

Predicting Authoritarian Crackdowns

A Machine Learning Approach

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Will China crack down on Hong Kong protesters?

If so, when?



This paper: Answer may lie in Chinese propaganda.



Policy Change Index (PCI) project

- Predict authoritarian policies based on propaganda;
- First use cases: China (incl. Hong Kong protests);
- Future: North Korea, Iran, Cuba, Venezuela, Russia,...
- Open-source and free (on GitHub).

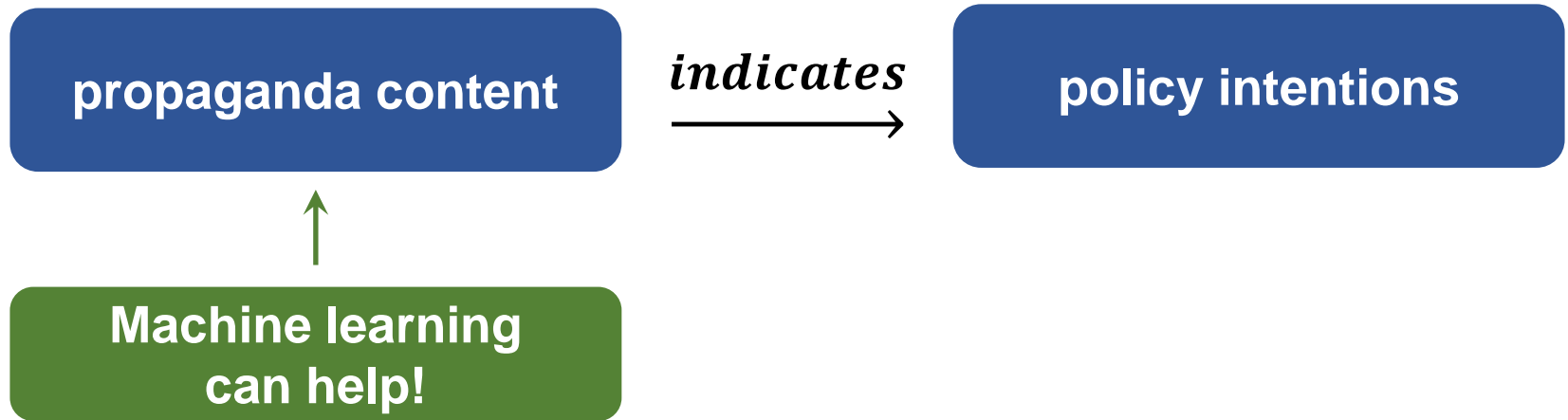
Words matter

propaganda content

indicates
→

policy intentions

Words matter

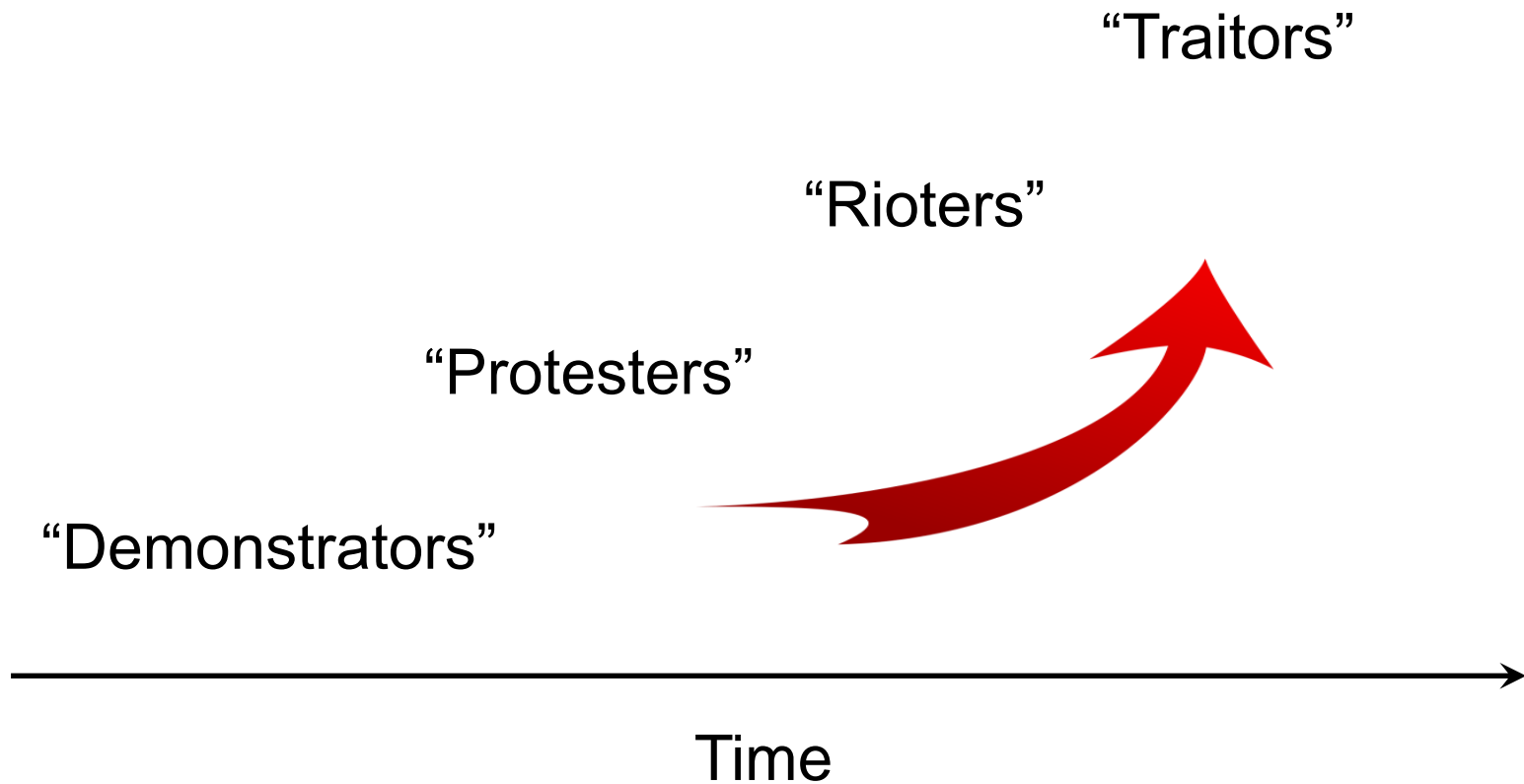


PCI algorithms:

- **PCI-China:** predicts major changes in policy direction;
- **PCI-Crackdown:** predicts crackdowns on HK protests;
- **PCI-Outbreak:** estimates true scale of COVID-19 in China.

This paper

Who were Tiananmen protesters?



Words matter — to crackdowns

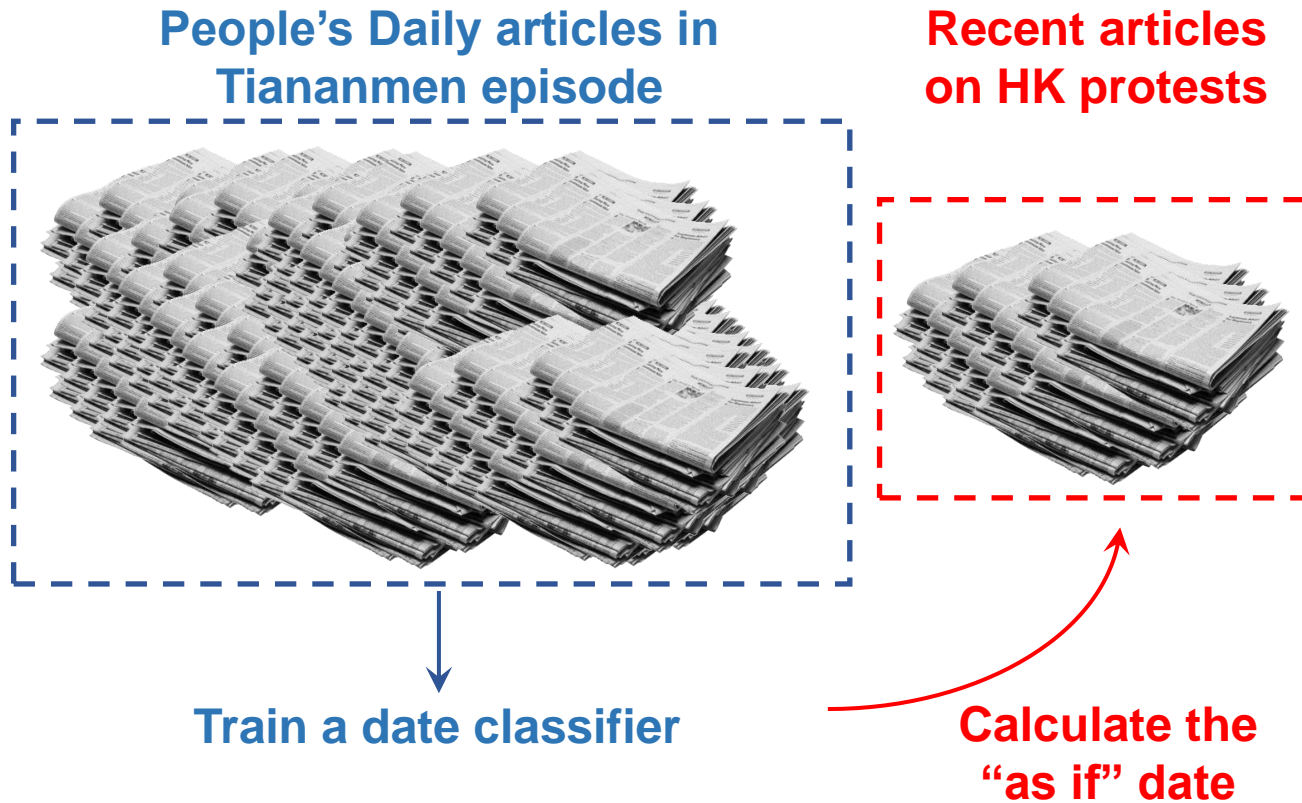
propaganda content

indicates
→

policy intentions

1. How does China's propaganda portray HK protests, compared to Tiananmen?
2. Will there be a crackdown in HK? If so, when?

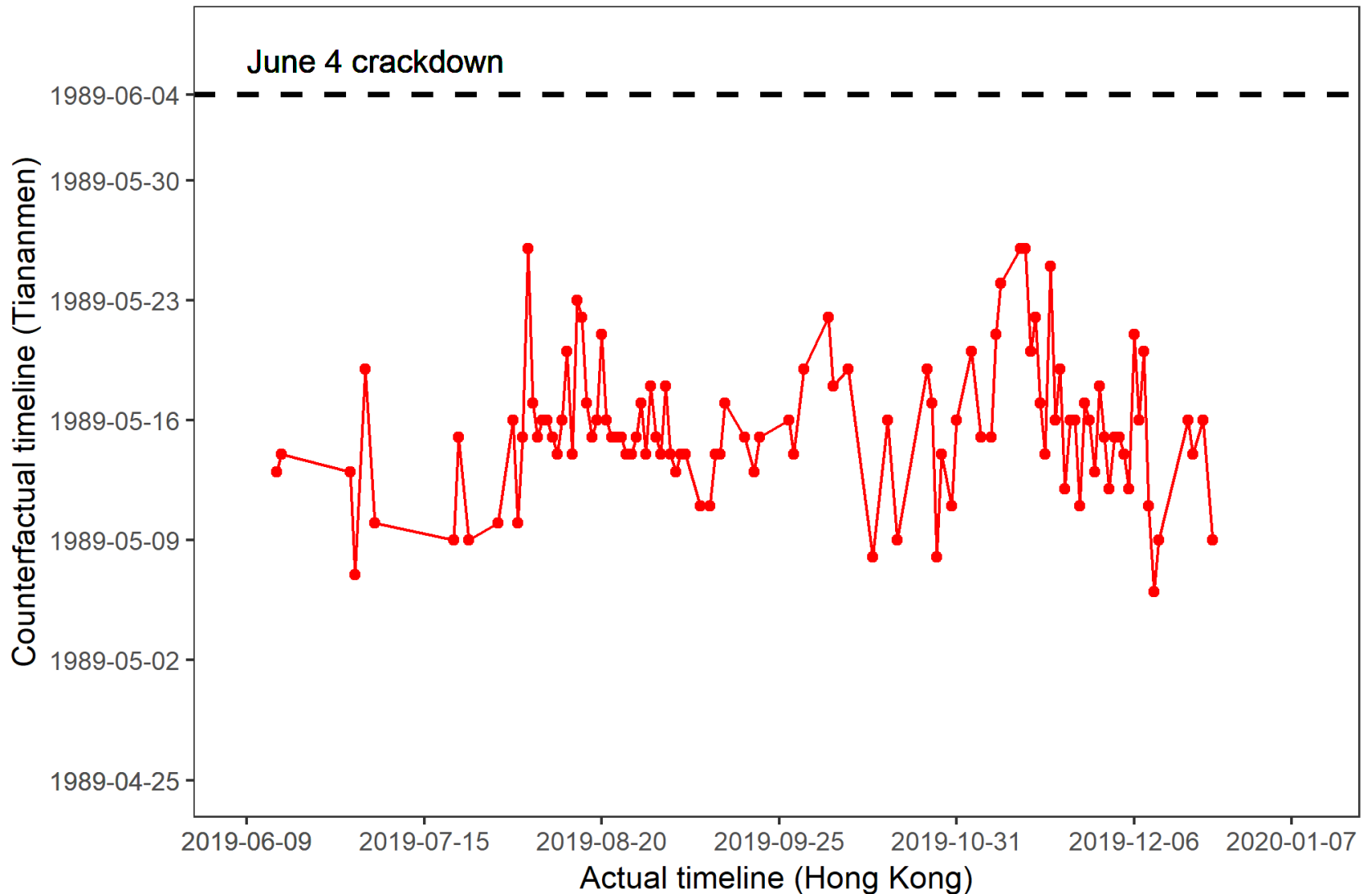
PCI-Crackdown: algorithm



PCI-Crackdown: "as if" date for the actual date

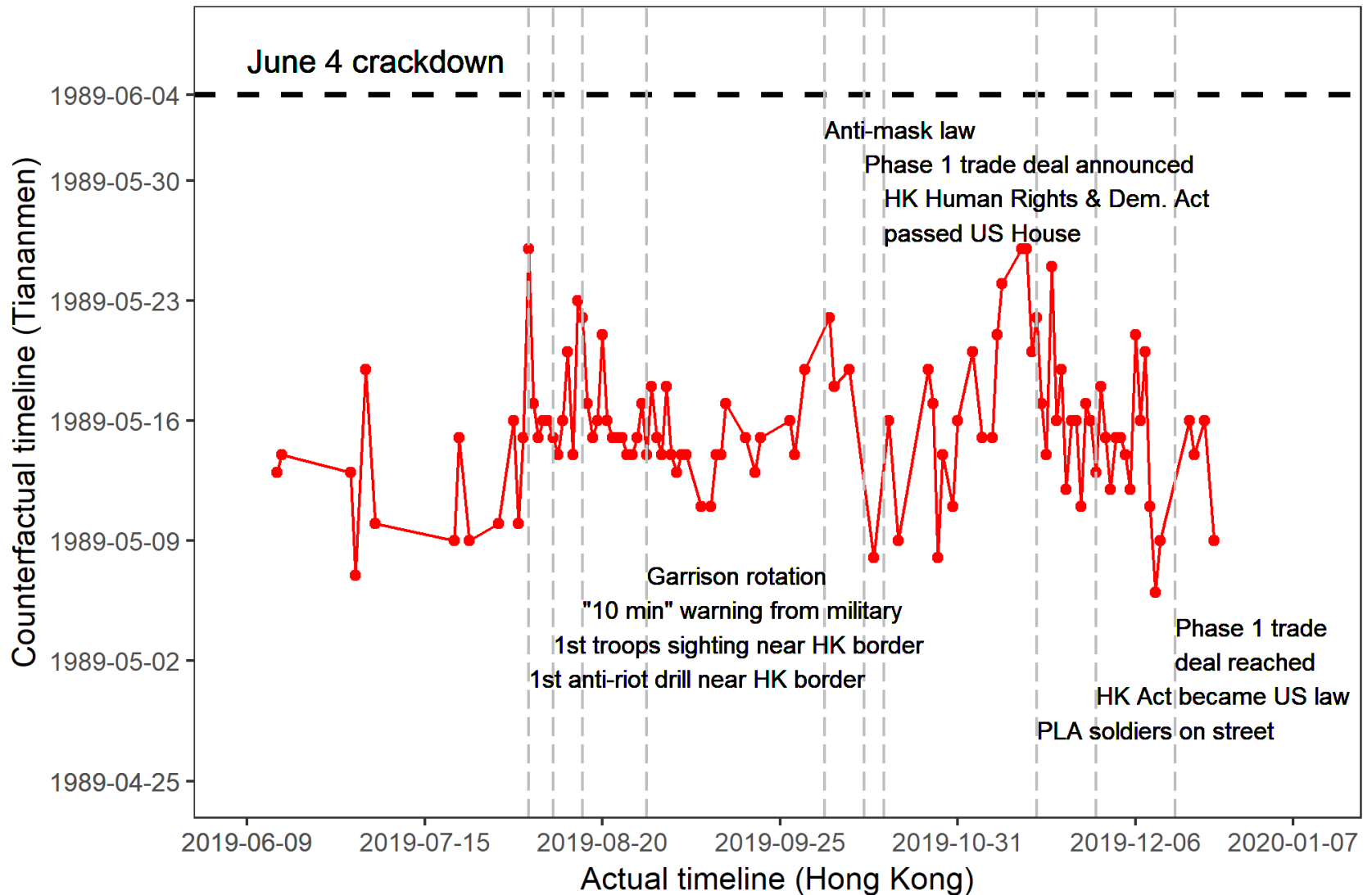
PCI-Crackdown monitors HK protests

(Jun 9, 2019 to Jan 7, 2020)

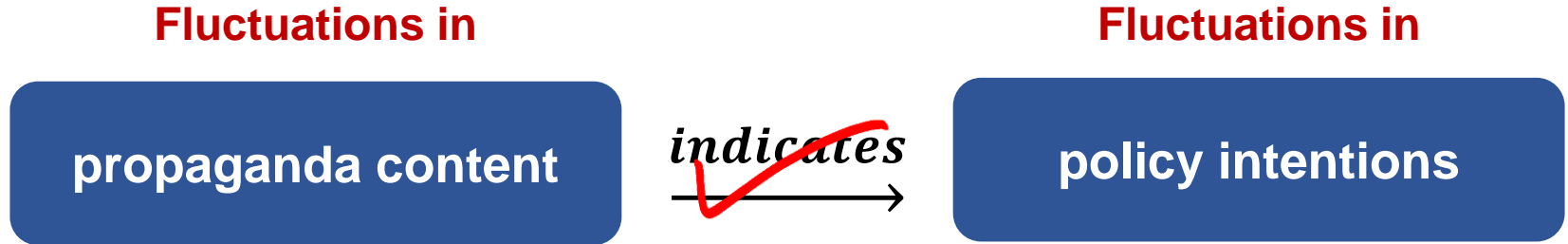


PCI-Crackdown monitors HK protests

(Jun 9, 2019 to Jan 7, 2020)



Bottom line



Assumptions:

- There is a well-formed precedent;
- The same “playbook” is being followed now.

Future work in PCI

- More applications on China:
 - Predict a Sino-Indian border war;
 - Predict China's Taiwan policy; ...
- Extensions to other authoritarian regimes:
 - North Korea, Cuba, Iran...

Thank you!

- Website & source code: policychangeindex.org
- Newsletter: mercatus.org/pcinewsletter
- We welcome your feedback!
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