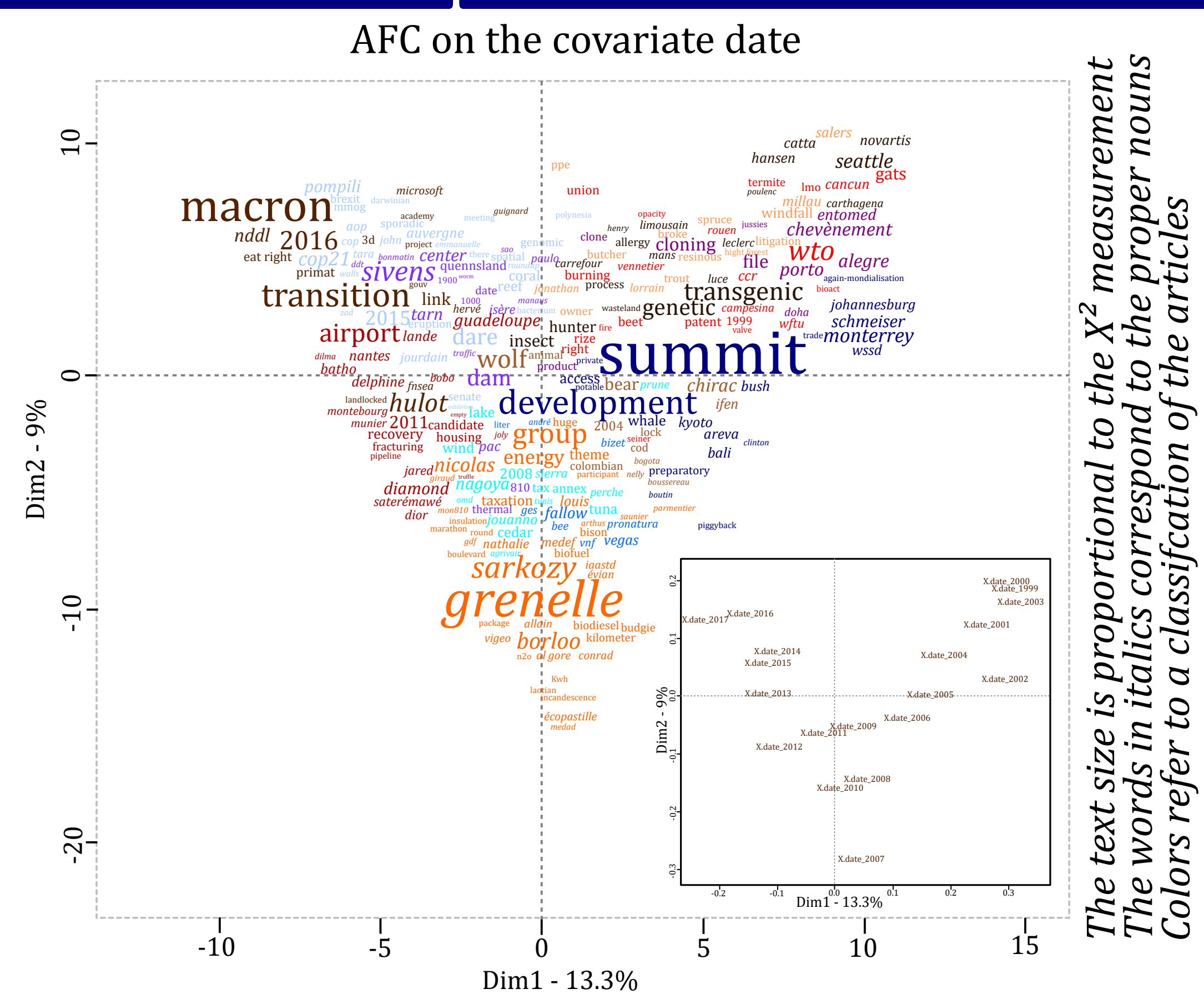
- ➔ Regional nature park discusses more of human dimensions than national park

### Species Portrayal



- ➔ Bee (*Apis mellifera*), wolf (*Canis lupus*) and bear (*Ursus arctos*) are the most mentioned species
- ➔ Bee is associated with ecosystem services while wolf and bear are threatened but also pests

### Time Effect on Topical Content



- ➔ Political events are the major factors of the media coverage
- ➔ Articles move from an ecocentric viewpoint to an anthropocentric viewpoint

### Conclusion

- ➔ Species have opposite valences and some biodiversity policies are mentioned in synergy with agriculture
- ➔ Topic content changes over time under political impulses and the viewpoint of articles becomes anthropocentric
- ➔ Textual analysis allows to analyze finely the content, the valence and the time trends but not the sources of the articles (scientific papers, interviews...)

### References

- Jacobson, S. K., Langin C., Carlton J. S., Kaid L. L. (2011). Content Analysis of Newspaper Coverage of the Florida Panther. *Conservation Biology* 26:171-179
- Mc Combs, M. E. & Shaw, D.L. (1972). The Agenda-setting Function of Mass Media. *Public Opinion Quarterly* 36:176-185
- Ratinaud, P. & Déjean, S. (2009). IRaMuTeQ : implémentation de la méthode ALCESTE d'analyse de texte dans un logiciel libre. *Modélisation appliquée aux sciences humaines et sociales MASHS*, p8-9