Decoding Catchphrases in China: Reading Between the Lines Using Word Embeddings

Yin Yuan

Department of Political Science, University of California, San Diego

Why Care About Catchphrases?

Catchphrases (a.k.a. slogans), defined as "terse strings of words" with fixed usage that "gain meaning by repetition and context" [1, 2, 3], are building blocks of official discourses in China. While some catchphrases (e.g. "China Dream") are well-known, thousands of others are used by Chinese officials on a daily basis to communicate their political allegiance and ideological and policy preferences. Pervasive in propaganda and official language of the Chinese Communist Party (CCP), catchphrases are often perceived as uninformative jargons whose meanings elude most regime outsiders. This paper attempts to facilitate our understanding of CCP political communication by deciphering these catchphrases with the help of word embeddings. In sum, this paper:

- Extracts a comprehensive list of catchphrases from top leaders' speeches and CCP documents (1921-2019).
- Shows how lower-level officials' usage of catchphrases reflect shifting political alliances.
- Uses word embeddings trained on CCP's major ideological and policy texts to interpret the meaning of catchphrases.
- Compares word embeddings of the same catchphrase across localities to reveal political and policy coalitions.

Extract Catchphrases

- The main idea: People's Daily publish articles following a major speech and document to emphasize and interpret important points.
- For each speech/document, find PD articles published within 30 days with highest cosine similarity. Use string matching to find important terms "highlighted" (see illustration above).
- Filter matched strings with three tests:
- Inclusion test: remove short strings used in longer strings over 70% of time.
- Redundancy test: eliminate long strings that contain unnecessary words.
- Informativeness test (using mutual information): true catchphrases with ideological/policy contents are able to distinguish texts from distinct political eras from the rest (e.g. Mao vs. reform era).

Catchphrases Output

- Left: sample speech and People's Daily article that interpreted the speech. Matched strings are highlighted in red.
- Right: Top 10 catchphrases (ranked by mutual information) characterizing three CCP General Secretaries' terms.

Xi Speech: 中共中央总 People's Daily 书记、国家主席、中央 出重要指示强调,各级 新、充满活力?一面全 党委和政府要充分认 国政法战线的旗帜, 为 识"枫桥经验"的重大意 什么要在全国范围推 广、弘扬?在纪念"<mark>枫</mark>/ 治思维和法治方式解决 平总书记作出重要指 "重大意义,为新时 加强和创新群众工作指 验"坚持好、发展好,把 明了方向,是对全面建 定环境的重要部署。 、结合起来,<mark>运用法</mark>浴 维和法治方式预防化 印时代要求; 充分发抖 z的政治优势,把专l 工作与群众路线结合起 们的重要启示, 也是有 主线, 为经济社会发展 效预防社会矛盾的重要 提供了重要保障。

实现全面建设小康社会目标 Realize the goal of comprehensively building a moderately prosperous society 紧密团结在以胡锦涛同志为总书记的党中央周围 Unite around the party center with comrade Hu Jintao as the General Secretary 全面建设小康社会构建社会主义和谐社会 Comprehensively building a moderately well-off and harmonious society 以邓小平理论和三个代表重要思想为指导全面贯彻 Thoroughly implement using Deng Xiaoping Theory and Three Represents 马克思列宁主义毛泽东思想邓小平理论和三个代表重要思想 Marxism, Leninism, MaoZD Thought, DengXP Theory and Three Represents 认真落实科学发展观 Implement Scientific Development Outlook 党的十七大精神 Spirit of 17th Party Congress 大规模培训干部 Massively train cadres 第五个五年规划 The fifth Five Year Plan 建设海峡西岸经济区 Build Western Taiwan Straits Economic Zone

Xi Jinping 学习贯彻习近平总书记 Study and implement General Secretary Xi Jinping 创新驱动发展战略 Innovation Driven Development Stategy 运用法治思维和法治方式 Use law based thinking and approaches 建设美丽中国 Build Beautiful China 底线思维 Bottom-line thinking 国家卫生和计划生育委员会 National Health and Family Planning Commission 实现中国梦 Realize China Dream 加快发展现代职业教育 Speed up development of modern vocational education 党的十八大以来 Since 18th Party Congress 习近平总书记重要讲话精神

Spirit of Genera Secretary Xi Jinping's important speeches

References

- [1] Harold Dwight Lasswell and Nathan Leites.

 Language of politics: Studies in quantitative semantics.

 Cambridge: Massachusetts Institute of Technology Press [1965, 1965.
- [2] Michael Schoenhals.

 Doing things with words in Chinese politics: Five studies, volume 41.
- [3] Gang Qian.

 Watchwords: Reading China through its political vocabulary.

Institute of East Asian Studies, University of California, Berkeley, 1992.

[4] Valerio Di Carlo, Federico Bianchi, and Matteo Palmonari.

Training temporal word embeddings with a compass.

In *Proceedings of the AAAI Conference on Artificial Intelligence*, volume 33, pages 6326–6334, 2019.

Contact Information

- Email: yiy055@ucsd.edu

Catchphrases and Political Support

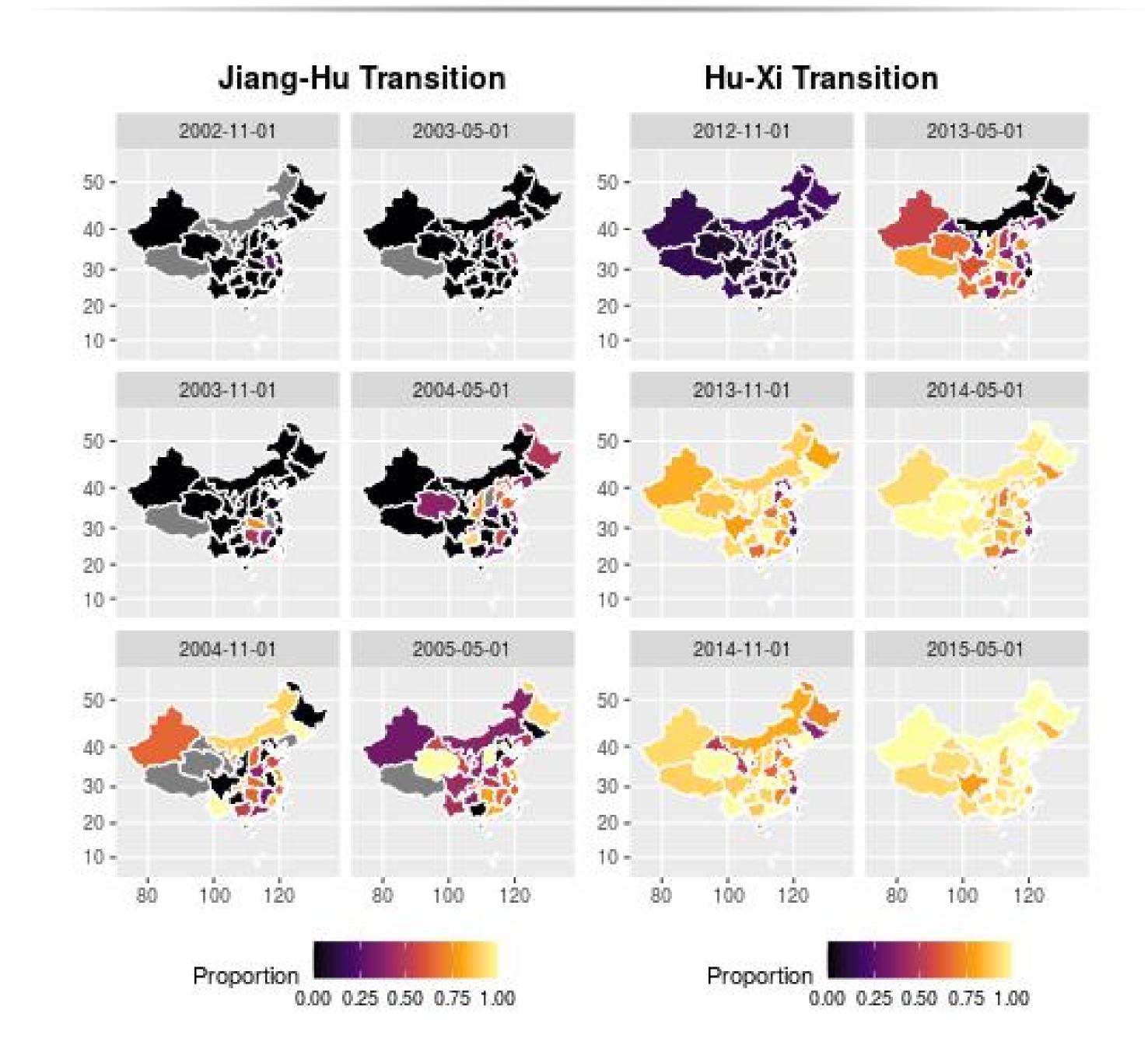


Figure 1: Ratio of appearances of signature catchphrases of incoming leader vs. outgoing the leader in provincial newspapers/documents. Signature catchphrases are those most strongly associated with top leaders, often becoming their major legacy.

Detecting Policy Coalitions

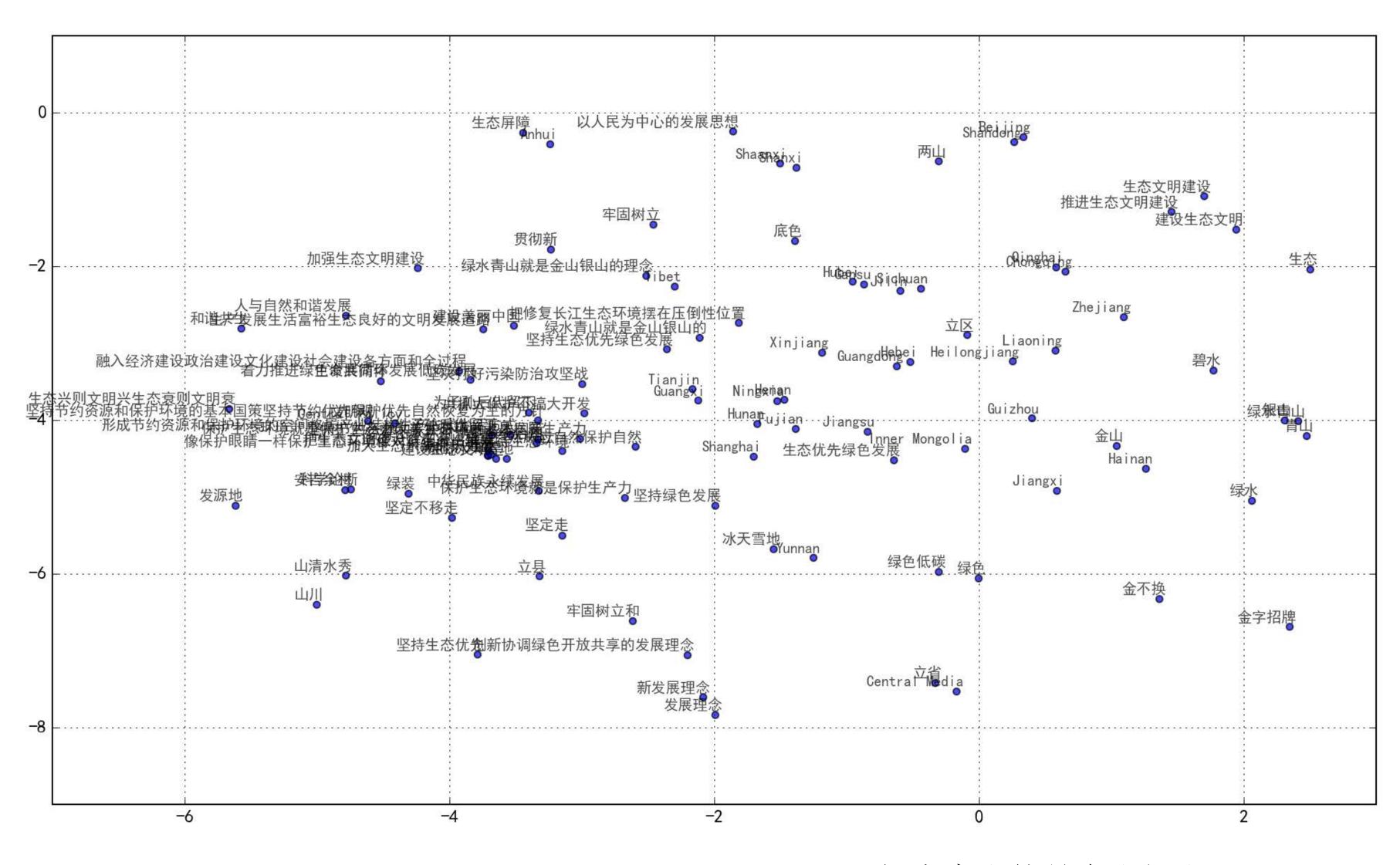


Figure 2: Comparison of word embeddings across provinces [4] for "绿水青山就是金山银山" (clear waters and green mountains bring us prosperity and wealth), a major environmental policy catchphrase under Xi. Word embeddings reflect how provincial officials use the same catchphrase in different contexts, reflecting different preferences and strategies to respond to the centrally handed down policy initiatives (without directly contradicting the party center).