

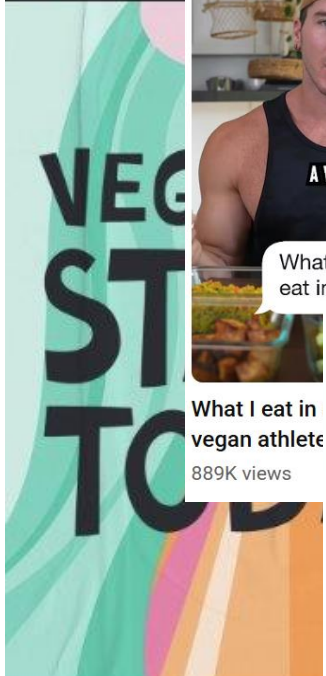
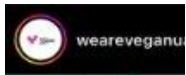
Legitimising veganism online

Computationally-interpretative approach to
video analysis

Adrianna Jezierska

Research background

- Influencers are primarily studied in marketing and advertising contexts, but they are increasingly engaged with social and political issues (Gheihman, 2021; Schmuck, 2021; Haenfler et al., 2012)
- Management research often conceptualises influencers as:
 - extensions of organisations for resource acquisition (Castelló et al., 2016)
 - entrepreneurial actors signalling credibility and attracting stakeholders (Jagolinzer, 2024)
- Recent calls urge management scholars to theorise influencers as independent focal actors, rather than as extensions of the organisations they endorse (Putri et al., 2026)
- Discursive legitimation highlights the role of communication and language in the legitimation processes (Vaara et al., 2024)



What I eat in vegan athlete
889K views



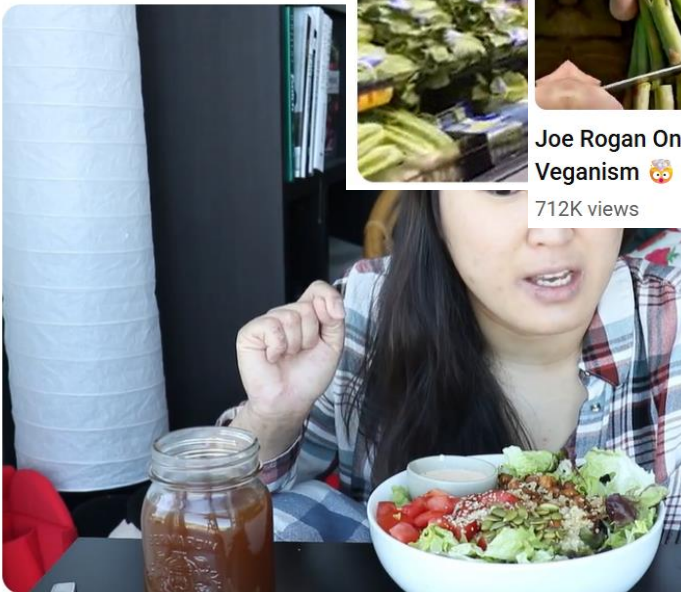
Joe Rogan On Quitting
Veganism 🐼
712K views



Joe Roan On VEGANS



Why Eggs ARE Vegan



♥️ 💬 📌

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weareveganuary #Veganuary2023 IS all the tips, advice and exciting vegan your journey is successful this year!

episode 019:
busting myths about the carnivore diet and how to thrive on meat with dr. shawn baker

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I thought my life wasn't worth living a lot of the time, which is a terrible, terrible way to live. And then to have simply a change in diet have that profound in effect to go from that to feeling optimistic almost every day of my life is just... It's hard to even imagine if you have an experience to. Now at that time were you seeing conventional treatment from a psychiatrist or a neurologist? Yeah. Did you tell them I kind of got these meds because I changed my diet? I had a really lucky turn of events. I had started the carnivore diet or the ZC diet, if we call it at the time. And I was on a low dose of a medication. I was also on thyroid medication. And shortly after I started the carnivore diet I got pregnant. I did end up going back on the carnivore diet as soon as my baby was born. And I was still nursing so I didn't have any more meds. And I just never needed them again. And so I never went back to this psychiatrist. Should write her a letter if she's still practicing like, wouldn't believe it. Yeah, my ex saw her on the bus one time and told her the story and she was kind of speechless. She noticed that. No, I mean what would you say it sounds ridiculous. Today's show with Amber is brought to you by her pals over at blueblocks.com. The leaders in blue light filtering protective eyewear that actually looks good and fits nice and snugly on your face that can even be made and customized if you need prescription lenses for your blue light filtering glasses. So why should you care about this? The data is out showing that screen usage not only causes digital eye strain, but it can actually affect some of the neurons and literally rewire your brain in a negative way. So if you're like me and you're spending a lot more time, whether it's good or bad on your screens because you can't see real people and you know we're distancing ourselves from other humans, I think you should be protecting your eyes using blue light filtering lenses that have been validated

Given this amount of data, how can we systematically identify the legitimising discourses and track their evolution over time?

Methods Overview

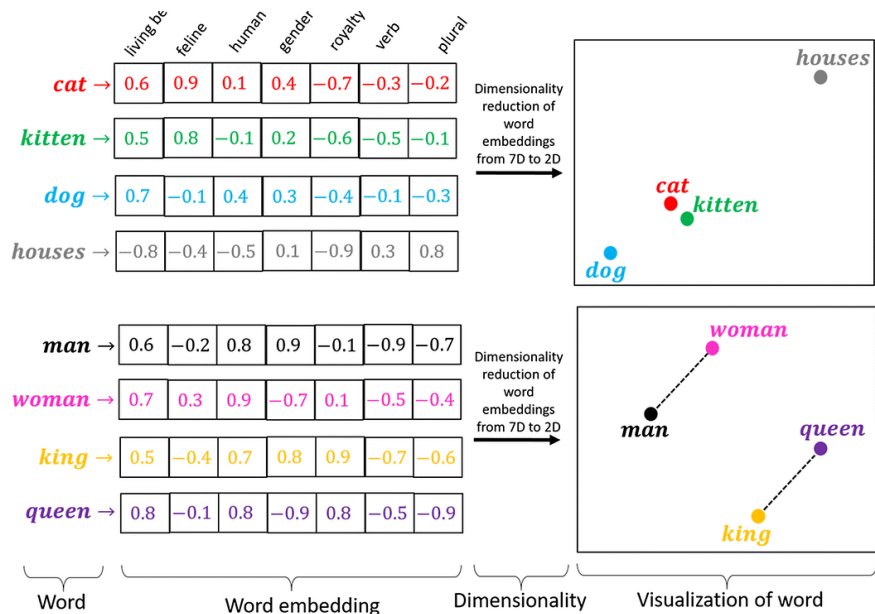
Data Collection	Data Sources	Computational Analysis	Qualitative Analysis
<p>7902 videos from 1011 YouTube channels.</p> <p>Channels filtered with a minimum of 1000 followers of curated vegan-related keywords (e.g., “vegan lifestyle,” “plant-based”).</p>	<p>Video transcripts (transcribed via Whisper Python library).</p>	<p>Dynamic BERTopic Modelling to identify decade-long vegan discourse from transcripts.</p>	<p>Interpretive video analysis to contextualise machine-identified topics</p>

How does BERTopic work? (very simplified list!)

1. Embed documents
2. Dimensionality reduction
3. Cluster documents
4. Topic representation
5. Topic fine – tuning (optional)

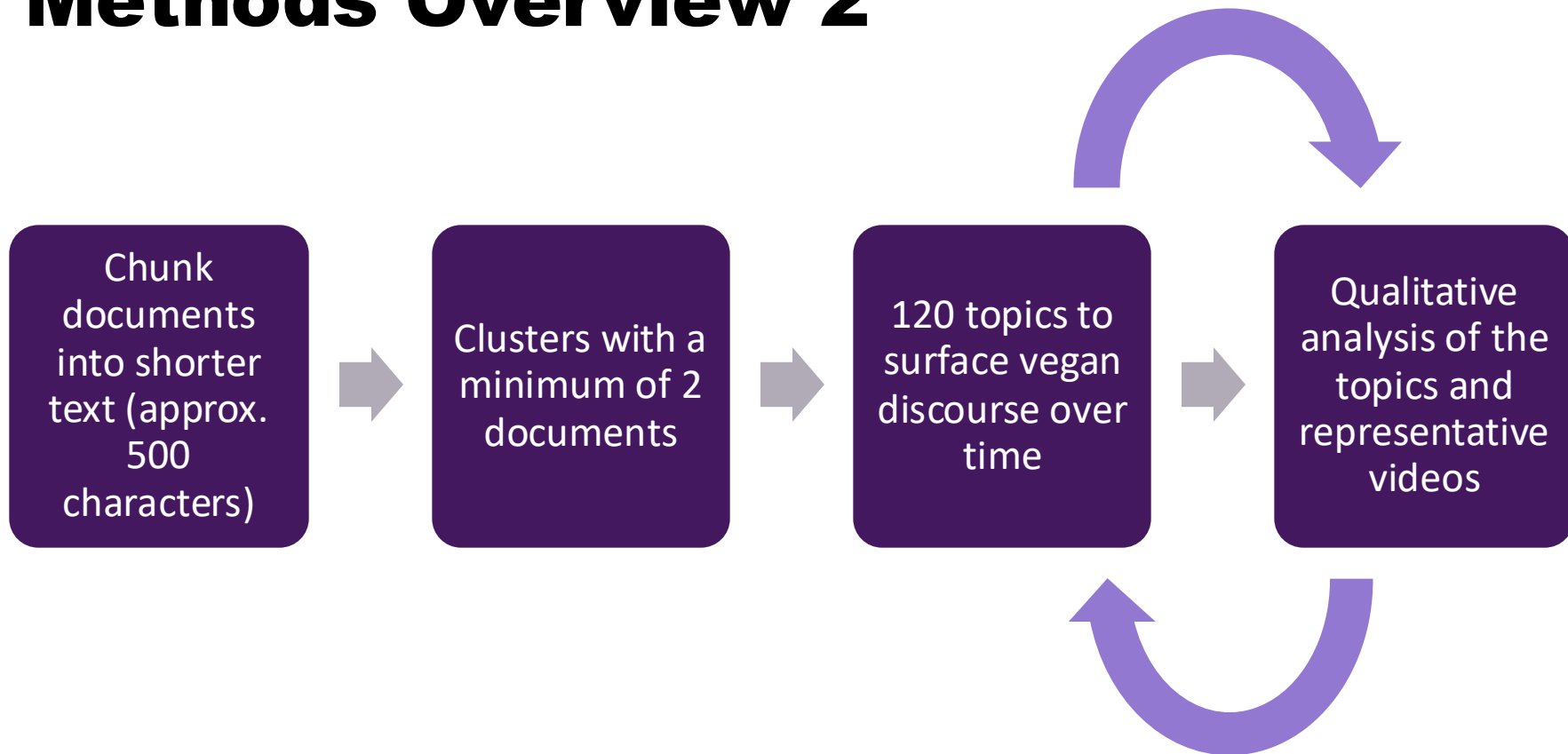
<https://maartengr.github.io/BERTopic/index.html>

What are word embeddings?



1. Text embeddings are numerical representations of larger pieces of text (sentences, paragraph or documents) that capture their meaning in a way machines can “understand” and compare.
2. A text embedding turns an input (e.g., "The cat sat on the mat") into a vector - a list of numbers like [0.25, -0.10, 0.93, ...].
3. The closer dots (word) are in the visualisation, the closer they are semantically.

Methods Overview 2



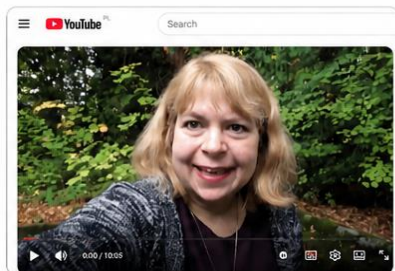
BERTopic Output



Topic	Representation	First Order Code	Second Order Code	Aggregated Dimension
70	['methane', 'carbon', 'emissions', 'carbon dioxide', 'dioxide', 'atmosphere', 'greenhouse', 'cows', 'livestock', 'tailpipe', 'gases', 'transportation', 'cycle', 'greenhouse gases', 'methane emissions', 'greenhouse gas', 'life cycle', 'gas', 'fossil', 'warming']	Debating the environmental impact of vegan diet and farming	Positioning veganism as a solution to climate change	Moralisation claims
47	['fish', 'mercury', 'fishing', 'salmon', 'tuna', 'ocean', 'seafood', 'msc', 'eat fish', 'oceans', 'eating fish', 'sharks', 'bycatch', 'fisheries', 'pcbs', 'shark', 'nets', 'fish s', 'sardines', 'dolphins']	Examining the health and environmental consequences of seafood consumption		
7	['land', 'agriculture', 'climate', 'animals', 'soil', 'planet', 'farming', 'farmers', 'emissions', 'climate change', 'carbon', 'farm', 'cattle', 'cows', 'animal agriculture', 'regenerative', 'feed', 'grass', 'animal', 'billion']	Navigating the complexity of environmental impact of agriculture		

Didn't you chunk your text?

1 Video Transcript

The transcript of the video is split into smaller chunks.



-  **Chunk 1**
(Beginning of video)
00:00 – 07:30
-  **Chunk 2**
(Later in video)
07:31 – 10:05

2 Topic Probability per Chunk

BERTopic estimates the probability of belonging to each topic for every chunk.

Topic Probability Matrix (subset)


Chunk	Topic 5 Integrating veganism into family life	...	Topic 10 Promoting sustainable cooking and shopping practices
Chunk 1	0.25	...	0.75
Chunk 2	0.25	...	0.75

3 Interpretation

Each chunk is represented by the topic with the highest probability.


Chunk 1 (00:00 – 07:30)

Most representative topic:

 **Topic 5**
Integrating veganism into family life
(Probability: 0.25)

Chunk 2 (07:31 – 10:05)

Most representative topic:

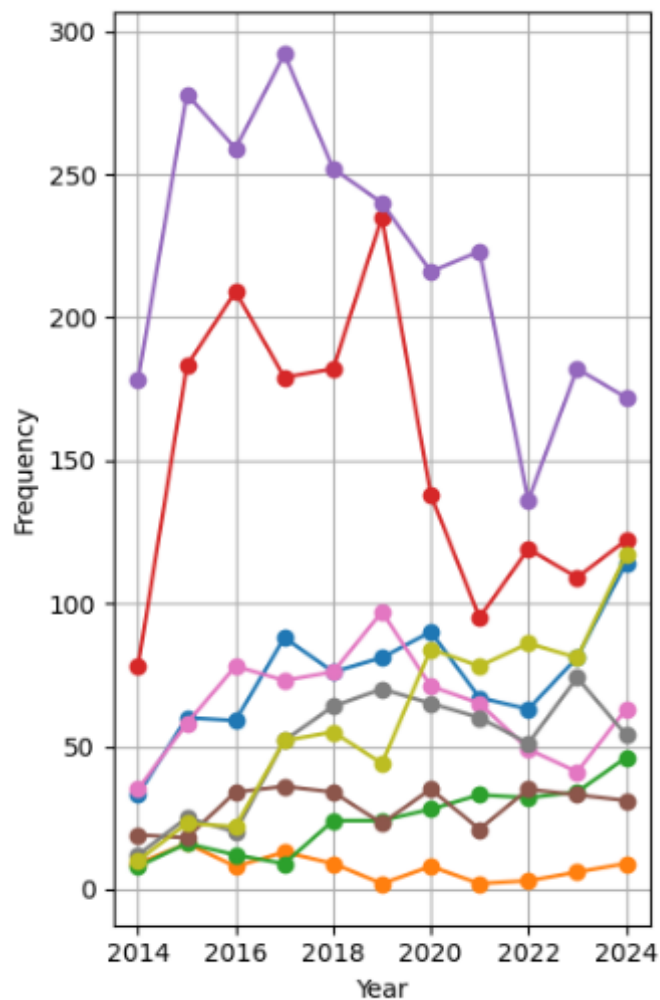
 **Topic 10**
Promoting sustainable cooking and shopping practices
(Probability: 0.75)

Temporal keyword analysis

Topic	Date	Words
28	2014	catherine milton, gunners, milton, catherine, gi tracks
28	2015	brain evolution, fossilized, cooked starches, brain fuel, human sorry
28	2016	neanderthals, hair food, raw natural, neanderthal, dr mcdowell
28	2017	ancestors, million years, rude vegetables, running m, evolution
28	2018	humans, strower, strower strower, million years, animal foods
28	2019	homo, humans, hunter, plants, animal foods
28	2020	homo, evolution, million years, ancestors, end quote
28	2021	hunter, hunter gatherers, gatherers, hunter gatherer, gatherer
28	2022	humans, hunter, plants, messiah, tribes
28	2023	homo, neanderthals, humans, sapiens, hunting

Topic 28 “Debating subjective morality and humans - environment relationships”

Discourse Mechanisms Over Time



- Mechanism
- Building an advanced understanding of veganism and health nexus
 - Building ecological responsibility
 - Challenging dominant health frameworks
 - Delegitimising non-vegan diets
 - Making everyday vegan practices accessible
 - Managing the body for performance and aesthetics
 - Moral Legitimacy
 - Optimising wellbeing with food and healthy lifestyle
 - Promoting dietary practices for the prevention of diverse health conditions

Other considerations for BERTopic

	Transcript Segmentation	Text Processing	Topic interpretation and hierarchy
Why needed	Transformers have a maximum input length of 512 tokens	Remove noise and improve semantic consistency	Topics often emerge at different levels of abstraction
Analytical implication	Long videos contain multiple discourse strategies	Excessive cleaning may remove discursive nuance	Some clusters require merging or hierarchical interpretation
Design choice	Chunking to preserve within-video variation	Minimal preprocessing to preserve meaning-rich language	Iterative review using topic hierarchy

Thank you!

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