Reverse Engineering Chinese Censorship¹

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(Talk at the Harvard Alumni Assembly, 20 September 2014)

¹Based on joint work with Jennifer Pan and Margaret Roberts ²GaryKing.org

• An Observational Study:

How Censorship in China Allows Government Criticism but Silences Collective Expression (American Political Science Review, May 2013)

• Experimental and Participatory Studies:

Reverse Engineering Chinese Censorship (Science, August 2014)

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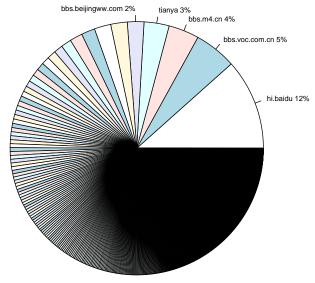
• A huge censorship organization:

- (obviously) designed to suppress information
- (paradoxically) very revealing about the goals, intentions, and actions of the Chinese leadership

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(Plus 59% from Sina Blog)

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Stop criticism, protest, & collective action about the state, its leaders, and their policies *Wrong*

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- $\bullet \rightsquigarrow A$ big prize, but payable only if we have the goals right

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Censorship is not Ambiguous: Example Error Page

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首页 论坛 博客 家園	1 排行榜		快捷导航 -
○ 请输入搜索内容	帖子 搜索	熟粮: 谷俊山案 经适防 征地 狼爸教育 国:	土局 珠江啤酒 拆迁
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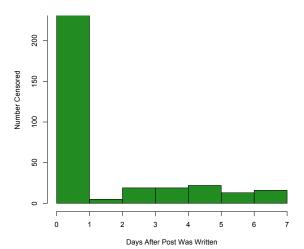
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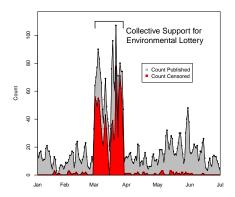


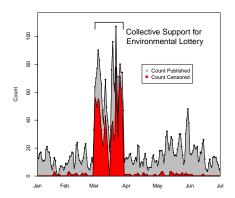
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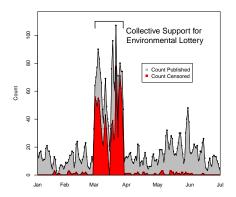
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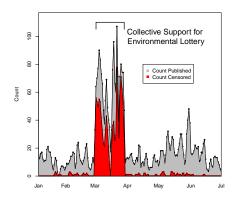




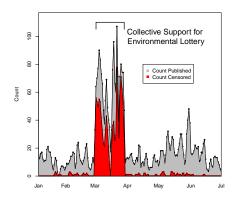
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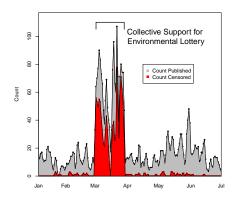
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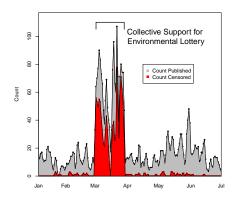
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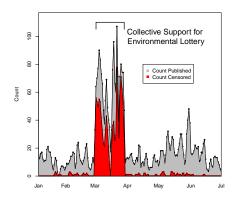
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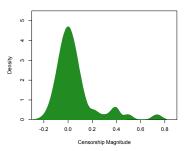
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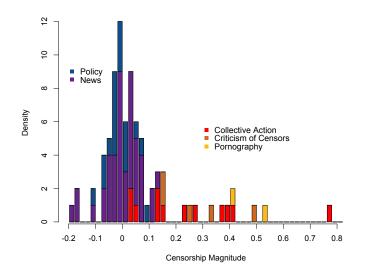
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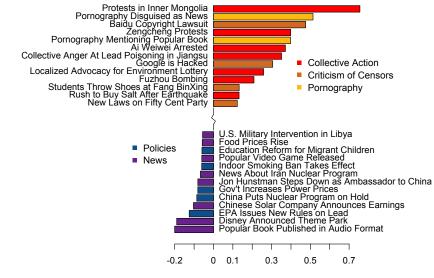
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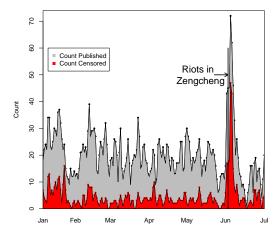


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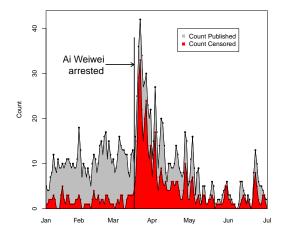


Censorship Magnitude

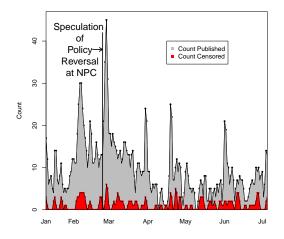
Censoring Collective Action: Riots in Zencheng



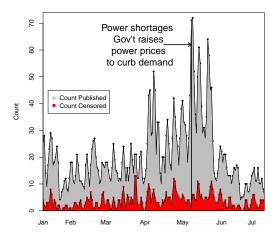
Censoring Collective Action: Ai Weiwei's Arrest



Low Censorship on Policy: One Child



Low Censorship on News: Power Prices



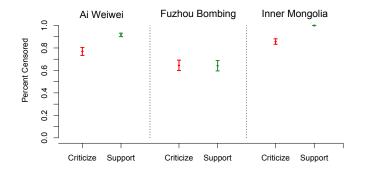
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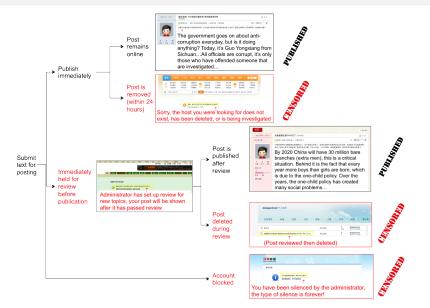
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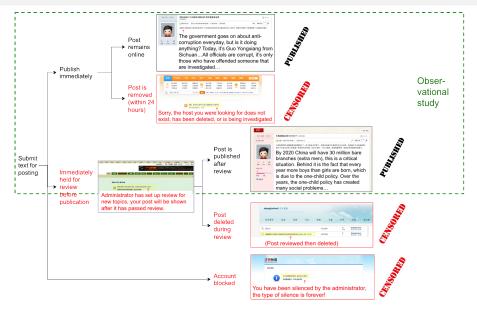
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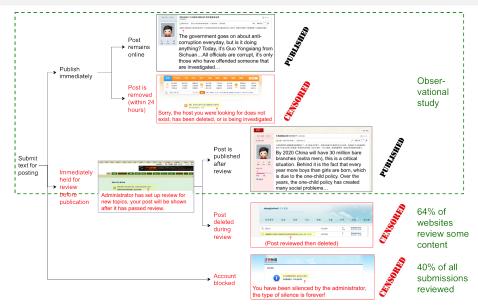
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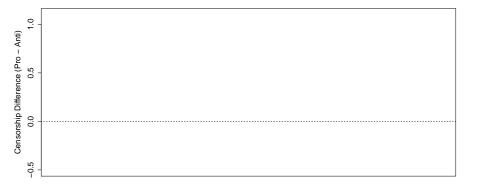
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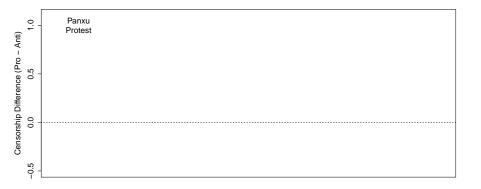
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 - To learn: we tried every software option, read the documentation, and called customer support(!)

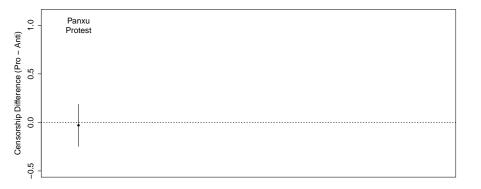


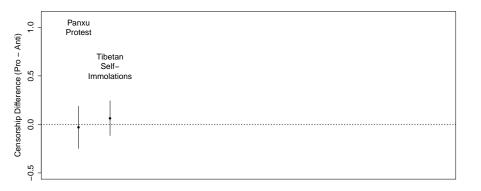


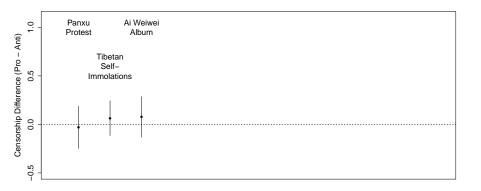


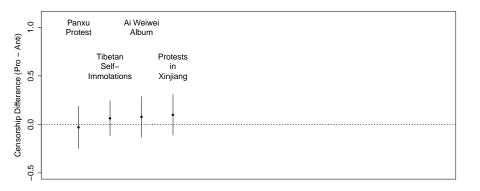


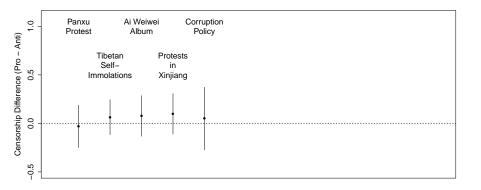


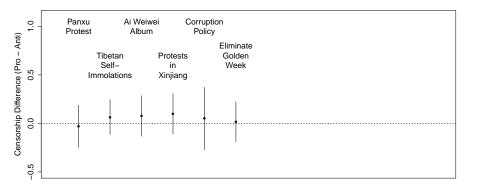


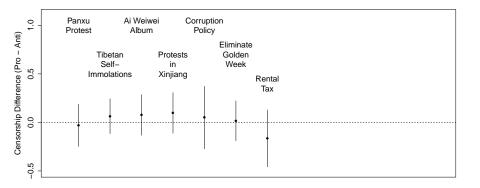


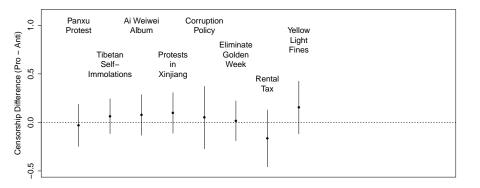


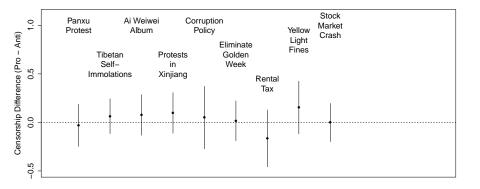


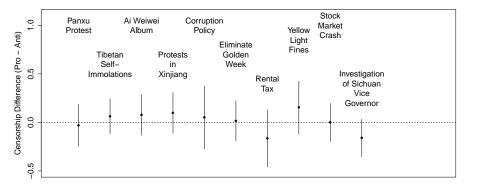


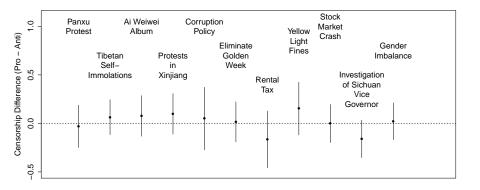


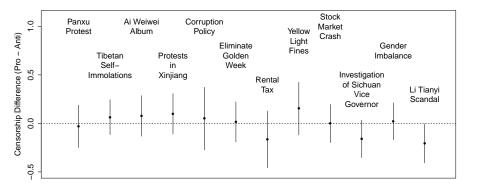


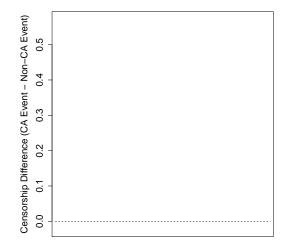


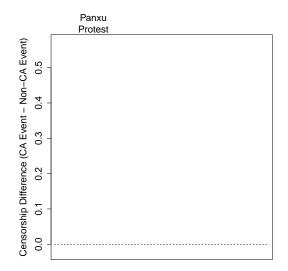


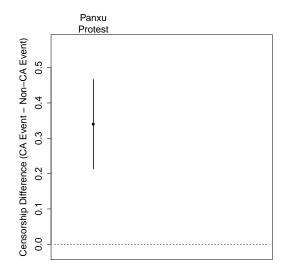


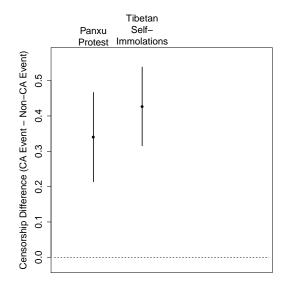


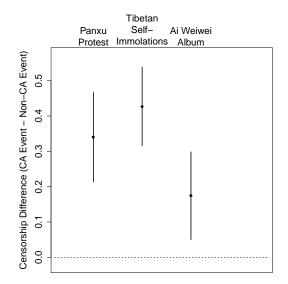


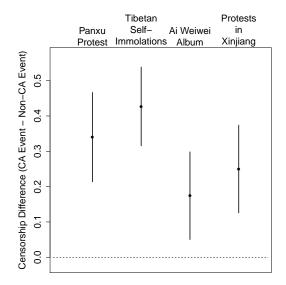












Example Substitution 1:

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Example Substitution 1:

自由 "Freedom"

Example Substitution 1:





Example Substitution 1:





Example Substitution 1:



"Freedom" CENSORED "Eye field"

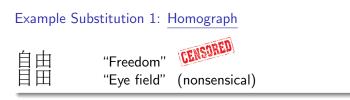


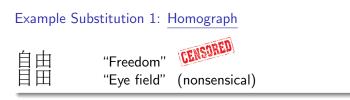
Example Substitution 1:





"Eye field" (nonsensical)







Example Substitution 2:



Example Substitution 2:

和谐



Example Substitution 2:

和谐 "Harmonious [Society]" (official slogan)



Example Substitution 2:

和谐 "Harmonious [Society]" (official slogan) GENSIRED



Example Substitution 2:

和谐 河蟹 "Harmonious [Society]" (official slogan)



Example Substitution 2:

和谐 "Harmonious [Society]" (official slogan) CENSORED 河蟹 "River crab"



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"Harmonious [Society]" (official slogan) CENSINED "River crab" (irrelevant)



Example Substitution 2: Homophone (both sound like "hexie")

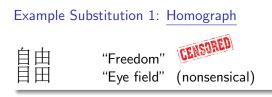
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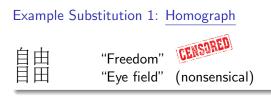
They can't follow the conversation; our new keyword methods can!



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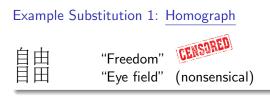
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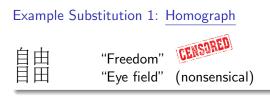


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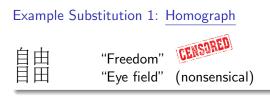


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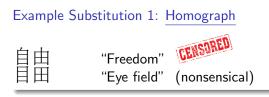


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 - Applications to brand monitoring, intelligence analysis, sentiment analysis, investment advice, news provision, etc.

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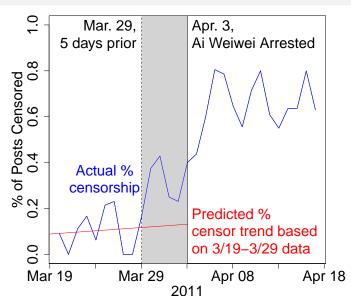
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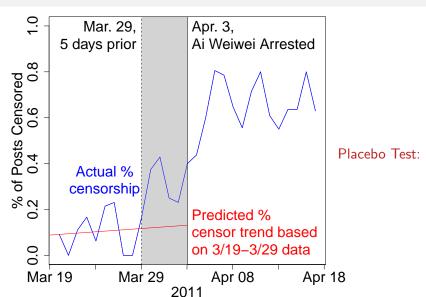
For more information

Gary King

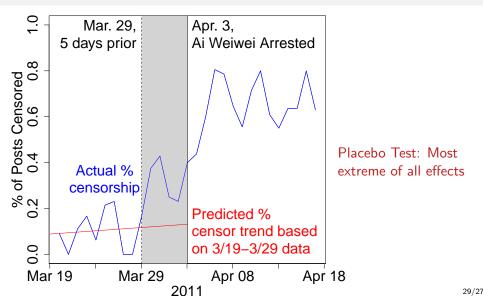
King@Harvard.edu

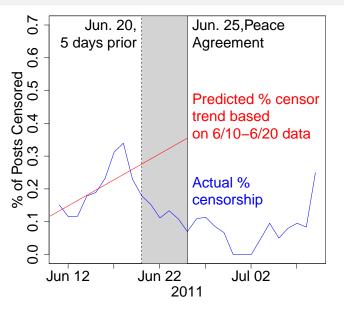
Appendix

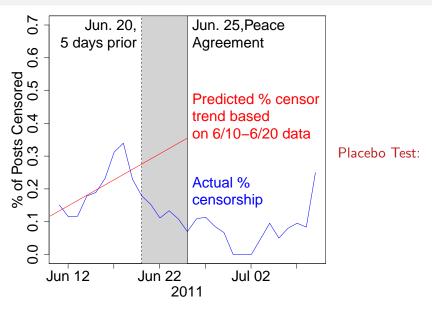


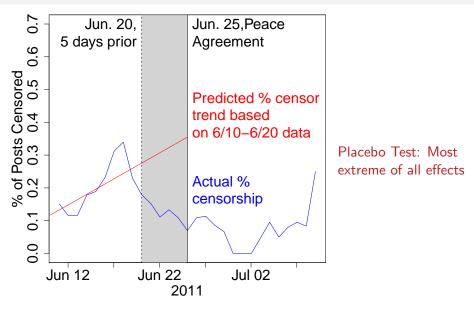


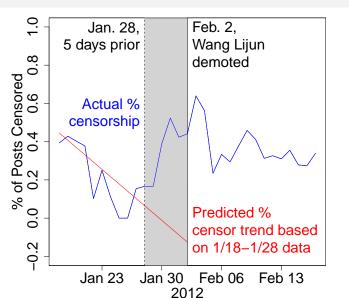
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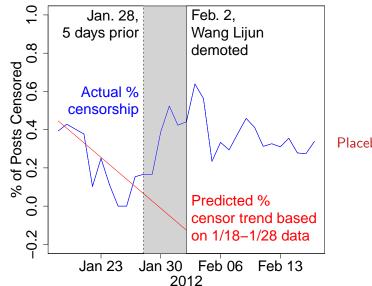






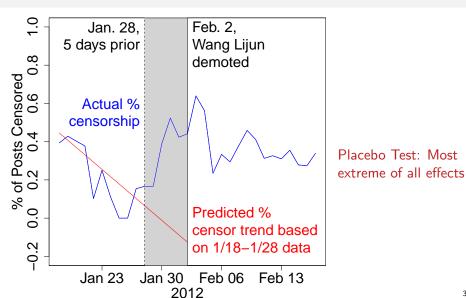


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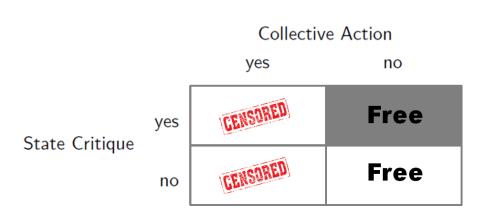
Placebo Test:



31/27

Uncensored Posts (w/o Collective Action Potential) Critical of the State

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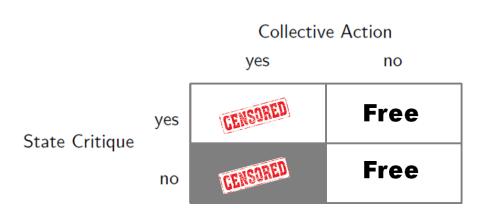
Uncensored Posts (w/o Collective Action Potential) Critical of the State

This is a city government [Yulin City, Shaanxi] that treats life with contempt, this is government officials run amuck, a city government without justice, a city government that delights in that which is vulgar, a place where officials all have mistresses, a city government that is shameless with greed, a government that trades dignity for power, a government without humanity, a government that has no limits on immorality, a government that goes back on its word, a government that treats kindness with ingratitude, a government that cares nothing for posterity...

这是一个漠视生命的市政府[陕西省榆林 市]、一个官员横行的市政府、一个没有 公正的市政府,一个低级趣味的市政府, 一个包二奶的市政府,一个为钱不要脸的 市政府,一个为个权不要人格的市政府, 一个没有血性的市政府,一个没有道德低 线的市政府,一个出尔反尔的市政府,一 个忘恩负义的市政府,一个不要子孙后代 的市政府,一个什么怪事都出的市政府, 一个什么的市政府,只要你想到的就有…

Censored Post (with Collective Action Potential) Supporting the State

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Censored Post (with Collective Action Potential) Supporting the State

The bombing led not only to the tragedy of his death but the death of many government workers. Even if we can verify what Qian Mingqi said on Weibo that the building demolition caused a great deal of personal damage, we should still condemn his extreme act of retribution.... The government has continually put forth measures and laws to protect the interests of citizens in building demolition. And the media has called attention to the plight of those experiencing housing demolition. The rate at which compensation for housing demolition has increased exceeds inflation. In many places, this compensation can change the fate of an entire family.

爆炸案造成他本人和多名政府工作人 员死伤的悲剧,即使钱明奇在微博里 所称拆迁造成的个人损失是属实的, 我们也应谴责他的极端报复行为.... 政府在连续出台保护被拆迁者利益的 政策法规,媒体也在为公平对待被拆 迁者大声疾呼,各地拆迁补偿款的上 升速度,大多高于商品房售价上升的 速度,在不少地方,补偿款已经足以 改变一个家庭的命运。