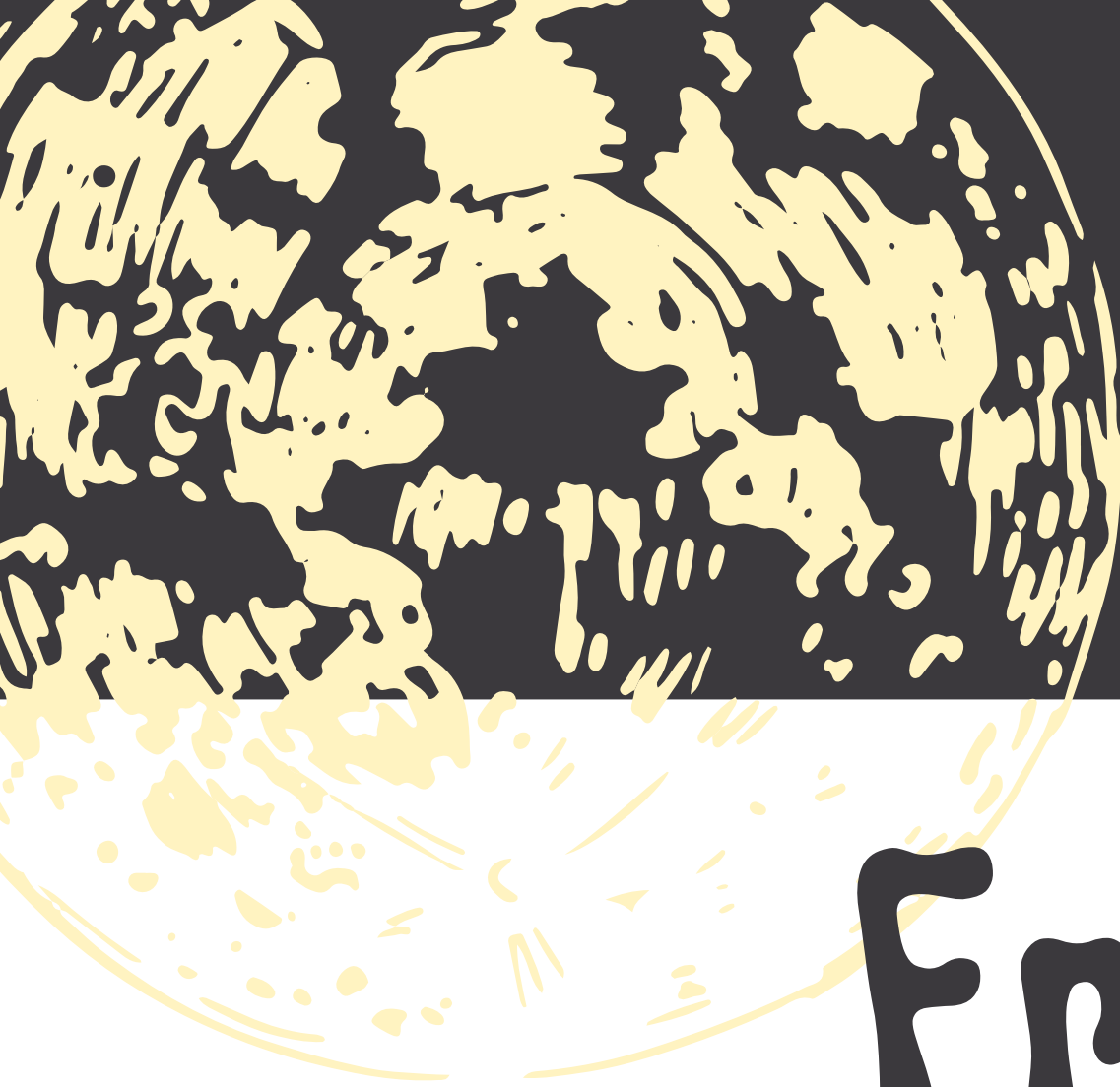




FrankenMetrics

Assembling a scholarly record of monsters

Kellie Dalton, Maddie Hare, Geoff Krause, Summer Wilson, & Philippe Mongeon
Department of Information Science, Dalhousie University

Monster Fest 2025



Overview



1

Introduction

2

Research objectives

3

Methods

4

Findings

5

Discussion and conclusion

6

References and links

We were working in the lab, late one night...



Scholarship across disciplines places monsters at the forefront of scholarly inquiry, and entire fields (i.e., Cryptozoology) are dedicated to such investigation.

We conducted a bibliometric analysis to examine scholarly work about specific monsters (vampires, werewolves, zombies, and Frankenstein) and its evolution over time.

This analysis provides insight into how monsters inhabit disciplines, time periods, and geographical regions, and key topics within this work.

It may aid other monster researchers consider scholarly and cultural perceptions of monsters — often used as symbols and metaphors.

Bibliometrics



- “The measurement of all aspects related to the publication and reading of books and documents.” (Otlet, 1934).
- “The application of mathematics and statistical methods to books and other media of communication.” (Pritchard, 1969)
The term ‘bibliometrics’ was first used by Alan Pritchard in 1969.
- In principle, bibliometrics could be applied to any type of documents, but in practice they are applied to scholarly outputs to measure knowledge production, dissemination, and use.
- Also known as Scientometrics, info(r)metrics, altmetrics, Quantitative Science Studies, Science of Science, Research on Research.

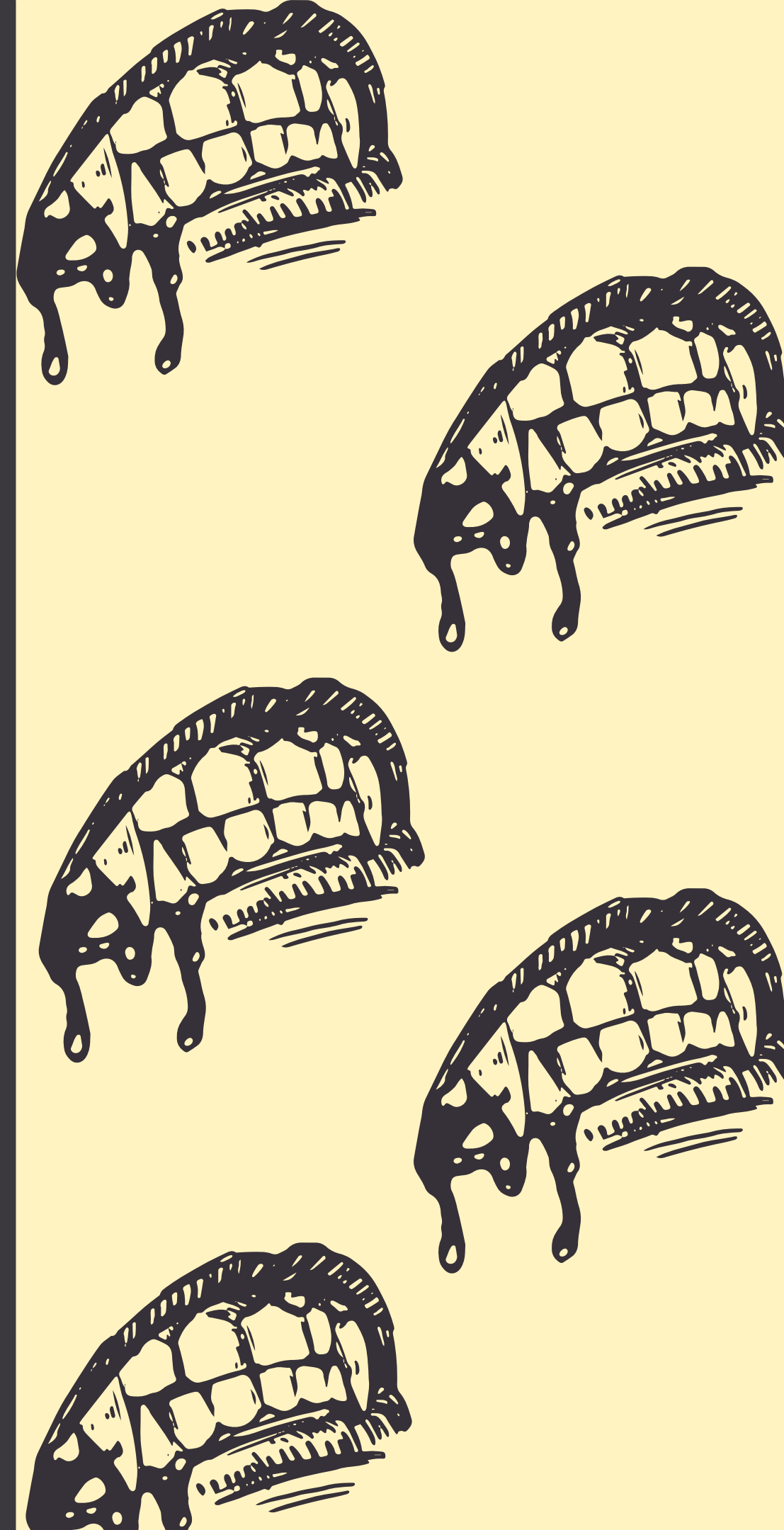
Research questions

RQ1. What scholarship has been written about monsters, and how has it evolved over time?

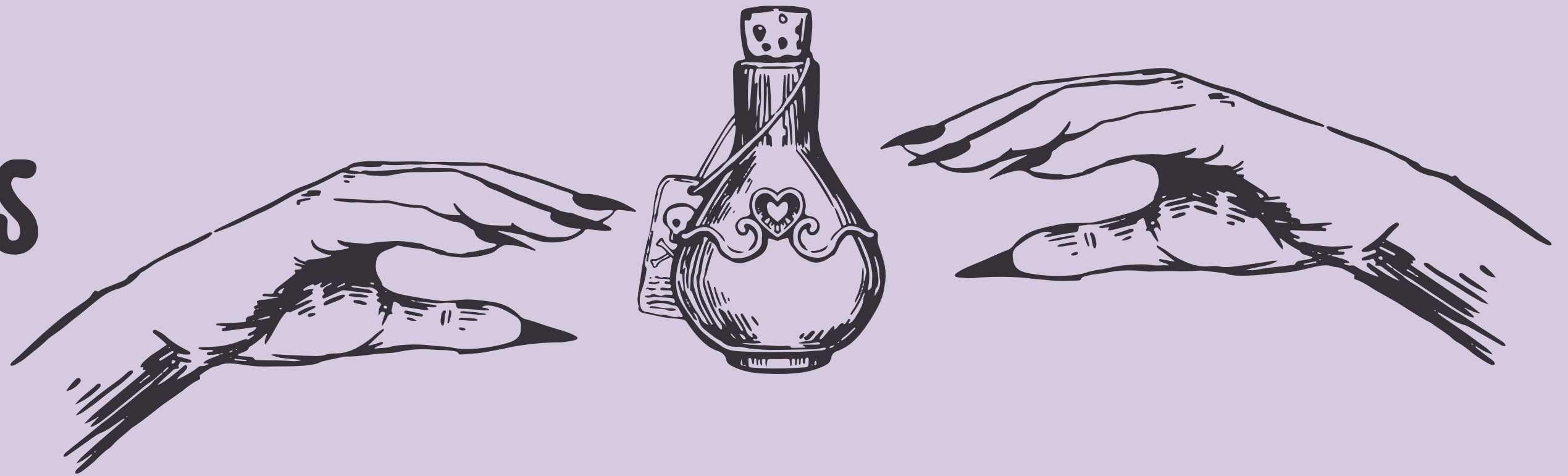
RQ2. Who produces scholarship on monsters?

RQ3. What is the geographic distribution of monsters scholarship?

RQ4. What topical communities exist in monsters research?



Methods



Using the OpenAlexR package, we queried OpenAlex, an open database of millions of scholarly works (Priem et al., 2022) for publications relating to the following list of monsters and select synonyms.

Vampire: Vampire OR Nosferatu OR dracula OR nightwalker OR bloodsucker

Zombie: Zombie OR ghoul

Werewolf: Werewolf OR “were-wolf” OR wolfman OR “wolf-man” OR lycanthrope

Frankenstein: Frankenstein

The time period restriction 1900-2024 was applied. No document type restriction was applied. Documents were deduplicated so that they were counted only once per monster type. Our final dataset comprised 18,294 works. All data processing and analysis was conducted in R.



Findings



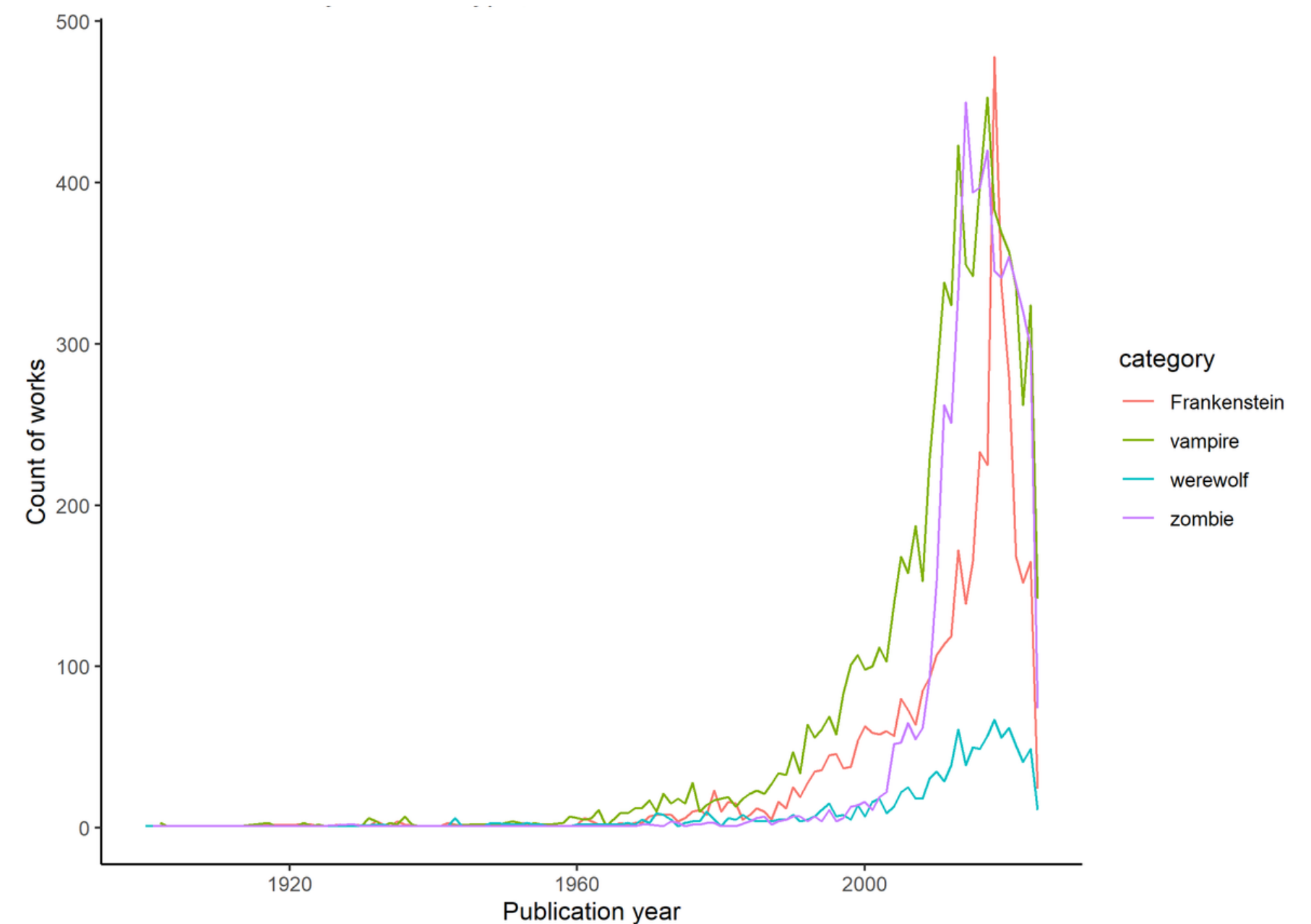
Works about monsters



Overall count of works by monster type

Monster type	Works count
Vampire	7678
Vampire	5703
Dracula	1935
Nosferatu	237
Bloodsucker	54
Nightwalker	18
Zombie	5535
Zombie	5370
Ghoul	168
Frankenstein	4301
Werewolf	780
Werewolf	531
Wolf-man	143
Wolfman	61
Lycanthrope	31
Were-wolf	15

Count of works by monster type, 1900-2024

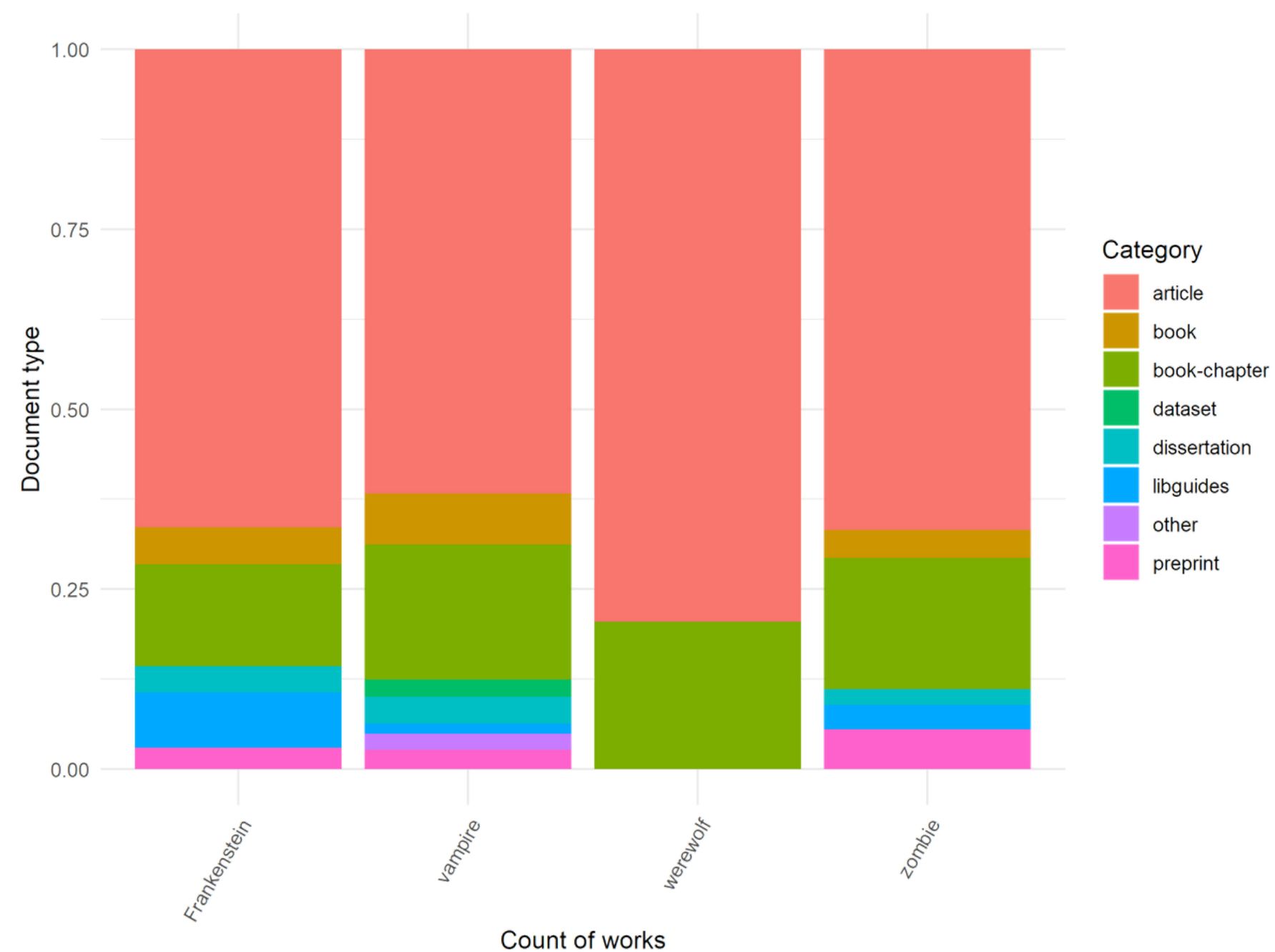




Document types



Count of document types (Freq > 100) by monster type





Where is this scholarship published?

Top 10 venues for each monster type

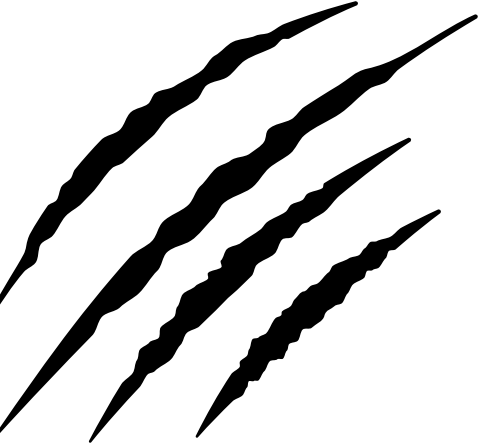
Frankenstein

Source	Works count
DOAJ (DOAJ: Directory of Open Access Journals)	38
Science Fiction Studies	38
PubMed	30
European Romantic Review	25
SSRN Electronic Journal	20
Deleted Journal	17
Studies in Romanticism	17
The Wordsworth Circle	16
Dirigido por ...: Revista de cine	14
Notes and Queries	14

Vampires



Source	Works count
Journal of Dracula Studies	67
PubMed	60
DOAJ (DOAJ: Directory of Open Access Journals)	53
Journal of Mammalogy	40
Choice Reviews Online	39
Gothic Studies	35
The Journal of Popular Culture	28
SSRN Electronic Journal	25
Nature	19
Bulletin of the Center for Children's Books	18
The New Scientist	18



Where is this scholarship published?



Top 10 venues for each monster type

Werewolf

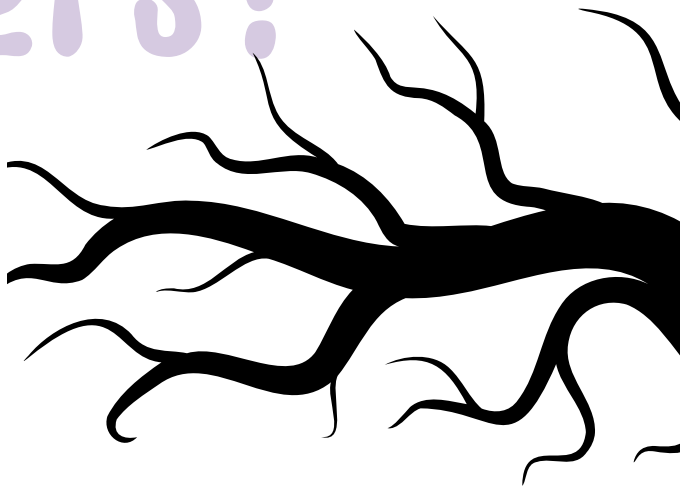
Zombie

Source	Works count
The Japanese Society for Artificial Intelligence	21
PubMed	12
Gothic Studies	6
Journal of the American Psychoanalytic Association	5
The Medieval REview	5
Bulletin of the Center for Children’s Books	4
2022 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)	3
American imago	3
Contemporary Psychology	3
DOAJ (DOAJ: Directory of Open Access Journals)	3
Folklore	3
French Studies	3

Source	Works count
SSRN Electronic Journal	132
The New Scientist	34
Nature	25
DOAJ (DOAJ: Directory of Open Access Journals)	23
Bulletin of the Center for Children’s Books	19
Choice Reviews Online	16
PubMed	15
Research Portal Denmark	15
The Journal of Popular Culture	15
Deleted Journal	13
Journal of Consciousness Studies	13

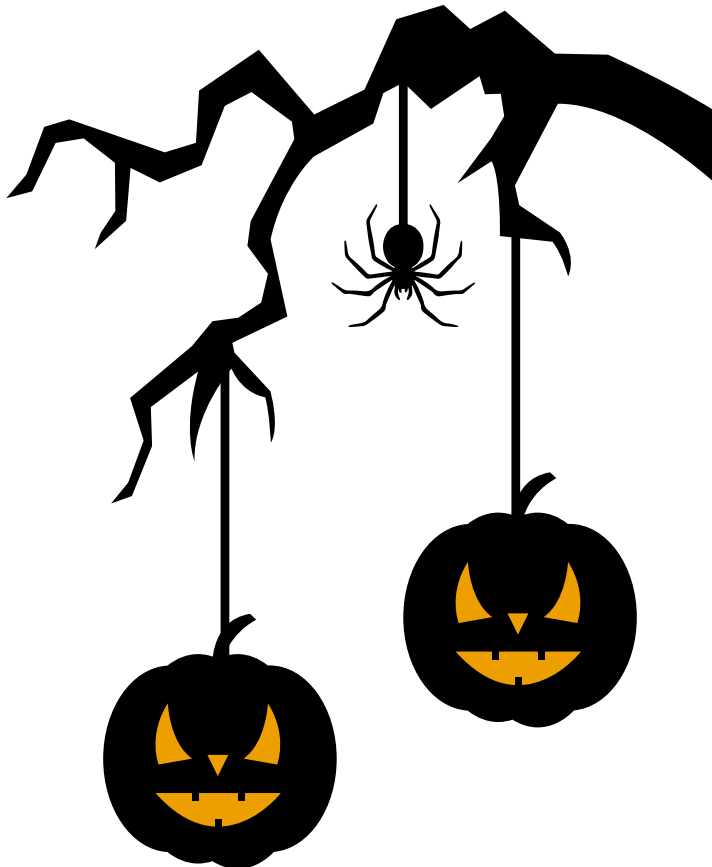
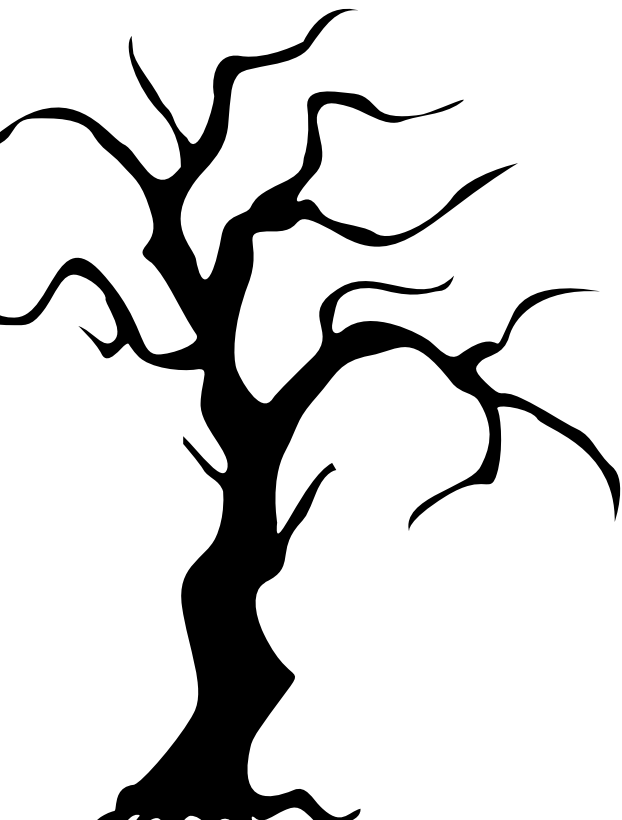


Who produces scholarship on monsters?



Top global institutions for monster-related works

Institution	Works count
The Ohio State University	41
Cornell University	39
University of Glasgow	39
Smithsonian Tropical Research Institute	38
University of Cambridge	38
Universidad Nacional Autónoma de México	37
The University of Sydney	36
Universidade de São Paulo	36
The University of Melbourne	34
Universidade Estadual Paulista (Unesp) [Brazil]	34

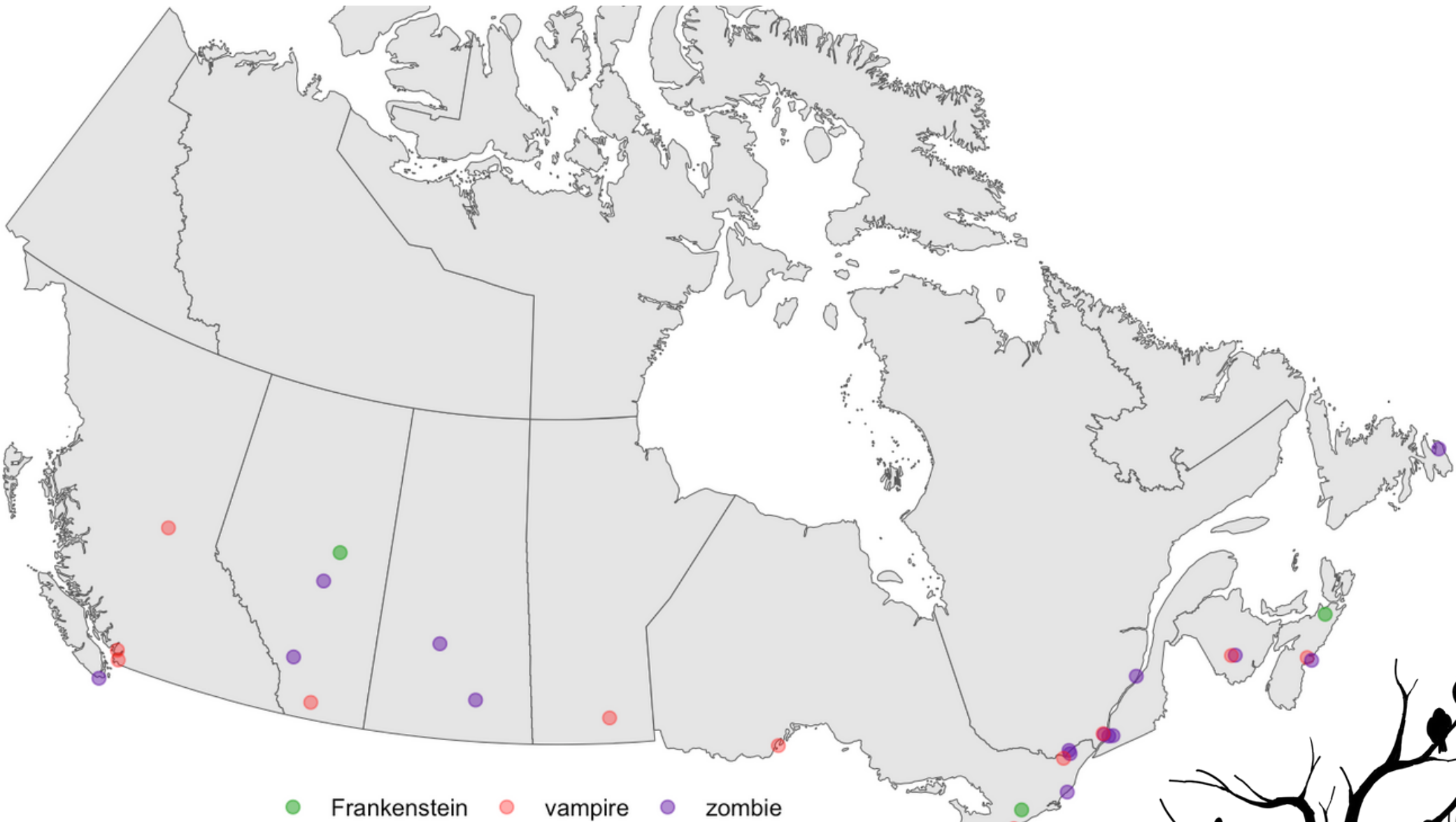


Who produces scholarship on monsters?

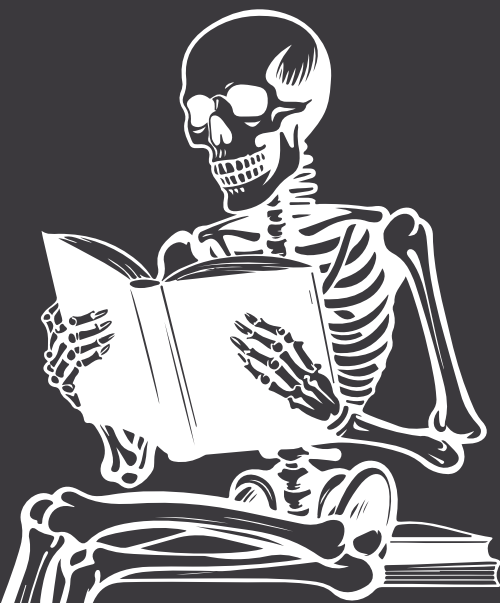
Top Canadian institutions

Institution	Works count
University of British Columbia	24
University of Toronto	19
Western University	16
University of Alberta	15
McMaster University	14
Carleton University	11
University of Windsor	11
Wilfrid Laurier University	11
Université du Québec à Montréal	10
Université de Montréal	10

Dominant monster per institution

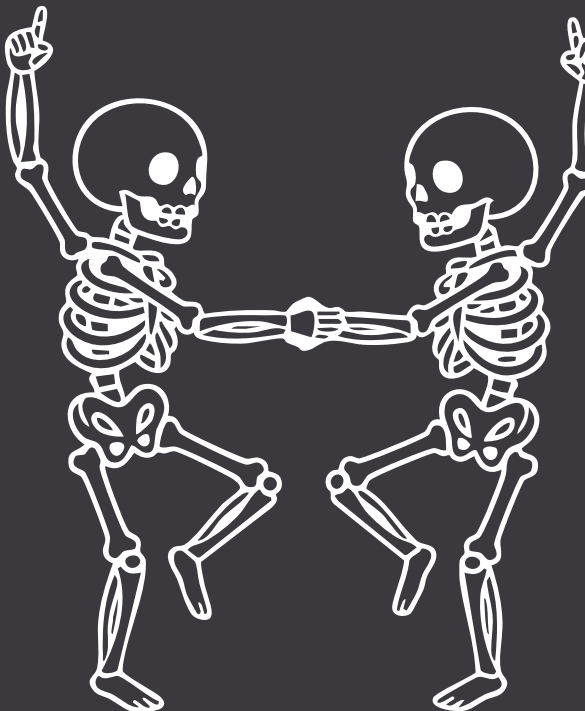


Who produces scholarship on monsters?



Collaboration statistics by monster

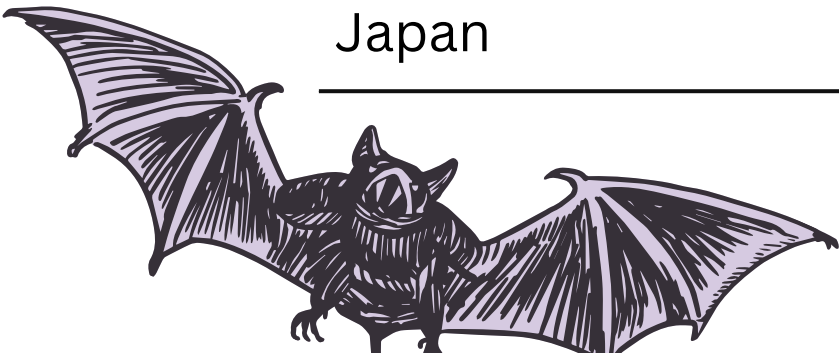
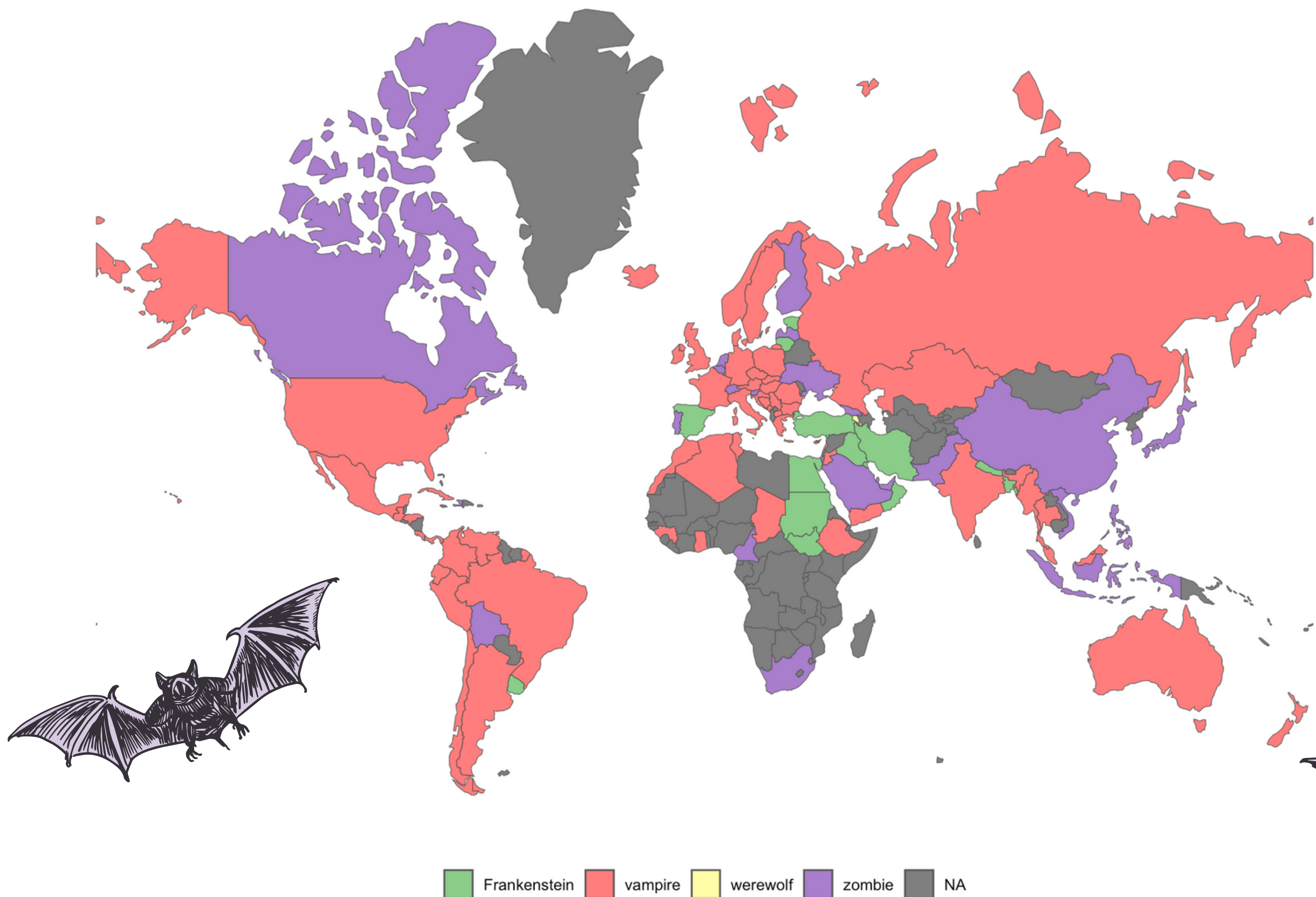
Monster	Works	Mean Authors	Mean Affiliations	Mean Countries
vampire	7,678	2.42	1.71	1.25
zombie	5,535	2.04	1.61	1.21
Frankenstein	4,301	1.37	1.25	1.09
werewolf	780	2.24	1.57	1.14



Geographic distribution of monsters scholarship

Top countries for monster works

Country	Works count
United States	1824
United Kingdom	818
France	338
Australia	280
Canada	257
Brazil	252
China	229
Germany	219
Spain	133
Japan	133



Geographic distribution of monsters scholarship



Top countries by monster

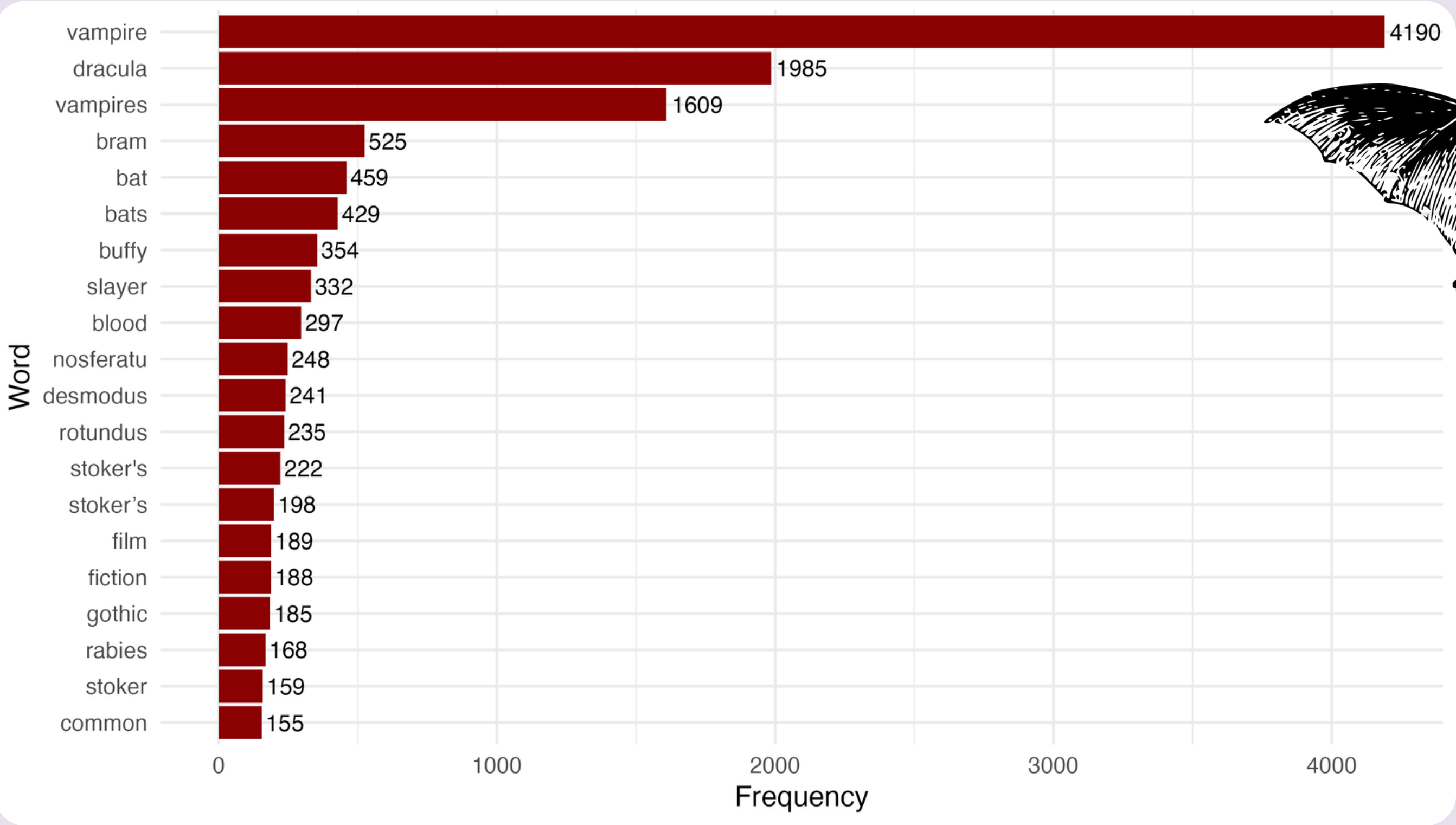
Monster	Country	Works count
Frankenstein	United States	347
	United Kingdom	120
	Brazil	79
	France	75
	Spain	54
Vampire	United States	732
	United Kingdom	378
	France	150
	Brazil	130
	Australia	118
Werewolf	United States	71
	Japan	35
	United Kingdom	27
	France	16
	Netherlands	9
Zombie	United States	674
	United Kingdom	293
	China	145
	Australia	115
	Canada	113



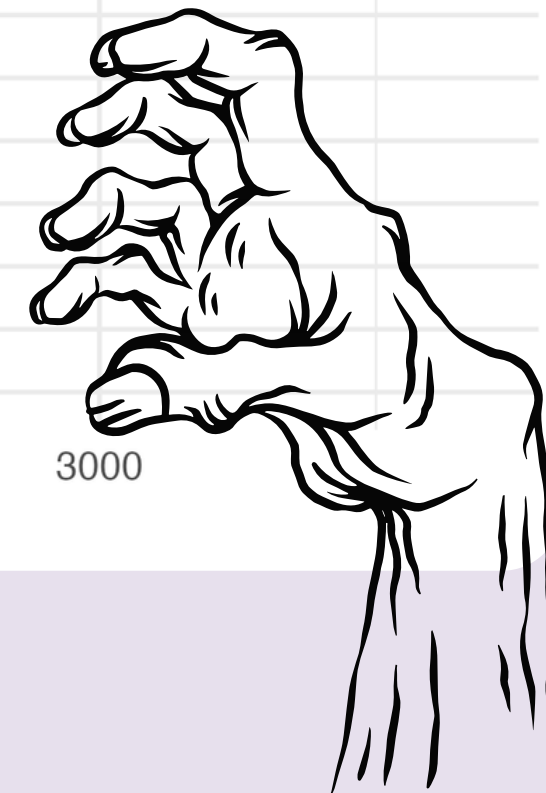
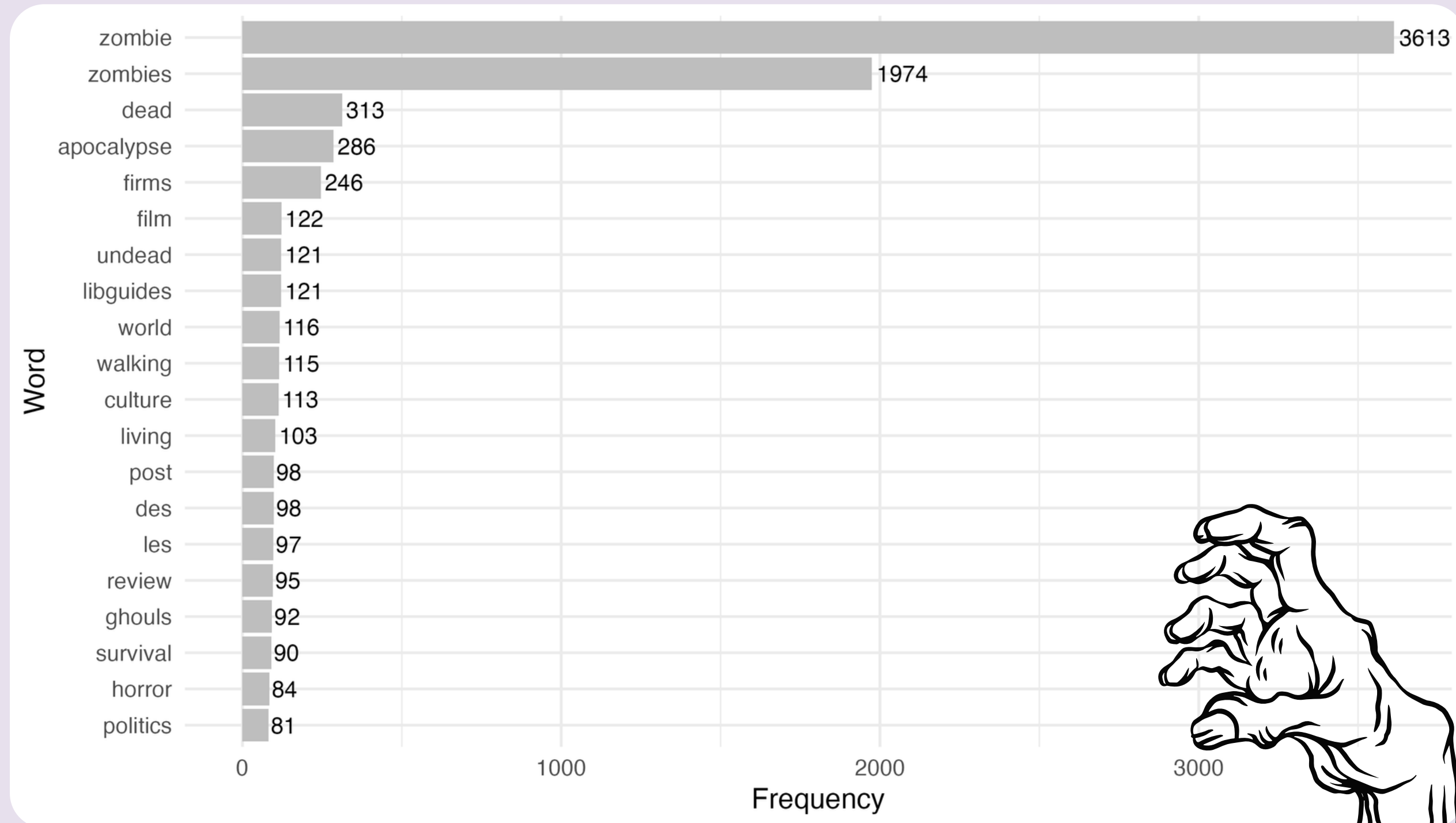
Topical analysis



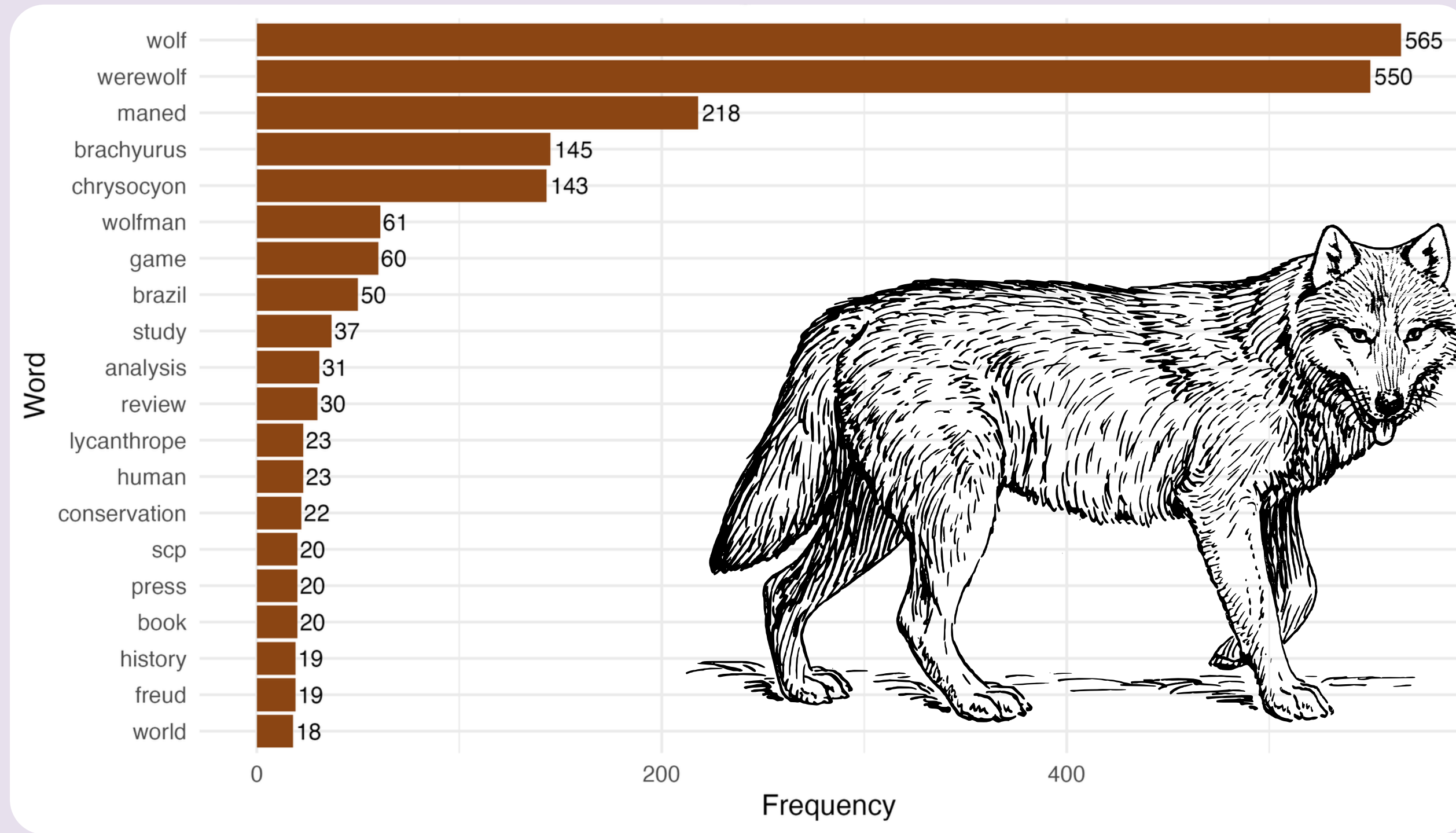
Top 20 frequently occurring co-words for works with 'vampire' in the title



Top 20 frequently occurring co-words for works with 'zombie' in the title

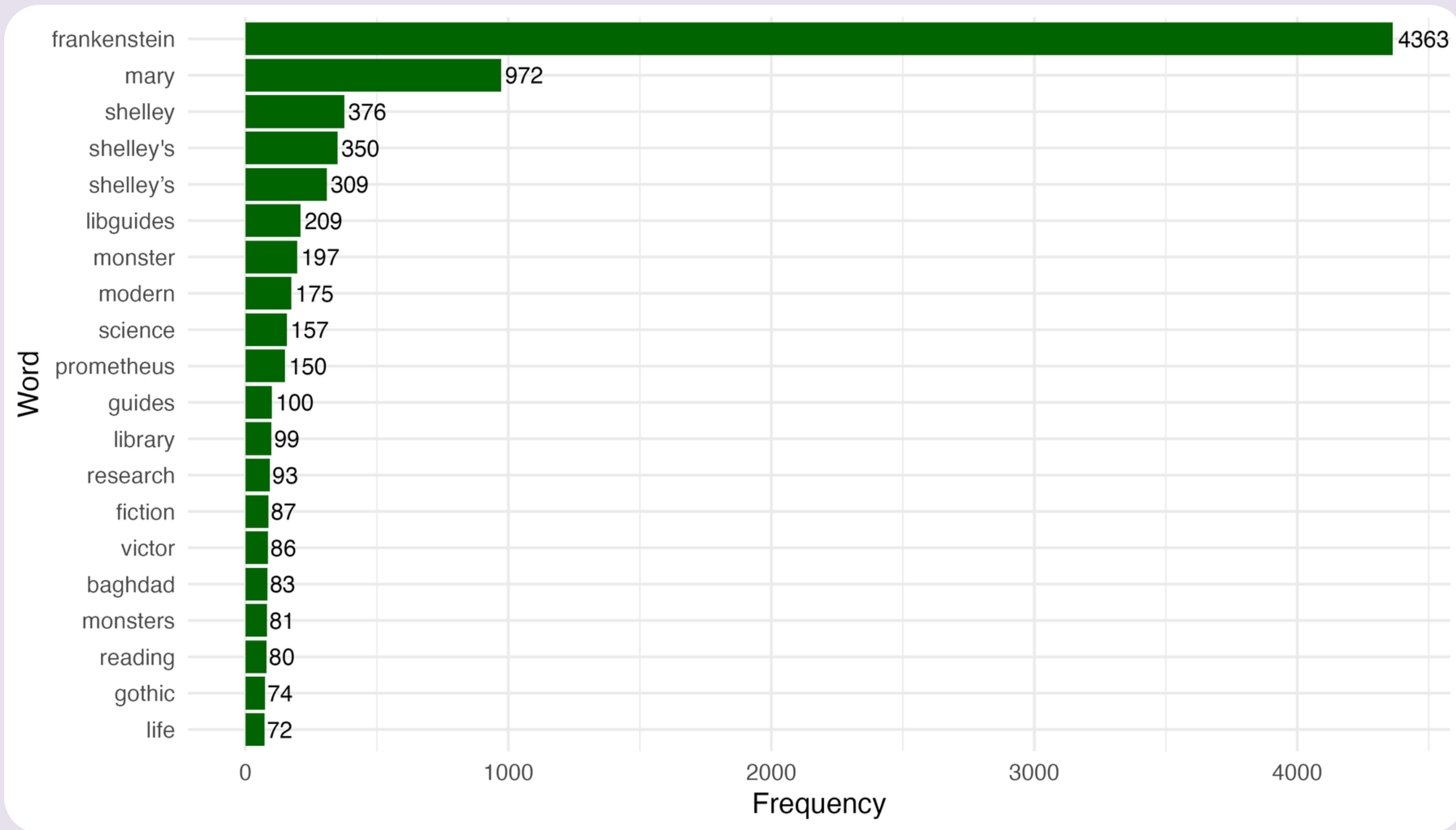


Top 20 frequently occurring co-words for works with 'werewolf' in the title

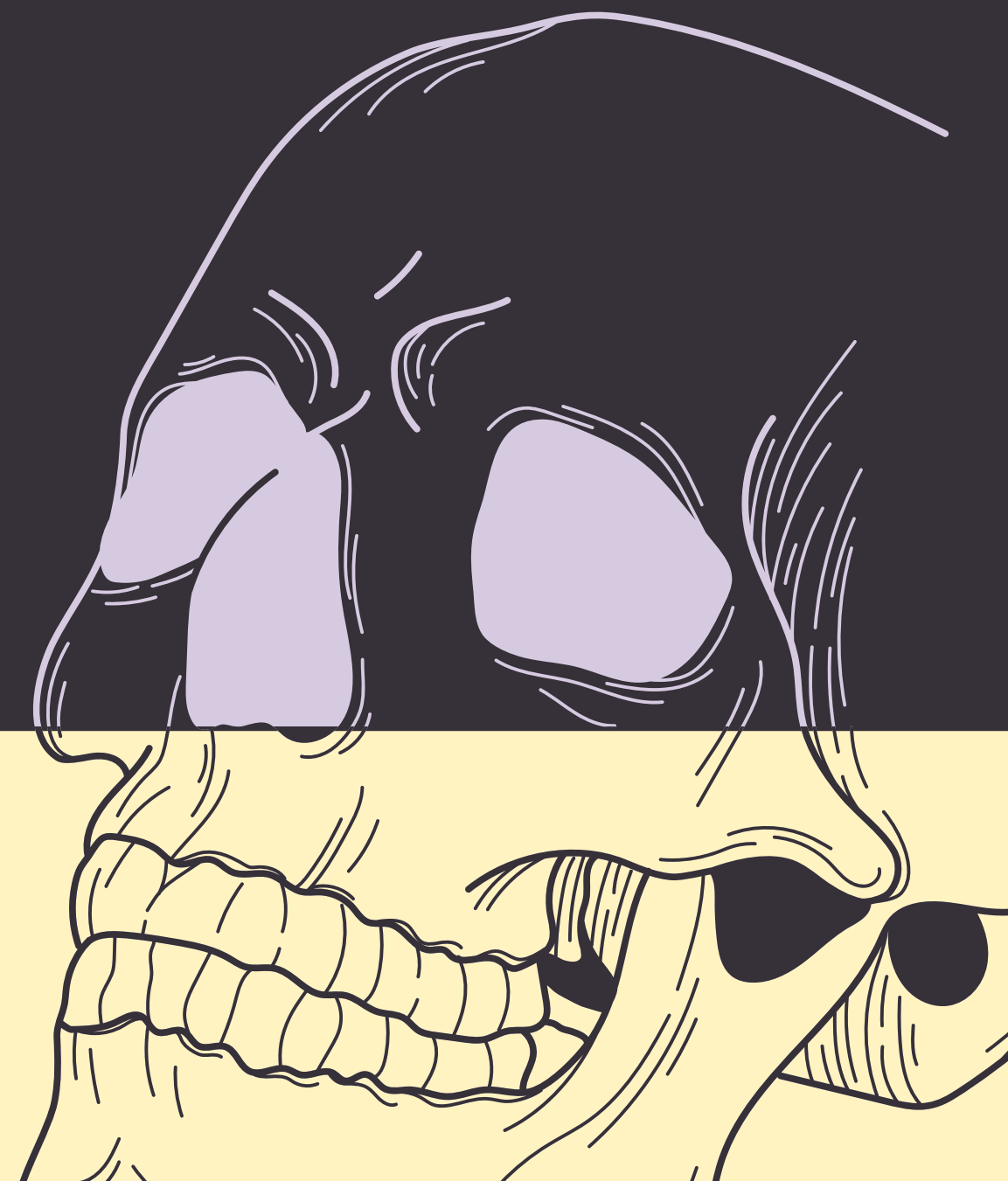




Top 20 frequently occurring co-words for works with 'Frankenstein' in the title



Discussion & Conclusion





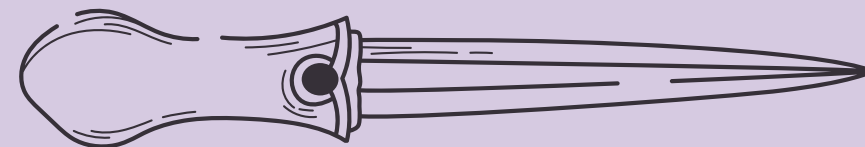
Characteristics

Mapped 18,294 scholarly works (1900–2024) on vampires, werewolves, Frankenstein’s monster, and zombies- iconic figures from The Monster Mash- using OpenAlex. Vampire studies dominate (~50%), zombies surpassed Frankenstein after 2010, Frankenstein spiked around 2020, and werewolves remain least studied (6%) with mid-century peaks.

Geographical & institutional patterns

Top producers include Universidade de São Paulo, CNRS, Oxford, Sydney, and Cornell; Canadian leaders are UBC, Toronto, Western, Alberta, and Carleton. Major countries: U.S., U.K., France, Australia, Brazil, Canada.

Document types & venues



Articles lead, followed by book chapters, books, preprints, and LibGuides—showing strong pedagogical and research engagement across fields (e.g., literature, technology, medicine, the natural sciences).

Collaboration & language

Higher collaboration in vampire and werewolf research; English dominates, followed by French, German, and Spanish. Latin America notable for vampire bat ecology.

Key insights and future work

Monsters function as epistemic objects linking culture, medicine, and technology. Bibliometrics reveal their interdisciplinary significance. Future analyses could expand to broader lexicons, citation contexts, and incorporating Arts & Humanities databases.



The End...?

Thanks for listening!

References



Otlet, P. (1934). *Traité de documentation: Le livre sur le livre, théorie et pratique*. Editiones Mundaneum.



Priem, J., Piwowar, H., & Orr, R. (2022). OpenAlex: A fully-open index of scholarly works, authors, venues, institutions, and concepts. ArXiv. <https://arxiv.org/abs/2205.01833>



Pritchard, A. (1969). Statistical bibliography or bibliometrics? *Journal of Documentation*, 25(4), 348–349.

“It is true, we shall be monsters, cut off from all the world; but on that account we shall be more attached to one another.”
–Frankenstein, Mary Shelley, 1818

Read the short paper on the QSS Lab website:

