Auto-EPU

Hsiu-Hsuan(Jacky) Yeh 2024-02-19

Outline

Chat With PDF

Generation Analysis of Self-Consistency

Word Cloud

Accuracy

Prompt For Different Categories/Paradigms

Query Analysis

Entropy

Similarity

References

Chat With PDF

ChatGPT-4

Upload the QJE version of the paper, Baker et al. (2016)

You are a Taiwanese Economist and plan to construct the EPU index of Taiwan. Define keywords in each E, P, U set

Assistant:

(1)	(2)	(3)
Economy	Policy	Uncertainty
經濟	政策	不確定
成長	法規	風險
發展	立法	擔憂
投資	財政	不穩定
消費	金融	變數
生產	稅務	
貿易	預算	

Cluade.ai-beta

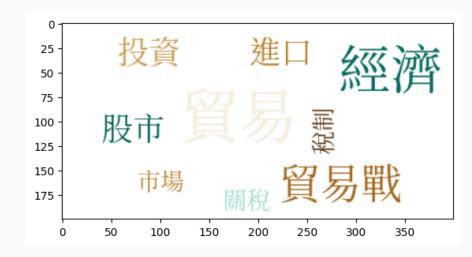
Note: only use the first 25 page of pdf from QJE

(1)	(2)	(3)
Economy	Policy	Uncertainty
經濟	 政府	不確定
商業	總統	風險
工業	行政院	動蕩
貿易	立法院	
金融	法規	
投資	稅收	
	關稅	
	財政	
	貨幣	

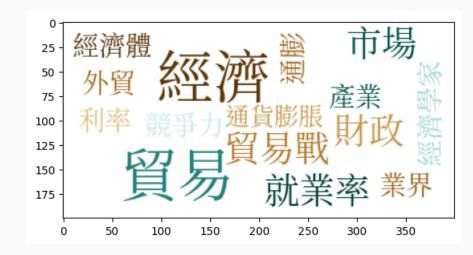
Generation Analysis of

Self-Consistency

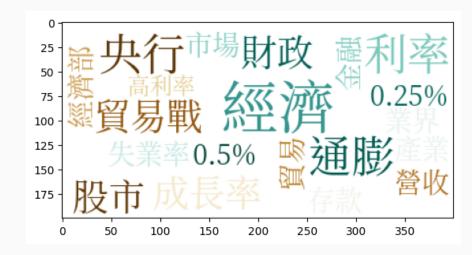
Economy Category, ChatGPT-3.5



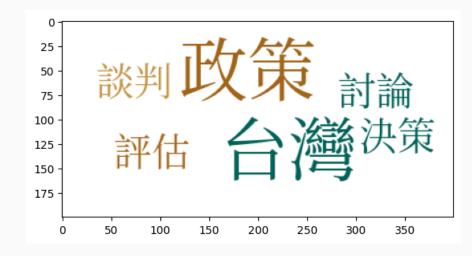
Economy Category, ChatGPT-4



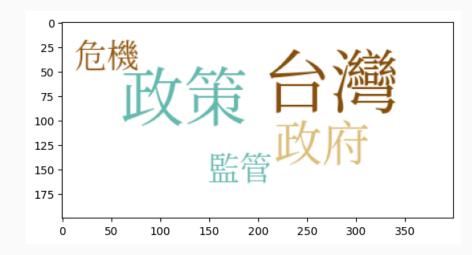
Economy Category, Claude.ai-beta



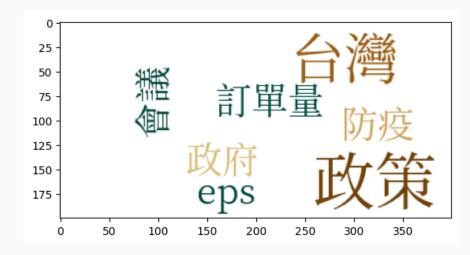
Policy Category, ChatGPT-3.5



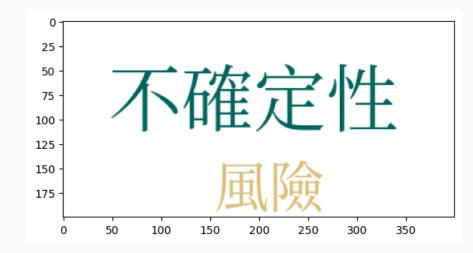
Policy Category, ChatGPT-4



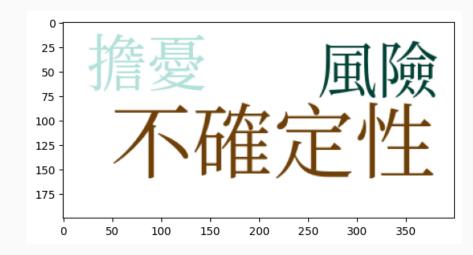
Policy Category, Claude.ai-beta



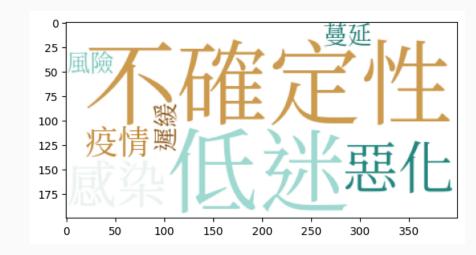
Uncertainty Category, ChatGPT-3.5



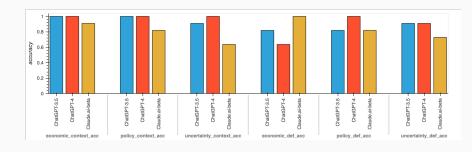
Uncertainty Category, ChatGPT-4



Uncertainty Category, Claude.ai-beta



Accuracy



Prompt For Different

Categories/Paradigms

- notebook
- colab

Categories

- Economy
 - the most common vocabularies that are related to economy
- Policy
 - the most common vocabularies that are related to policy
- Uncertainty
 - the most common vocabularies describing economic-relevant uncertainty

Categoty-Level Paradigms

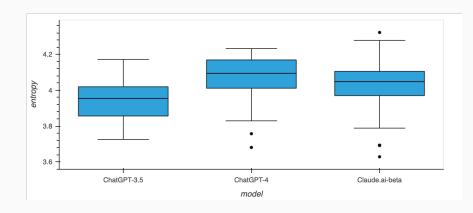
- talent
- newspaper copora
 - newspaper reader
 - newspaper editor
 - economist
- add definition
- definition with SC

Policy Relation

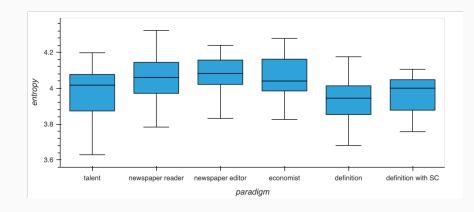
- synonymous vocabularies which are nouns and related to "policy"
- 2. "government occupations" which are highly related to "national policy"
- 3. "government agency" which are highly related to "national policy"
- synonymous vocabularies which are verbs and related to "policy"

Query Analysis

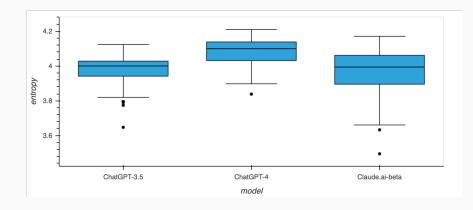
Policy Entropy, Among Models



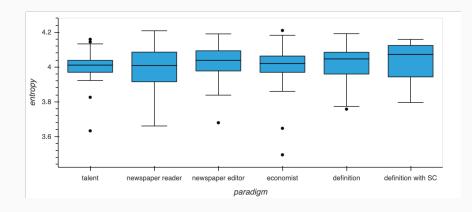
Policy Entropy, Among Paradigms



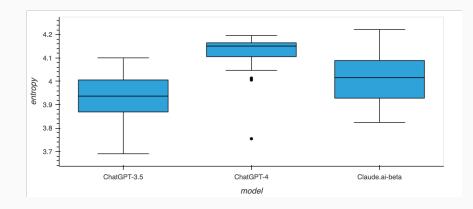
Uncertainty Entropy, Among Models



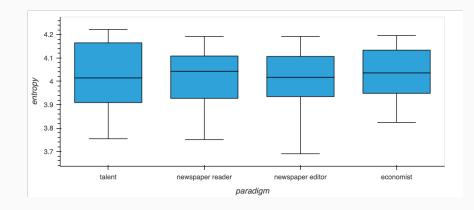
Uncertainty Entropy, Among Paradigms



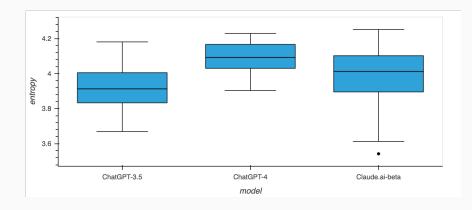
Entropy Of Policy Relation 1, Among Models



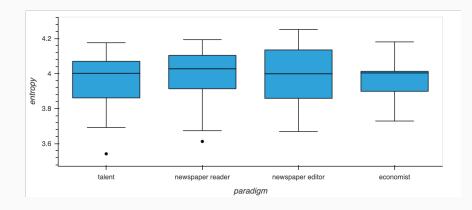
Entropy Of Policy Relation 1, Among Paradigms



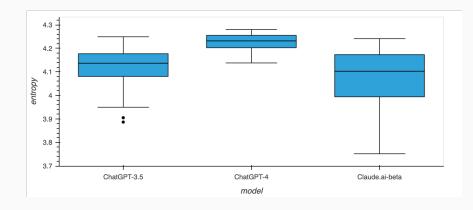
Entropy Of Policy Relation 2, Among Models



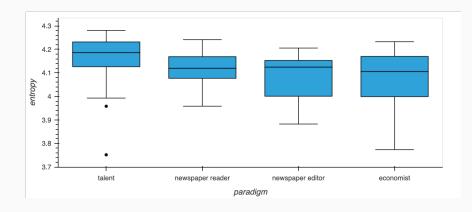
Entropy Of Policy Relation 2, Among Paradigms



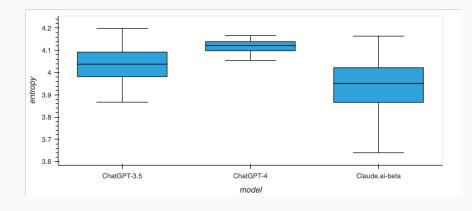
Entropy Of Policy Relation 3, Among Models



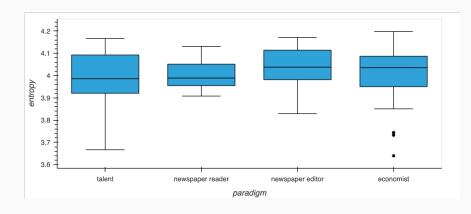
Entropy Of Policy Relation 3, Among Paradigms



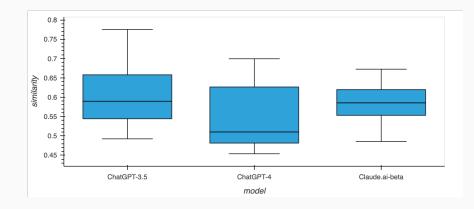
Entropy Of Policy Relation 4, Among Models



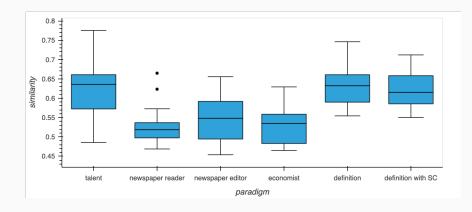
Entropy Of Policy Relation 4, Among Paradigms



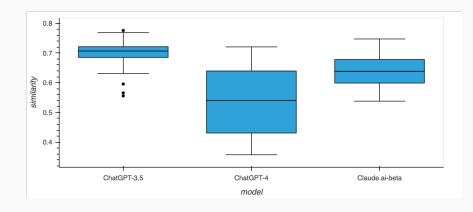
Policy Similarity Among Models



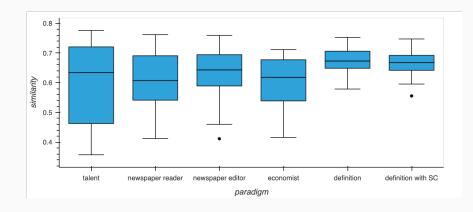
Policy Similarity Among Paradigms



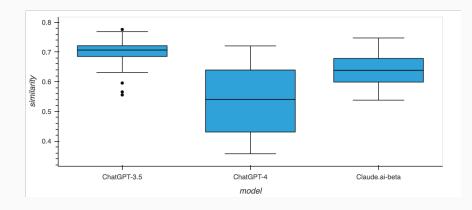
Uncertainty Similarity Among Models



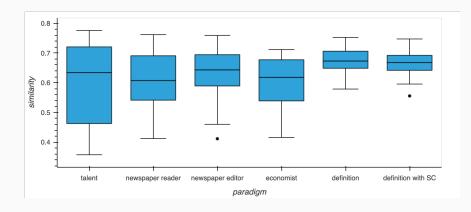
Uncertainty Similarity Among Paradigms



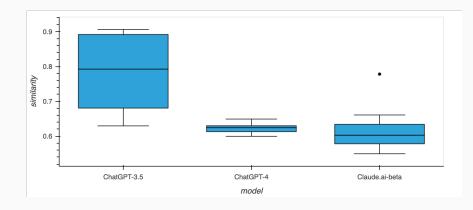
Uncertainty Similarity Among Models



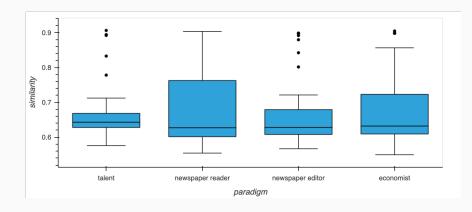
Uncertainty Similarity Among Paradigms



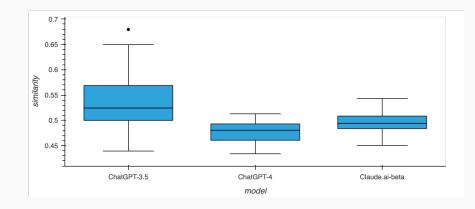
Similarity Of Policy Relation 1 Among Models



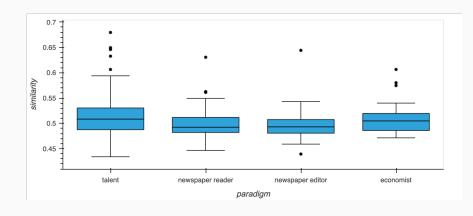
Similarity Of Policy Relation 1 Among Paradigms



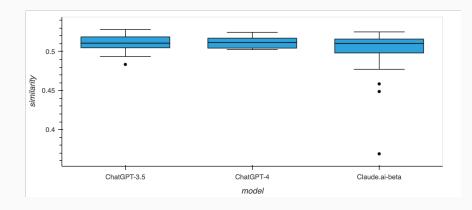
Similarity Of Policy Relation 2 Among Models



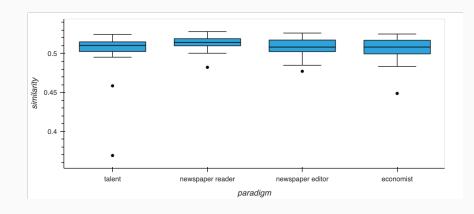
Similarity Of Policy Relation 2 Among Paradigms



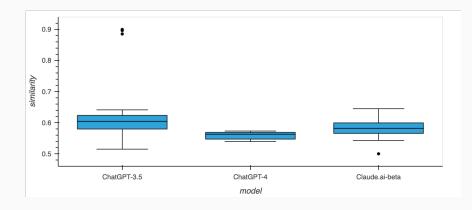
Similarity Of Policy Relation 3 Among Models



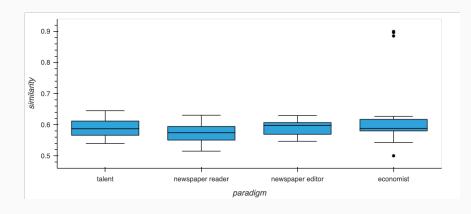
Similarity Of Policy Relation 3 Among Paradigms



Similarity Of Policy Relation 4 Among Models



Similarity Of Policy Relation 4 Among Paradigms



Country-Level Comprehension, Literature

• Lin and Chen (2023)

References

- Baker, Scott R., Nicholas Bloom, and Steven J. Davis, "Measuring Economic Policy Uncertainty*," *The Quarterly Journal of Economics*, November 2016, *131* (4), 1593–1636.
- **Lin, Yen-Ting and Yun-Nung Chen**, "LLM-Eval: Unified Multi-Dimensional Automatic Evaluation for Open-Domain Conversations with Large Language Models," May 2023.