This collaborative presentation (with equal contribution) was delivered at the Edge Hill Corpus Research Group on 14 December 2023.

A PACK OF LONE WOLVES? EXPLORING THE NEXUS BETWEEN THE LONE-WOLF TERRORIST, AL-QAEDA, AND ISIS IN THE BRITISH PRESS



Daniel Malone & Hanna Schmück Lancaster University | Edge Hill University





ABSTRACT

Historically, the lone wolf has been associated with different movements, ranging from the propaganda of the deed in the 19th Century to the leaderless resistance of white-supremacist groups in the 1980s and 90s. More recently, it is within the domain of Islamist terrorism, often dominated by Al-Qaeda and ISIS, where the lone wolf has become increasingly associated, especially in the British press.

In this joint presentation, we discuss the analytical approaches and results from our analysis of discourses surrounding the lone-wolf terrorist, al Qaeda, and ISIS in three diachronic subcorpora of the Lone Wolf Corpus (Malone, 2020), a compilation of British Press articles from 2000 to 2019. In a unique methodological combination, we employed large-scale collocation networks and topical clustering to examine shifting discourses through collocational clusters and applied a corpus-based critical discourse analysis to examine representations of the Al-Qaeda-ISIS nexus.

Hanna introduces the methodology employed to generate topical clusters and discusses collocational changes and constants in emerging discourses surrounding the lone-wolf terrorist. The resulting patterns present a discursive shift from clusters related to causative factors (e.g., a mental health subcluster), towards the internationalisation and institutionalisation of lone-wolf terrorism, and finally to response management in the form of sentencing and punitive actions (e.g., a court proceedings/prison subcluster).

Reporting on his corpus-based critical discourse analysis, Daniel presents the emergent representations surrounding co-occurrences of the node AL QAEDA with ISIS. These discourses were categorised into four modes of representation of presented relationship-types: Convergence, Association, Dissociation, and Divergence. These modes contributed to surrounding (in)security discourses that at times equate, promote and/or relegate different entities in a continual reshuffling of the threat hierarchy; a process termed here *enmity reimagining*.

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AGENDA

- Introduction Discourses of (In)Security and Threat Representation
- The Lone Wolf Corpus
- Part I: Collocational Clusters
 - Large Linguistic Networks
 - The LLN pipeline
 - Analysis of Collocational Clusters
 - Conclusion
- Part II: Corpus-based Critical Discourse Analysis (CDA)
 - Emerging Al Qaeda-ISIS Nexus Types
 - Interaction of (In)Security Discourses
 - Enmity Reimagining
 - Conclusion

NAVIGATING DISCOURSES OF (IN)SECURITY

Dichotomy of (In)Security Discourses: Inseparable yet conflicting perceptions of security and insecurity.

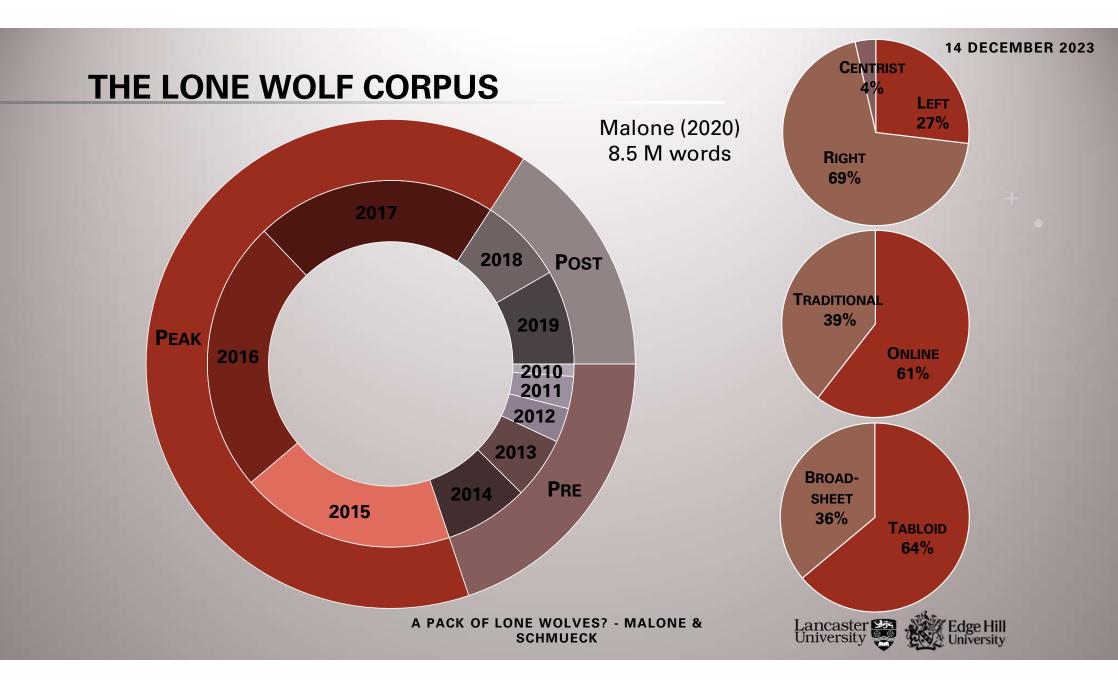
"Because we can never think security without insecurity, and vice versa, there is an essential conflict, which the word itself bears within itself, at the heart of security that is overlooked by the traditional study of security. [...] any discourse of security must always already, simultaneously and in a plurality of ways, be a discourse of danger too." (Dillon 1996)

From a Constructivist perspective, macro-level (in)security

- is not as an *a priori* reality, but rather a result of the processes of *threat representation*.
- discourses not only reflect but reify perceptions of threat.

The critical examination of (In)Security Discourses

- critiques 'natural' security paradigms and their formation.
- challenges the subjectivity of security paradigms, their underpinning practices/processes, and the role/purpose of threat identification.
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PART I COLLOCATIONAL CLUSTERS

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LARGE LINGUISTIC NETWORKS

General idea: bridging the gap between **corpus linguistics** and **graph theory**

Graph theory (Gross et al., 2019) is a branch of mathematics focusing on nodes (points) connected by edges (lines) and their properties

LLNs can be generated on different linguistic data, here we focus on corpus-wide **collocations**

Collocation broadly defined as 'a repeated or commonly co-occurring set of words' (Stulpinaitė et al., 2016; Brezina, 2018)

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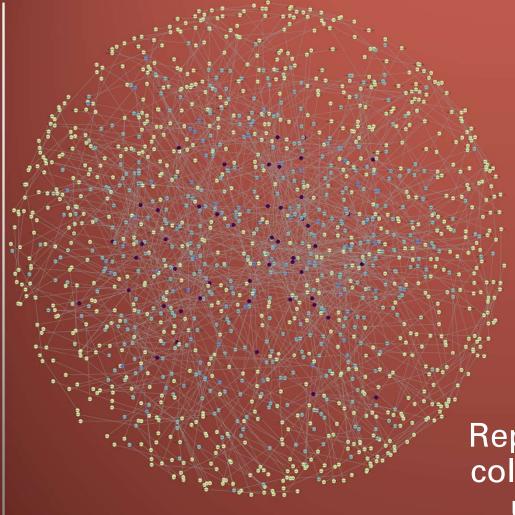
LARGE LINGUISTIC NETWORKS

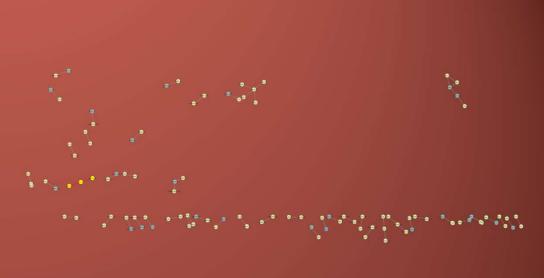
Aim

 A better representation of collocational profiles and thus special functions (Pecina, 2010), semantic relations (Xiao & McEnery, 2006), aboutness (Phillips, 1989), and discursive contexts (Brezina, 2016; Baker, 2016; Brezina et al., 2015) of words

Key feature

- Holistic exploration of the corpus
 - generating *all* collocations
 - analysing corpus-wide features
 - exploring individual words with special collocational functions





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Representation of the corpus-wide collocation networks based on the unclustered pre-peak corpus.

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https://osf.io/mw4jt/ https://doi.org/10.17605/OSF.IO/MW4JT

THE PIPELINE

A pack of lone wolves

lone_wolf_bigrams_script.ipynb

Lone Wolf Networks

This ipynb documents the procedure used to generate collocation networks for the lone wolf project. In line with existing key word analyses, MI scores and log likelihood of bigrams have been extracted from a diachronic corpus on lone wolf discourses in the British Press. Years have been grouped into pre-peak, peak, and post-peak (see classification below).

Key information regarding the bigram generation:

- bigrams cannot span multiple sentences
- Filters and thresholds are fully customisable, to keep collocation networks at a manageable size and to mirror ANON's previous work a minimum LL score of 50 had been implemented

In [1]: from matplotlib.ticker import FuncFormatter import os import re import random import pickle import pandas as pd import numpy as np from collections import Counter

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THE PIPELINE

generating global frequency wordlist Normalise ISIS/AlQaeda lemmatisation and Raw Corpus POS tagging (spaCy) spelling generating frequency wordlist per year combining into one removing nongenerating dataframe filtering for most lexical* alphanumeric sentence-wide containing all items (J,R,N,V) tuples (directional) words/tuples subcorpora csv file for network generation (optional) applying contingency table minimum AM calculation collocation creation calculation of frequencies percentage overlap per subcorpus A PACK OF LONE WOLVES? - MALONE & Lancaster University Edge Hill University SCHMUECK

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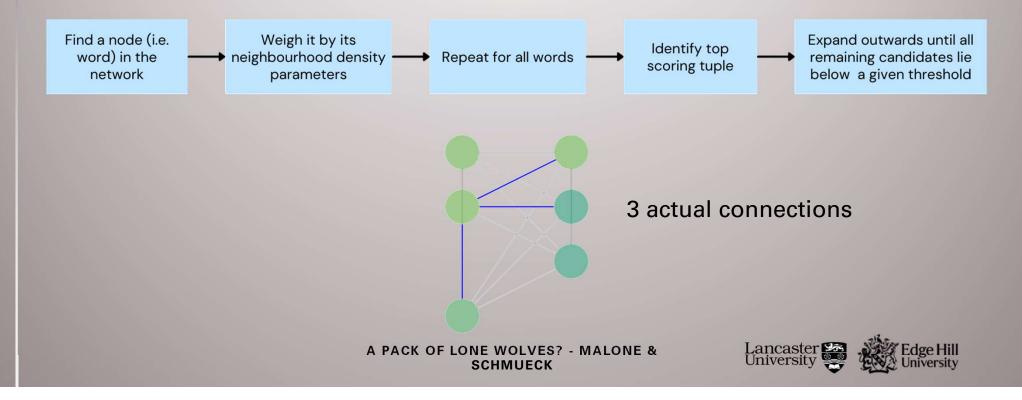
METHODOLOGY

LLN Collocation analysis

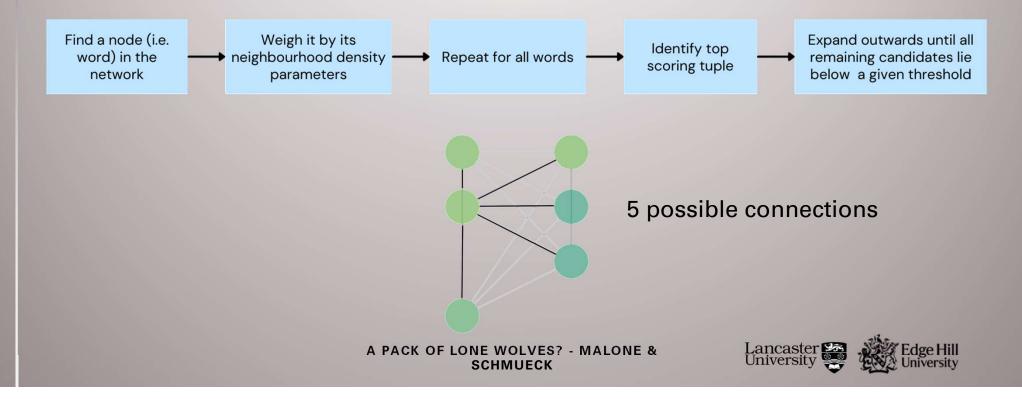
- Selection of relevant layer(s) of analysis
 - here: lemma_POS, AM: logLikelihood > 50, sentence-span
- Selection of relevant properties
 - here: density, centrality, cluster memberships
- Selection of clustering algorithm
 - here: MCODE clustering (Bader & Hogue, 2003)
- Selection of appropriate layout
 - here: edge-weighted spring directed layout (Kamada & Kawai, 1989) based on AM strength

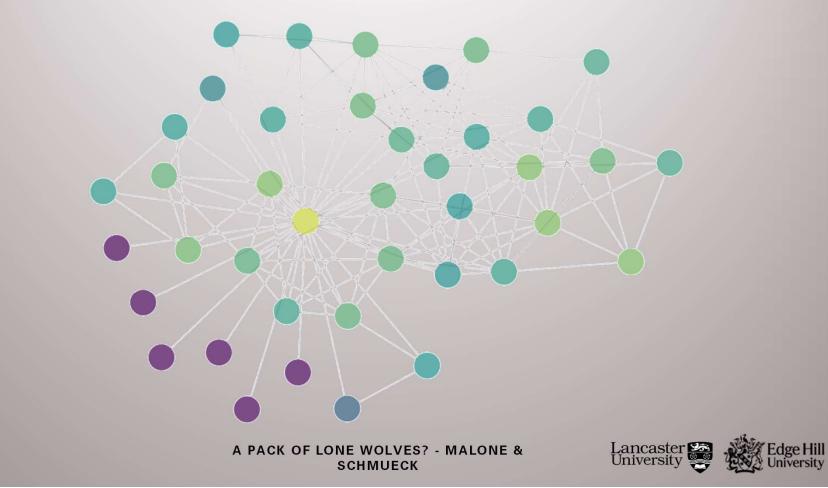


- Here MCODE clustering (Bader & Hogue, 2003)
- In simple terms, the clustering algorithm follows these steps:



- Here MCODE clustering (Bader & Hogue, 2003)
- In simple terms, the clustering algorithm follows these steps:









6197

646

LVC CLUSTER 216 23.765 54.322 13.116 96.924 0.709 36.56 RESULTS 38.161 NA. 17A

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33

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8 MALONE & PACK OF LONE WOLVES? SCHMUECK

912

19.973

69.593

73.601

81.201 23.121

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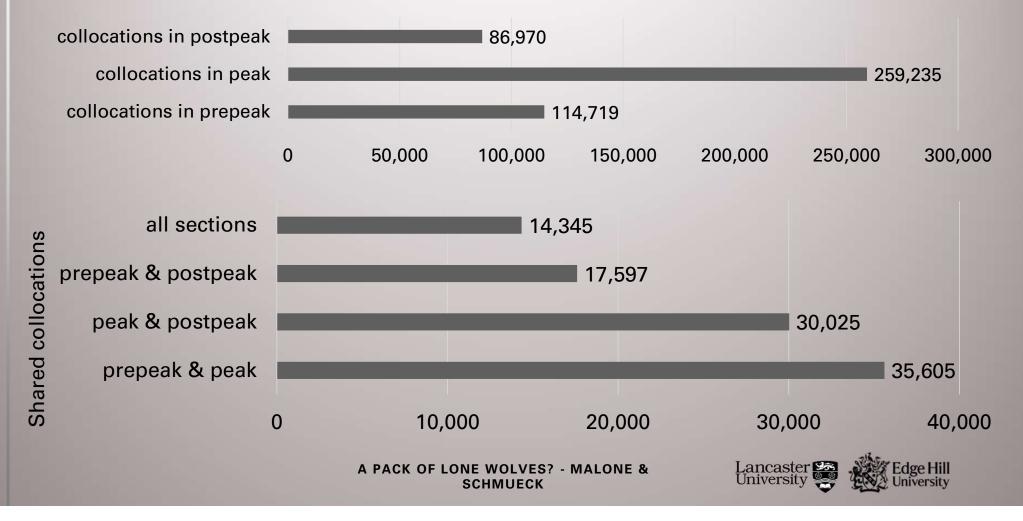
LWC NETWORK PROPERTIES

	PREPEAK	PEAK	POSTPEAK
Number of nodes	6,538	13,264	5,387
Number of edges	7,184	20,695	5,741
Avg. number of neighbours	2.2	3.1	2.1
Network diameter	27	22	29
Characteristic path length	9.4	6.8	9.5
Clustering coefficient	0.006	0.01	0.007
Connected components	1,068	1,473	866

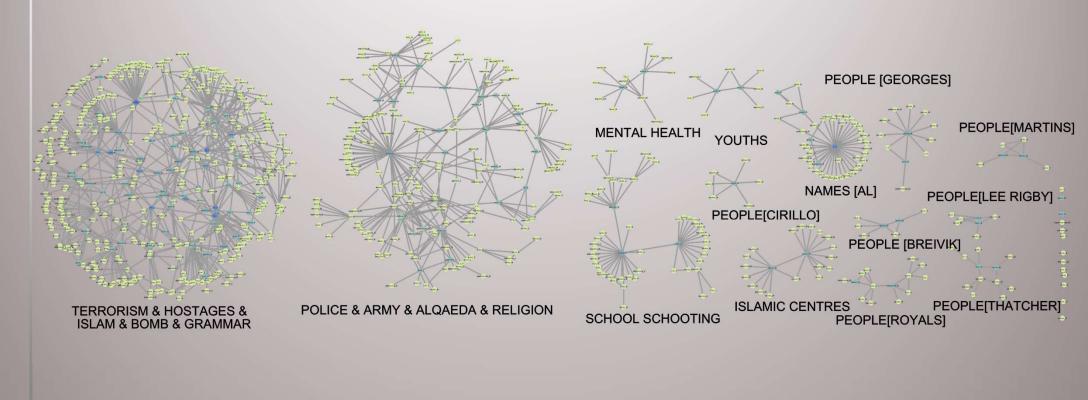
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SUBCORPUS SIMILARITY

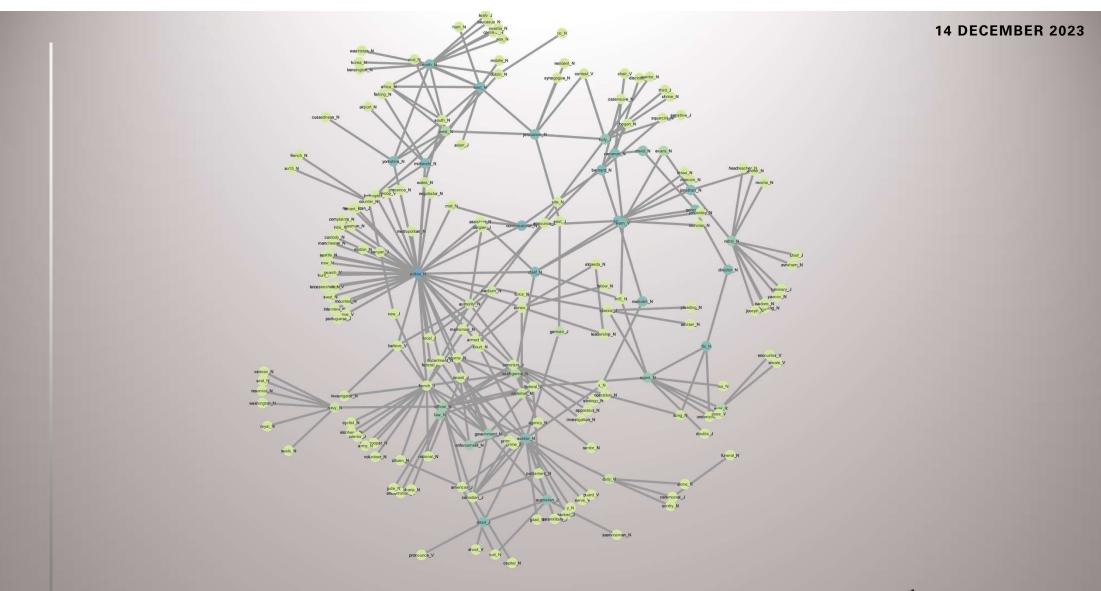


PREPEAK

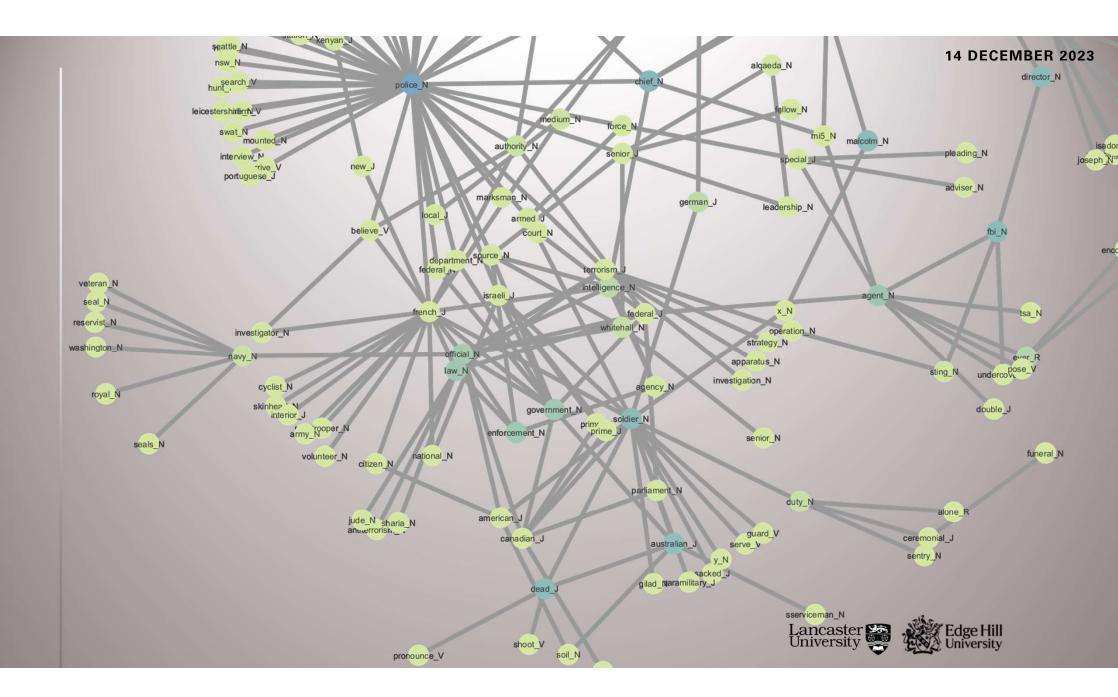


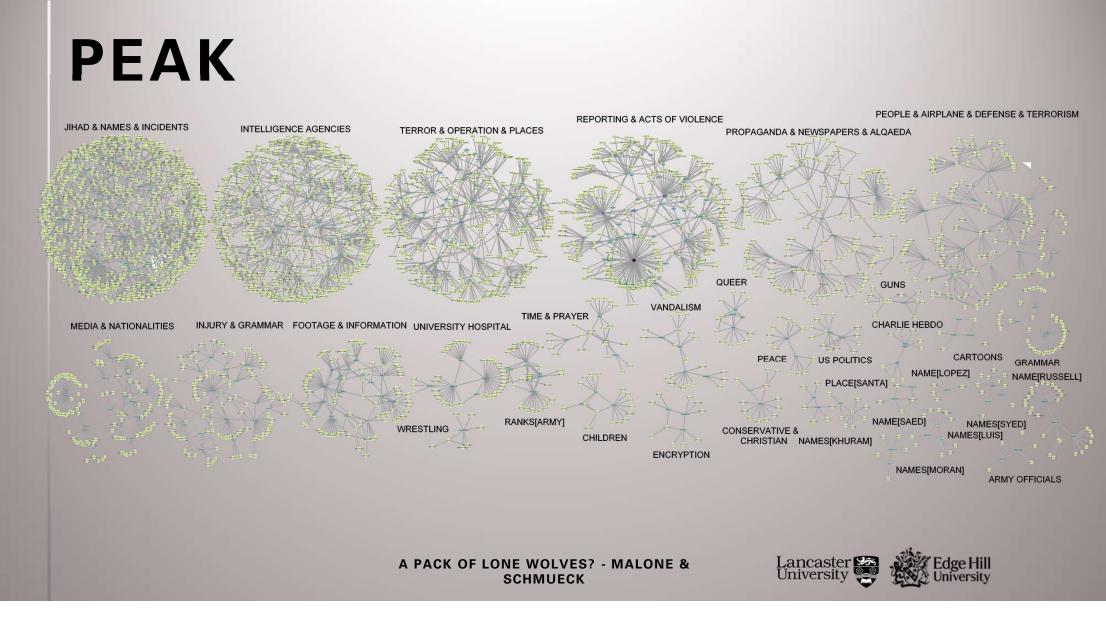
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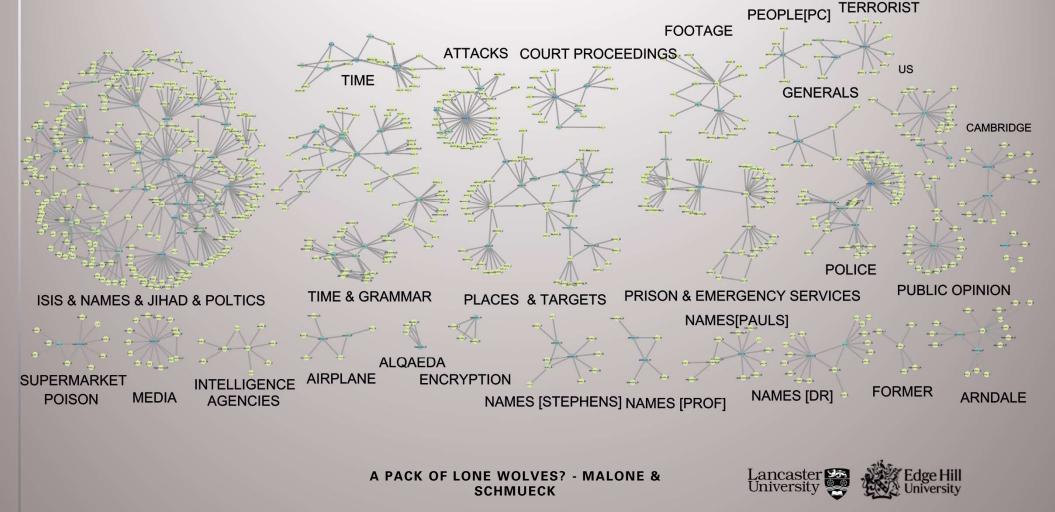


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POSTPEAK



CONCLUSION

- Reporting in the peak time is not just most verbose, but also most collocationally dense
- Prepeak and peak are more collocationally similar than postpeak and peak
- Overall, the collocation networks share a common core:
 - Strong focus on Islamist attacks, right wing terrorism plays a minor role
 - Prominence of organisations in the contextualisation of lone actors
- Discursive shifts:
 - Abstraction and internationalisation in the peak years
 - Loss of distinct focus on mental health (present in prepeak)



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THEORY INFORMING INTERPRETATION

Van Leeuwen (2008): Discourse as recontextualization of social practice

- "...all texts, all representations of the world and what is going on in it, however abstract, should be interpreted as representations of social practices... [texts] draw on, and transform, social practices"
 - Bernstein's (1981) concept of "recontextualization"
 - Foucault's (1980) notion of discourse "a socially constructed knowledge of some social practice" that is defined by its specific context
 - "a field of objects"
 - "the definition of a legitimate perspective for the agent of knowledge"

Based on this, we can understand (in)security discourses discussed today as

- Concerning with practices/processes of threat identification; focus on how threat objects are (re)positioned within these discourses, particularly in the space left by security "successes"
- Defined by the highly institutionalised contexts of their production,
 - e.g., the press, security services, political elites
- Involving representations that are sensitive to the socio-political contexts of their production,
 - e.g., "real-world" happenings, editorial commitments of producing newspapers, quality of reporting (i.e., sensationalist vs in-depth analysis)
 Lancaster Lancast

DYNAMICS OF THREAT REPRESENTATION

Buzan's "Threat Deficit" (2006) : Security vacuum post-Cold War led to new adversary identification.

- Emergence of discourses presenting "irrational" and "unpredictable" threats
- The War on Terror as a reaction to this security void
- Understood here as the space vacated by the demise of a primary adversary

Heath-Kelly's "Enmity Forgetting" (2018): Active relegation of past adversaries

- Strategic repositioning of threats in collective memory; from Al Qaeda to ISIS, from ISIS to..?
- Cyclical pattern in (in)security discourses

Our contribution: *Reimagining Enmity*

- Strategic *re*introduction of previously "forgotten" adversaries as threats
- Indicates a reshuffling of the threat hierarchy when no new adversary/threat is evident
- Empirical observations from the Lone Wolf Corpus



METHODOLOGICAL APPROACH

Three interconnected stages (for a similar approach, see Karaminis et al., 2023):

1. Collocation analysis

- unusually frequent co-occurrences between two words (Sinclair, 1991)
- ... subsequent identification of attitudes through the semantic preference and discourse prosody stages

2. Semantic preference analysis

- associations between node/s and groups of semantically-related collocates (Stubbs, 2001: 65)
- .: reveal consistent concepts and/or issues (Phillips, 1989)

3. Discourse prosody analysis

- implicit and explicit attitudes (Stubbs, 2001: 66) toward Al-Qaeda and ISIS
- .: enables a critical discourse analysis of the emerging representations

Practically speaking, in the discourse prosody analysis, we

- manually annotated all 424 corpus instances of AL QAEDA co-occurring with ISIS
- investigated a broad analytical window of 100 words either side of the node
- annotated corpus instances for two categories:
 - nexus-types; Association, Dissociation, Convergence, Divergence
 - surrounding discourses



Impact

France is still under a

attacks on Paris, when

almost 150 people were

murdered by ISIS and Al-

In that year four radical

responsible for three-

quarters of all deaths

from terrorism: Isis, Boko

Haram, the Taliban and al-

[Daily Mail Online, 2016]

Qaeda operatives.

Islamic groups

of

State

Qaeda.

following

Emergency

were

last year's

EMERGING NEXUS-TYPE 1

Association: foregrounding of shared phenomena, e.g., capability, ideology, objectives, methods, etc.

- Frequency: 75% of instances
- Annual Trend:
- Trend interpretation:
 - Al-Qaeda used as a template for understanding ISIS (e.g., Smith et al., 2020)
 - Various degrees of connection to the lone wolf

Capability

'It should be underlined that IS, Al-Qaeda and other jihadist groups continue to pose a major threat. They have the ongoing intent and capability to conduct terrorist attacks in the West,' Europol said. [Daily Mail Online, 2018]

Western governments claim that IS might one day, like Al-Qaeda, export terrorism to Europe or the United States. So far, however, the group has expressed little interest in acting outside the Middle East. [Independent, 2014]

Association

Inspiration

"There's also a threat from individuals who may have been inspired by terrorist groups, including Daesh and al Qaeda, to carry out so-called 'lone actor' attacks targeting public events or places," says the Foreign Office. [Independent, 2018]

However, a four page intelligence report from the NYPD has confirmed Thompson's selfradicalization and his creeping obsession with terror outfits such as al-Qaeda and Islamic State. [Daily Mail Online, 2014]

Modus Operandi

Groups like ISIL and al Qaeda want to make this war a war between Islam and America, or between Islam and the West.

[Independent, 2016]

The Spanish officers were referring to the number of jihadists residing on the Continent who have been recruited by Islamic State or groups affiliated to al-Qaeda.

[Times, 2015]

[Times Online, 2017]



EMERGING NEXUS-TYPE 2

Dissociation: contrasting phenomena, e.g., capability, ideology, operational distinctiveness

- Frequency: 11% of instances
- Annual Trend:
- Trend interpretation:
 - Al-Qaeda used as a template for understanding ISIS (e.g., Smith et al., 2020)
 - ISIS positioned as a superior threat to Al-Qaeda

Capability

ISIS militants 'MORE brutal' than al-Qaeda terrorists behind 9/11, claims terror expert [Express Online, 2015]

Islamic State made you almost nostalgic for al-Qaeda, who seemed rather old-fashioned, thoughtful fellows compared to this monstrous new strain of psychopath.

[Telegraph, 2015]

Isis will become 'al-Qaeda on steroids' after defeat, official warns

[Independent, 2017]

ISIS the new 'super Al-Qaeda' with Europe its main recruiting ground

[Express Online, 2016]

Dissociation

Inspiration

The Bangladeshi immigrant added that he was specifically inspired by ISIS, 'not Al Qaeda'. [Daily Mail Online, 2017]

Lone operators have come to the fore in recent years as Isis has succeeded where al-Qaeda largely failed in exhorting what one senior British official calls "Nike terrorism", saying "just do it" to Muslims living in the west.

[Financial Times, 2017]

Modus Operandi

By comparison with al-Qaeda, lsis, which has claimed the majority of recent attacks, is multi-dimensional. It owes its strength to the merging of the millenarian ideals of extremist Islam and the Sunni supremacist remnants of the Iraqi Ba'athist state.

[Financial Times, 2016]

Fighting ISIS has been harder than al Qaeda was, he said, because the terrorist organization preys on susceptible individuals, rather than relying on skilled operatives.

[Daily Mail Online, 2015]



EMERGING NEXUS-TYPE 3

Convergence: characterised by unification, e.g., via collaboration, alliance, or evolution.

- Frequency: 5% of instances
- Annual Trend:
- Trend interpretation:
 - 2015 shared responsibility for Charlie Hebdo attack
 - 2017 after the collapse of the Islamic State, speculations of ISIS resurgence

	Convergence					
	Collaboration	Alliance	Merger	Evolution/Genealogy		
S	Were Paris attacks the first case of al-Qaeda and Isis working together? [Independent, 2015] DRONE BOMB:: ISIS and Al-Qaida are feared to be plotting a terror attack on Inauguration Day. [Daily Star Online, 2017]	There are fears, too, that ISIS and AI Qaeda will team up to create a global terror giant in the wake of his death. [Sun Online, 2019] TERROR ARMY: ISIS in talks with al-Qaeda to form deadly ALLIANCE. [Express Online, 2017]	The successor group could be made up of Al- Qaeda and the remains of IS, he said Jane Marriott, UK director of the Joint International Counter Terrorism Unit, said that although crushing the IS caliphate was a positive step, more needed to be done to stop a new group forming.	As al-Qaeda evolved into Isis, he rose rapidly, becoming al-Baghdadi's most trusted lieutenant. [Times, 2016] Isis- and its ancestor, al- Qaida- are highly aware of the impact of each" message in blood" (the title given by its propaganda department		
	Charlie Hebdo: Mourning in Paris Do the attacks show al- Qaeda and Isis are now working together?	Isis 'seeking alliance with al-Qaeda`, says Iraqi Vice President [Independent, 2017]	[Daily Mail, 2017]	to a grisly October 2014 video depicting the beheading of a Kurdish man). [Independent, 2016]		
ie	Lange M. Anal.	hannan		mmmm		

Convergence



EMERGING NEXUS-TYPE 4

Divergence is characterised by fragmentation, competition, or direct enmity.

- Frequency: 9% of instances
- Annual Trend:
- Trend interpretation: used to represent ISIS's emergence

Split

The Kouachis and Coulibaly knew each other prior to the al-Qaeda and Islamic State split. [Independent, 2015]

The booklet, originally written in Arabic for al-Qaeda, has been translated and re-released in English by Isil, which split from al-Qaeda in 2014.

[Telegraph, 2016]

Clapper also said al-Qaida, from which the Islamic State spun off, remains an enemy and the U.S. will continue to see cyber threats from China, Russia and North Korea, which is also ramping up its nuclear program. [Daily Mail Online, 2016]

[Daily Mail Online, 2010]

Divergence

Competition

He said: 'AI Qaeda and IS are competing with each other to attract the same kind of jihadis. [Daily Mail Online, 2017]

Other battle-hardened militants, some with training in chemical weapons, have defected to al-Qaeda in Syria.

[Sun Online, 2018]

While the civil war makes it easier for ISIS to grow, the strong al-Qaeda presence makes strong ISIS growth difficult. [Sun Online, 2018]

Enmity

Islamic State and al-Qaeda in Syria have been fighting each other in the region ever since the al-Qaeda leadership refused to pledge allegiance to IS leader Abu Bakr Baghdadi in 2014.

[Daily Mail Online, 2016]

Al-Qaida 'declares war' on ISIS on 9/11 anniversary [Daily Star Online, 2015]

Matthew Olsen told ABC News that al-Zawahri speaking out against Baghdadi "suggests that the differences are irreconcilable" between the two groups. It is hoped that the divide between lsis and al-Qaeda can be used by the Western allies to fight against them.

[Independent, 2015]



INTERACTIONS OF (IN)SECURITY DISCOURSES

ASSOCIATION

[1] ...ISIS' hold. Al-Qaeda is preparing to launch terror attacks on Britain and Europe as the West focuses its attention on crushing ISIS a report has claimed. Sources told The Times of a rising threat from the terror group and Defence Secretary Michael Fallon confirmed there has been a resurgence of al-Qaeda in Afghanistan, meaning Britain is forced to keep troops on the ground in the country. [Daily Mail Online, 2016]

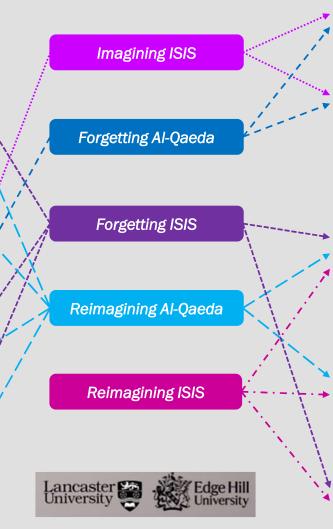
[2] But groups- **al-Qaida, Isis** or some other affiliatecontinue to want to wreak misery... And this comes as al-Qaida has started to rear its head once again, menacing the world through new messages by Hamza bin Laden. [Observer, 2017]

DIVERGENCE

[3] **Al-Qaeda** fear of **Islamic State** after hate preacher Qatada reveals group ripped apart [Express.co.uk, 2016]

[4] Experts believe al-Adnani's death, combine with recent IS territorial losses could leave the door open for an **al-Qaeda** to replace **IS** with its own caliphate. [Daily Mail Online, 2016]

[5] Earlier this year, Max Abrahms, a terrorism academic and expert on al Qaeda based in the US, told MailOnline that Hamza could play a key role in displacing **Islamic State** in the region. He said: 'Al Qaeda and IS are competing with each other to attract the same kind of jihadis. [Daily Mail Online, 2017]



DISSOCIATION

[6] **IS** A GREATER DANGER THAN **AL QAEDA**- FBI. ISLAMIC State's effort to recruit vulnerable young people through social media has turned it into a greater terror threat than Al Qaeda, the director of the FBI has warned. [Daily Mail, 2015]

[7] **ISIS** is a bigger threat than **al-Qaeda** says Attorney General Loretta Lynch as terror group uses Twitter and social media to recruit members [Daily Mail Online, 2015]

CONVERGENCE

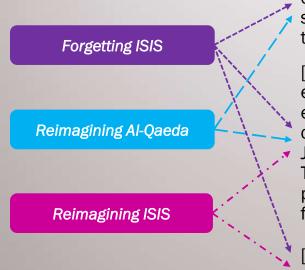
[8] The Belgian also predicted that a new Daesh 2.0' group could emerge after the defeat of IS militants in Iraq and Syria if not enough is done to address their grievances. The successor group could be made up of **Al-Qaeda** and the remains of **IS**, he said. Jane Marriott, UK director of the Joint International Counter Terrorism Unit, said that although crushing the IS caliphate was a positive step, more needed to be done to stop a new group forming. [Daily Mail, 2017]

[9] His warning was echoed by France's former President Francois Hollande, who said Baghdadi's death was "not a fatal blow" against ISIS because it "still has fighters." There are fears, too, that **ISIS** and **AI Qaeda** will team up to create a global terror giant in the wake of his death. At the height of its power, Islamic State ruled over millions of people from northern Syria to the outskirts of Baghdad. [TheSun.co.uk, 2019]

[10] Isis will become 'al-Qaeda on steroids' after defeat, official warns ... **Isis** 'seeking alliance with **al-Qaeda**', says Iraqi Vice President [Independent, 2017]

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ENMITY REIMAGINING



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CONCLUSION

Key Takeaway:

- 1. Threats in (in)security discourses are not static; they are strategically constructed
- 2. Threat objects can be reshuffled in these discourses
- 3. => the practice of threat identification is fundamental to (in)security discourses
- 4. .: questions relating to subjectivity and/or purpose
- Methodologically speaking: Discourse prosody analysis with broadened co-text allowed for complex practices/processes to be revealed
- Drawbacks: cross-section of the AQ-ISIS nexus = relatively low number of instances investigated => to be treated as exploratory
- Future research may consider constructing a topic-specific corpus specifically designed to examine discourses surrounding threat entities. This corpus would comprise texts where the presence of multiple threat objects co-occur.



REFERENCES(1/2)

- Bader, G. D., & Hogue, C. W. V. (2003). An automated method for finding molecular complexes in large protein interaction networks. BMC Bioinformatics, 4(2). doi.org/10.1186/1471-2105-4-2
- Baker, P. (2016). The shapes of collocation. International Journal of Corpus Linguistics, 21(2), 139–164. doi.org/10.1075/ijcl.21.2.01bak
- Bernstein, B. (1981). Codes, Modalities and the Process of Cultural Reproduction: A Model. Language and Society, 19: 327-63.
- Brezina, V. (2016). Collocation Networks: Exploring Associations in Discourse. In P. Baker & J. Egbert (Eds.), Routledge Advances in Corpus Linguistics: Vol. 17. Triangulating methodological approaches in corpus-linguistic research (pp. 90–107). Routledge.
- Brezina, V. (2018). Collocation Graphs and Networks: Selected Applications. In P. Cantos Gómez & M. Almela Sánchez (Eds.), *Quantitative Methods in the Humanities and Social Sciences: Vol. 10. Lexical collocation analysis: Advances and applications* (Vol. 16, pp. 59–83). Springer. doi.org/10.1007/978-3-319-92582-0_4
- Brezina, V., McEnery, T., & Wattam, S. (2015). Collocations in context: A new perspective on collocation networks. International Journal of Corpus Linguistics, 20(2), 139–173. doi.org/10.1075/ijcl.20.2.01bre
- Buzan, B. (2006). Will the 'Global War on Terrorism' Be the New Cold War? International Affairs, 82(6): 1101–1118
- Dillon, M. (1996). Politics of Security: Towards a political philosophy of continental thought. Routledge.
- Foucault, M., & Bouchard, D. (1980). *Language, Counter-Memory, Practice: Selected Essays and Interviews*. Cornell University Press. doi.org/10.1515/9781501741913
- Gross, J. L., Yellen, J., & Anderson, M. (2019). Graph theory and its applications (Third edition). Textbooks in mathematics. CRC Press. doi.org/10.1201/97804294251344
- Heath-Kelly, C. (2018). Forgetting ISIS: enmity, drive and repetition in security discourse. *Critical Studies on Security*, 6(1): 85-99. 10.1080/21624887.2017.1407595

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REFERENCES(2/2)

- Kamada, T., & Kawai, S. (1989). An algorithm for drawing general undirected graphs. Information Processing Letters, 31(1), 7–15. doi.org/10.1016/0020-0190(89)90102-6
- Karaminis, T., Gabrielatos, C., Maden-Weinberger, U., & Beattie, G. (2023). Portrayals of autism in the British press: A corpus-based study. *Autism*, 27(4): 1092-1114. doi.org/10.1177/13623613221131752
- Malone, D. (2020). Developing a complex query to build a specialised corpus: Reducing the issue of polysemous query terms. Corpora and Discourse International Conference 2020. Advance online publication.
- Pecina, P. (2010). Lexical association measures and collocation extraction. Language Resources & Evaluation, 44, 137–158. doi.org/10.1007/s10579-009-9101-4
- Phillips, M. (1989). Lexical structure of text. Discourse analysis monograph: Vol. 12. University of Birmingham.
- Sinclair, J. (1991). Corpus, Concordance, Collocation. Oxford University Press.
- Stubbs, M. (2001). Words and Phrases: Corpus Studies of Lexical Semantics. Oxford: Blackwell.
- Stulpinaitė, M., Horbačauskiene, J., & Kasperavičienė, R. (2016). Issues in Translation of Linguistic Collocations: Lingvistinių kolokacijų vertimo ypatumai. *Studies About Languages*(29), 31–41. doi.org/10.5755/j01.sal.0.29.15056
- Van Leeuwen, T. (2008). Discourse and Practice: New Tools for Critical Discourse Analysis. Oxford University Press.
- Xiao, R., & McEnery, T. (2006). Collocation, Semantic Prosody, and Near Synonymy: A Cross-Linguistic Perspective. Applied Linguistics, 27(1), 103–129. doi.org/10.1093/applin/ami045

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