TEXT MINING ANALYSIS OF PERCEPTION IN ARCHAEOLOGICAL LANDSCAPES:
THE CASE OF STONEHENGE

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When it comes to analyzing the archaeological record, surviving heritage, and landscapes of the past – how often does this include analyzing those discussing the past ?

Background

o   Methodology

  - *Textual Analysis: Topic Modelling*

  - *Open-Source software: SQLite and R*

  - *Applying GIS technologies to Textual Sources (Murrieta-Flores; Gregory)*

o   Theoretical lens

  - *Landscape Archaeology (Llobera)*

  - *Sense of Place (Tuan)*

  - *Transformation of Symbol (Kolodziejska)*

Case Study

o   Stonehenge

  - *Globally recognized archaeological and heritage site*
  - *Shifting role in local and global landscape*

Antiquity

- o Archaeological Academic Journal
  - *Based in the UK*
- o Single lens of academic writing pertaining to Stonehenge

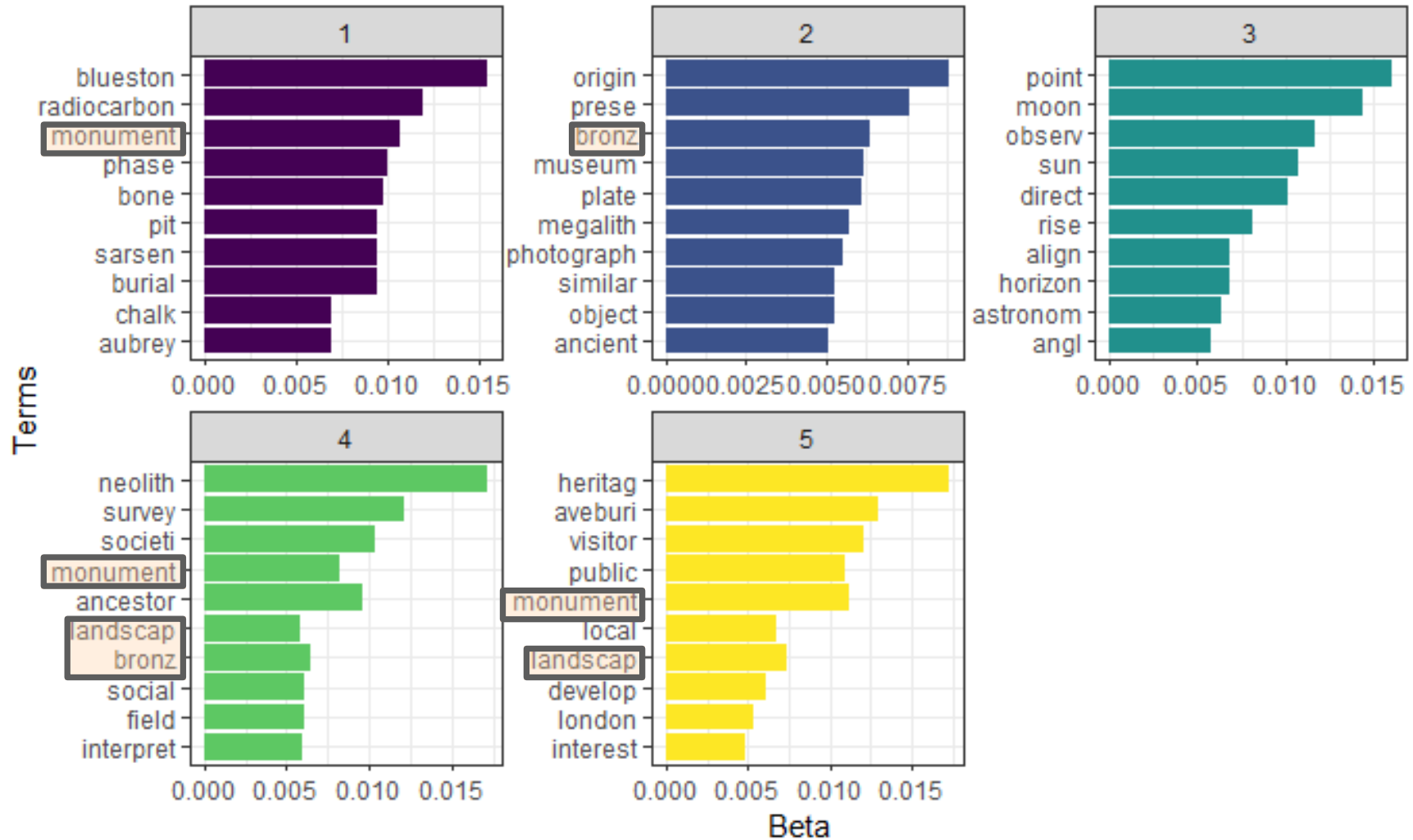# Topic Modelling

Topic Model of Stonehenge-Related Texts
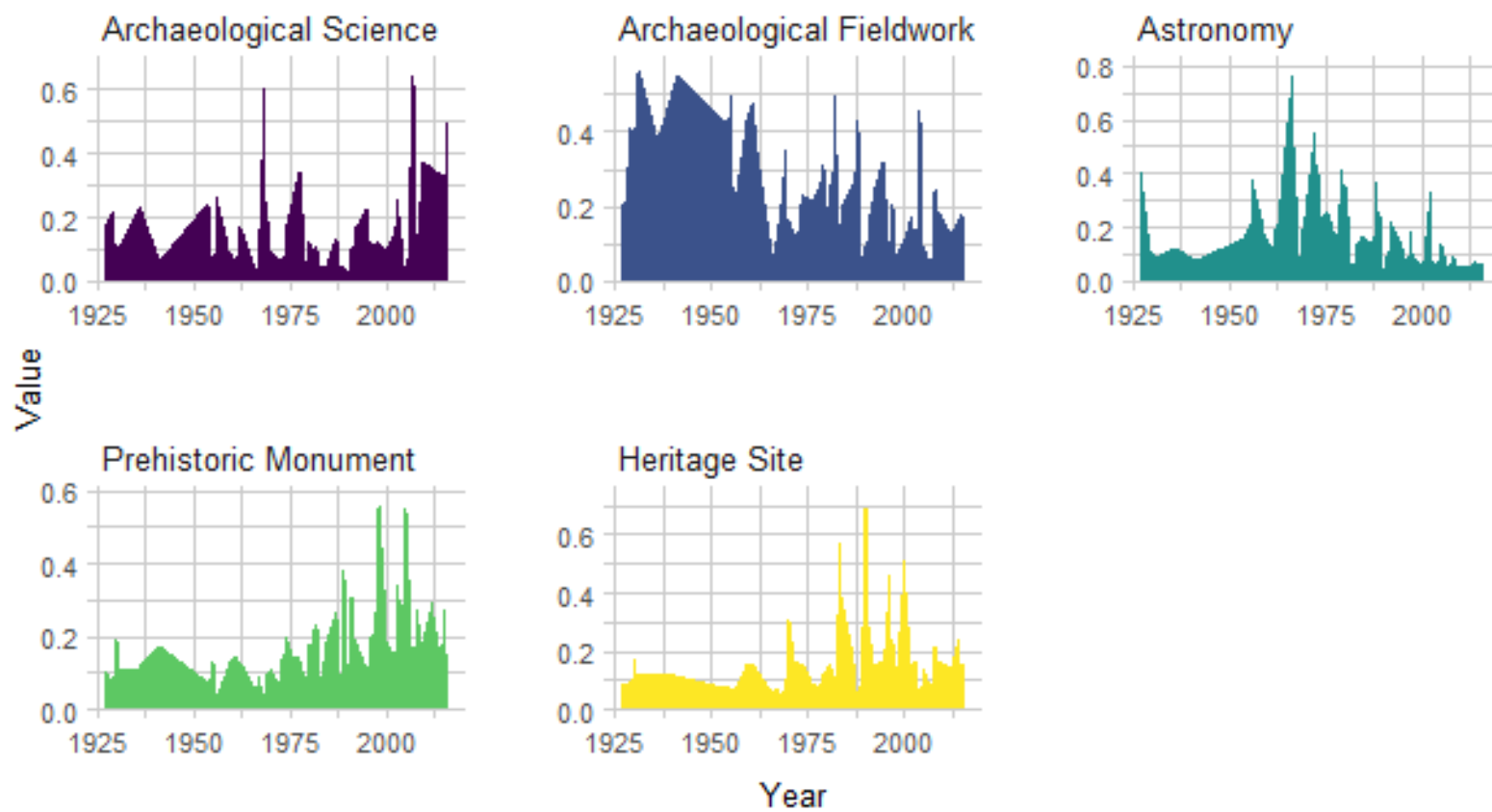
Top Terms per Topics of Stonehenge-Related Texts
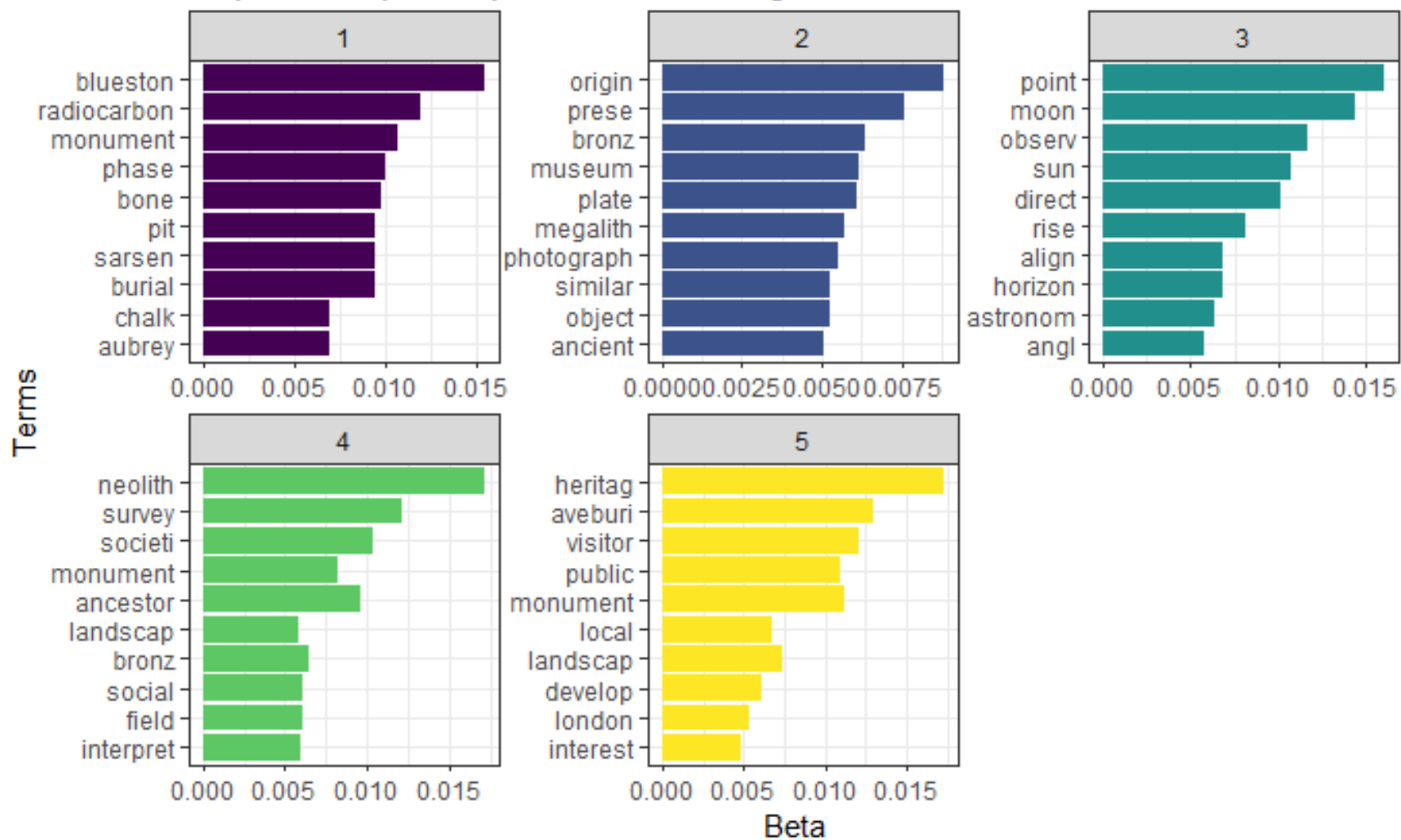
Top Terms per Topics of Stonehenge-Related Texts

Future Work

o   Utilizing a Comparative Framework in other case studies

o   Additional textual sources other than academic texts

o   Additional types of heritage: tangible vs. intangible

o   Geotextual Analysis: potential use of GTA

ANY QUESTIONS?

Thank you

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References:

Murrieta-Flores, Patricia, Baron, A., Gregory, I., Hardie, A., & Rayson, P. (2015). Automatically Analyzing Large Texts in a GIS Environment: The Registrar General's Reports and Cholera in the 19th Century. (Report). 19(2), 296.

Gregory, I. (2014). Challenges and Opportunities for Digital History. Frontiers in Digital Humanities, 1. https://doi.org/10.3389/fdigh.2014.00001

Llobera, M. (2001). Building Past Landscape Perception With GIS: Understanding Topographic Prominence. Journal of Archaeological Science, 28(9), 1005–1014. https://doi.org/10.1006/jasc.2001.0720

Tuan, Y.-F. (1991). Language and the Making of Place: A Narrative-Descriptive Approach. Annals of the Association of American Geographers, 81(4), 684–696. https://doi.org/10.1111/j.1467-8306.1991.tb01715.x

Kolodziejska, M. (2013) Symbol of the Cross in Popular Culture: an Analysis of the Use and [1] Transformation of the Symbol in 'Machina Magazine'. Polish sociological review. (182), 209–222.

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