# "Delegated Information Choice" Kristoffer Nimark & Stefan Pitschner

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Barcelona GSE Summer Forum, June 2016

#### Motivation:

- Most imperfect information models have either
   (a) information provided exogenously; (b) ex-ante information choice
- But, in reality, we receive most of our information from media We *delegate our information choice*

# **Question:** What if we live in a world where media select our information? How does that affect people's choices?

**Empirical:** News coverage is more homogenous after major events

**Theoretical:** Proposes model that can account for stylized fact Shows how media selection makes people actions *more* correlated

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# Big Picture: Media Selection Should Matter

## Media Selection:

- People base their decisions on many different types of information
- We have often separated these into classes: {public vs private}
- After *Morris and Shin (2002)*, focus on how *public information creates commonality of beliefs and coordination*

**But** what determines how public events become?

 $\implies$  the selection of events by news media

Kris and Stefan show that media selection matters for the

Publicity of events

⇒ how common knowledge an event is
 ⇒ how people react to different events
 ⇒ the corr. between people's actions

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#### **Basic Setup:**

• Estimates a *Latent Dirichlet Allocation (LDA)* topic model on 17 US newspapers over two 3-month periods (08-10/01 and 08-10/08)

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- Idea is to objectively detect the 10 most prevalent topics, the commonality of coverage, and how that changes with event size
- LDA is *the* standard approach to infer topics from text

#### Stylized Facts:

- 1. There is heterogeneity in coverage across newspapers
- 2. Heterogeneity *drops* when there are *large events*

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# Stylized Fact #1: Debatable?

• *McCombs* ('81) and *Graber* ('97):

"A content analysis of competing dailies [...] found no statistically significant differences across [...] the 22 content categories compared"

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• Across vs within media market variation?

## Stylized Fact #2: Plausible

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- Measure of uncertainty?

Minor Points: (1) Time-span selection? (2) Topic selection? (3) How does it all fit with the media literature?

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## Two Person Beauty-Contest Model:

- Heterogeneous interests ~ person-specific *latent variable X<sub>i</sub>*
- Each person entrusts their information choice to *one* news provider
- News provider selects which X to report to max that person's welfare

## Mechanism:

- Suppose than an extreme realization of  $X_A$  happens, then Alice will almost certainly be told about it by her news provider
- But since Bob's optimal action depends on Alice's, Bob's news provider will likely also find it optimal to report  $X_A$
- And if Alice knows that, her response will be more forceful (and so on)

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#### Model is Abstract and General:

- Special cases can be analyzed analytically ~ Geanakoplos ('92).
- Multiple equilibria; what *Refinement Concept* to use?

# **Conceptually:**

Are events that increase the homogeneity of news large realizations of type-specific shocks <u>or</u> shocks that we all care about (9-11 vs. Bank-run)

#### Alternative Model:

- Continuum of two types of people
- Each cares about one type-specific shock and one common
- Duopolistic news providers with *fixed-cost of news provision*

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#### **Conclusion:**

- Since Morris and Shin (2002) focus on public information's ability to coordinate people's actions by creating more common knowledge
- But how common are events? And what determines it?
- Kris and Stefan turn our attention to the critical role played by media in determining which events are observed, how common the knowledge of events are, and how that matters for people choices
- .... and enormous upside potential

**Rubenstein** (1989): Almost common knowledge  $\neq$  common knowledge

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#### Thank you for your time and attention!

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