Content Analysis is to Words as Statistics is to Numbers

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CONTENT ANALYSIS PDW
AOM MEETINGS
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Small N Content Analysis

Excellent for Theory Building/Grounded Theory

- Lyles & Reger, JMS, 1993
  - Cognitive causal mapping of hundreds of pages of interview transcripts
  - Upward influence in a multi-partner international joint venture
  - Case study

Medium N Content Analysis

Excellent for Exploring Themes

Duriau, Reger & Pfarrer (2007) *Organizational Research Methods*

A Content Analysis of the Content Analysis Literature in Organizational Studies: Research Themes, Data Sources, and Methodological Refinements

98 journal articles over 25 years
- Multiple rounds of hand coding
  - Themes
  - Topics
  - Type of Content Analysis
  - Others

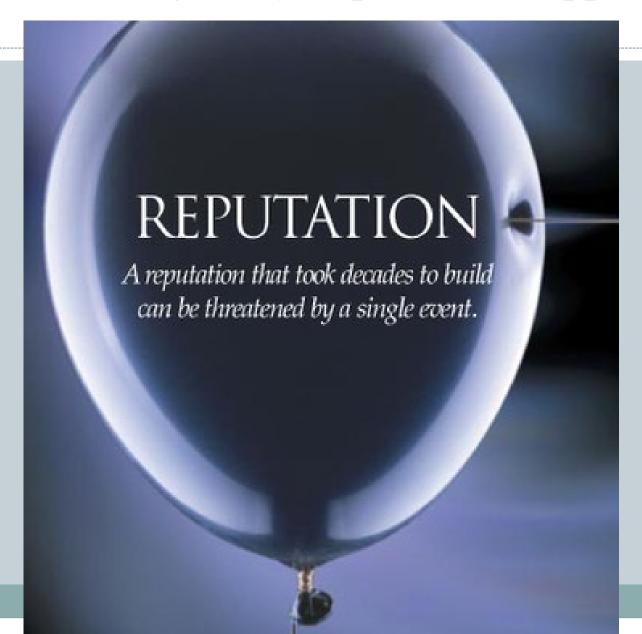# Large N Content Analysis
Excellent for Theory Testing

Managing the Message: The Effects of Firm Actions and Industry Spillovers on Media Coverage Following Wrongdoing

ZAVYALOVA, PFARRER, REGER, SHAPIRO
2012, *ACADEMY OF MANAGEMENT JOURNAL*

How Do Firms "Manage the Message"?

- What types of announcements of actions are effective in restoring positive media coverage following wrongdoing?

  - Content of firms' announcement of actions are choices and are a reflection of the "mind of the strategist" mental model

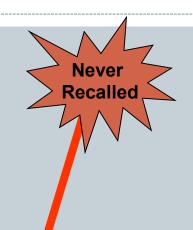 - Media coverage are choices and are reflections of the "eye of the beholder" mental models

Bad Actions Negatively Impact Social Approval

REPUTATION

A reputation that took decades to build can be threatened by a single event.

And Spills Over to Others
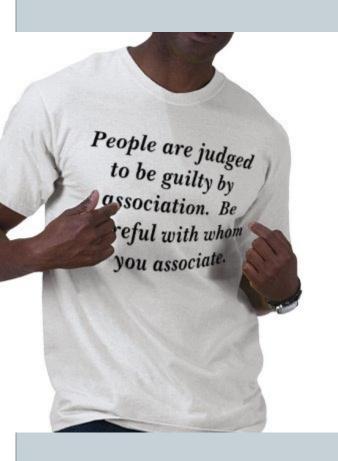

Never Recalled

Theory of Spillovers

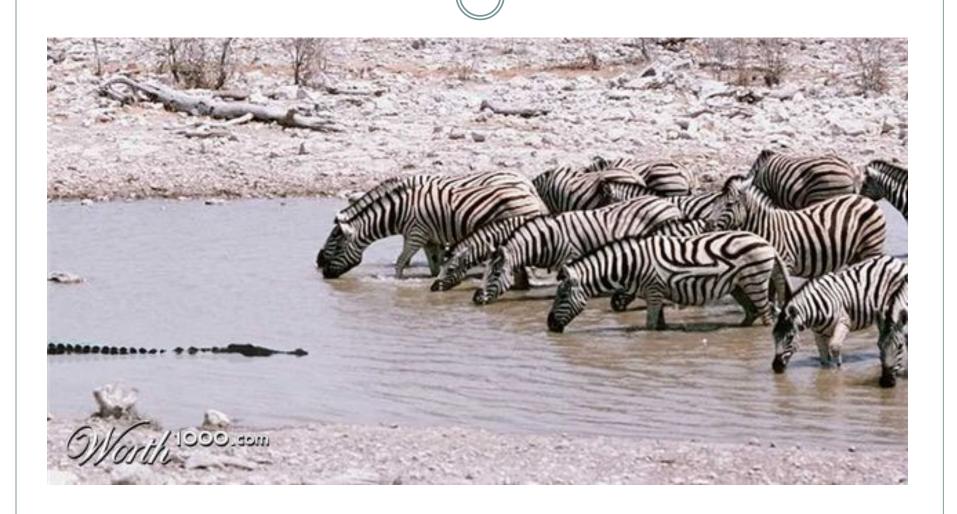Cognitive Categorization Theory

→ Generalization:

Characteristics of one member of a category generalize to all members of the category

→ Negativity bias:

Bad events and actions are more salient and memorable

Safety in Numbers?

Social Approval Repair

Can a stain on your REPUTATION be *dry-cleaned?*

Threat-Reducing (Technical) Actions:

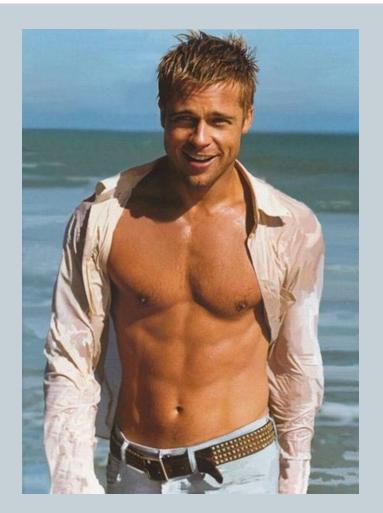- Aimed at improving the core internal processes of the company, and thus, may address the cause of firm guilt

Attention-Deflecting (Ceremonial) Actions:

- Reveal the goodwill or good character of the firm or are aimed at managing stakeholders' perceptions about the firm

(Ashforth and Gibbs, 1991; Elsbach, 1994; Elsbach, 2003; Petkova, 2008)

Is it better to announce actions that show you are addressing the problem or that take the audience's mind off of the problem?

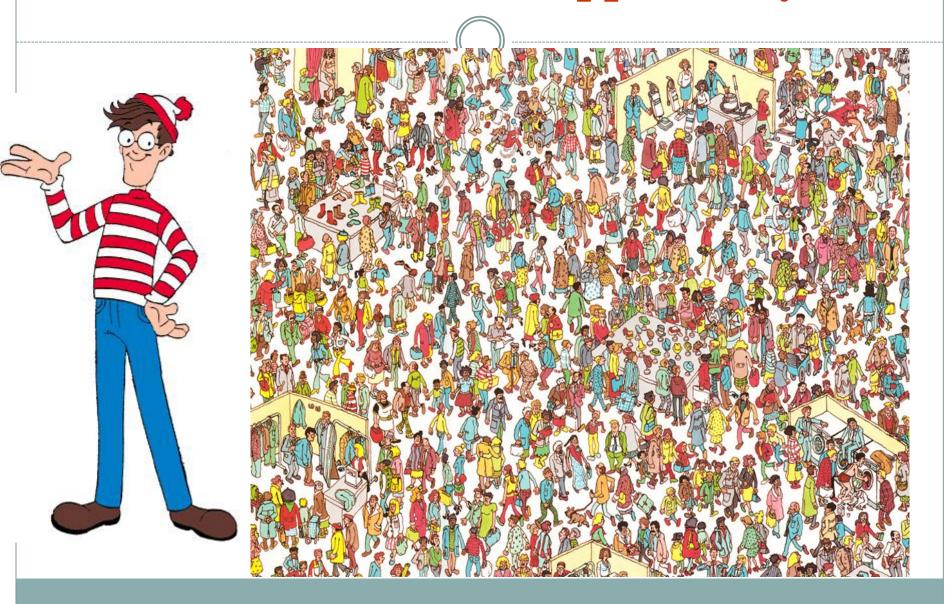# What is the best way to stand out in a good way in a bad crowd?

Proactive threat-reducing actions

Proactive attention-deflecting actions

"Where's Waldo" Opportunity

Large N Content Analysis

Structured Content Analysis
- CPSC Press Releases
- Toy recalls by U.S. public companies 1998-2007
- No Cognitive Theory
- Assumed to be "Factual Data"

IV: Actions hand coded Structured Content Analysis
- 5,500 Company press releases – Factiva, 944 firm quarters
- 45 companies, 21 experienced recalls
- "Mind of the Strategist"

DV: Affective Tone Content Analysis
- 32,000 articles & web blogs – Lexis-Nexis, LIWC
- "Eye of the Beholder"
- Computer-coded with LIWC

"Managing the message" works...

* **Data and Method:**
  * US toy recalls, 1998-2007
  * Econometric Modeling: Arellano-Bond estimation

* **Findings:**
  * Firms have a choice of what actions to announce in press releases
  * These choices have different effects on how positively or negatively the media views the company
  * Tenor (positivity/negativity of media coverage) depends on whether the firm was a major perpetrator
  * Tenor also depends on how many other firms are also perpetrators

What's all the Hot Air About?
Media Coverage of Wind Power

Research Questions:

- **Does media coverage affect the speed and likelihood of adoption of an innovation?**

  1. Is it possible to have too much coverage?
  2. Does it matter if the coverage is simple (few issues) or complex (many issues)?
  3. Does it matter which issues the media discuss?
  4. Are there interactions between tenor & important context-specific content?

Theory Development

- **Volume breeds familiarity breeds acceptance:**
- Shapes primary stakeholders' knowledge, opinions and actions about organizations and industries (Deephouse, 2000; Elsbach, 1994; Pollock & Rindova, 2003)
- IPO valuation (Pollock, Rindova, & Maggitti, 2008)
- Mutual funds (Jonnson & Buhr, 2011)
- Evolution of mature industries (Anand & Peterson, 2000; Anand & Watson, 2004)

H1: Too much media attention slows speed of adoption.

- Is it possible to garner too much media attention?

  - Decreasing returns to media attention
    - Saturation effect
    - Curve flattens out

  - Negative returns to media attention
    - Media cover newsworthy stories
    - Too much coverage might signal controversy
    - Curve turns negative

H2: Issue diversity slows speed of adoption.

Does it matter if the coverage is simple (few issues) or complex (many issues)?

H3: Content matters: More coverage of aesthetic issues decreases speed of adoption.

H4: Content matters: More coverage of economic issues decreases speed of adoption.

The first stage of the giant Thanet wind farm was officially opened last week

What about Tenor?

Tenor Matters!

Why does tenor matter?

Tenor is framing

○ Positive or negative framing of a particular issue, organization, or industry
Pollock & Rindova, 2003; Fiol, 1995; Levin, Schneider, Gaeth, 2002

Measured by affective content

○ Pennebaker, Booth & Francis, 2007; Pennebaker, & Francis, 1996; Pennebaker & King, 1999
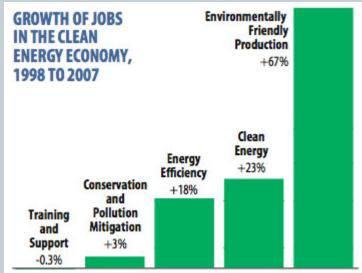
Frames & affect are more influential and memorable than specific content

○ Zajonc, 1980, 1984; Fiol, 1994, 1995

Content Interactions with Tenor

- Are there interactions between aesthetics & tenor or economics & tenor?

GROWTH OF JOBS IN THE CLEAN ENERGY ECONOMY, 1998 TO 2007

- Environmentally Friendly Production +67%
- Clean Energy +23%
- Energy Efficiency +18%
- Conservation and Pollution Mitigation +3%
- Training and Support -0.3%

Setting: US Wind Power Industry
2000-2009

- Commercial Wind Projects
- 20 MW or larger
- 224 Operational
- 389 Proposed

Proposed and Installed U.S. Wind Farms

Number of Projects vs. Year

Legend: □ Adopted ■ Proposed

Data and Variables

DV: Time elapsed in months from project announcement to generating electricity

Sources: AWEA, verified by press releases

IVs: Computerized Content Analysis

- Computer-coded state-specific and national newspaper articles – Lexis-Nexis, LIWC
- **Media Attention:** Count of articles per project per year
- **Issue Diversity:** Number of issues: 8 possible categories
- **Aesthetics & Economics:** Followed Short, Broberg, Cogliser & Brigham (2010) protocol to create custom dictionaries
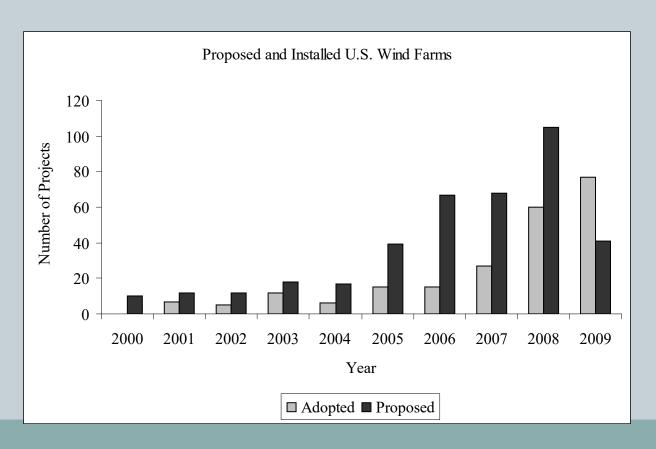
Control Variables: prior research + interviews in the industry

Tenor: Positivity of affective content (see Zavyalova, et al for measure)

Sources: American Wind Energy Association (AWEA), the Department of Energy, U.S. Census Bureau, the database of State incentives for renewable energy and Lexis/Nexus

Contributions

1. Adds to growing evidence that media coverage matters to firm performance; in this case, to technology diffusion.

2. Effect of media attention is fully mediated by tenor—suggests studying amount of coverage is crude measure.

3. First empirical investigation in management literature of issue diversity in a media or innovation adoption study.

4. Context matters -- Specific content matters.
   o Future research should be informed by which issues are important to the context.
   o Not content alone, however: content X tenor matters.

5. **Emotions matter!** Adds to the nascent strategic management literature on emotions affecting strategic performance.

Advice for Content Analysis Researchers

- Theory first and foremost.
- Be clear on research questions & model before collecting data or running analysis.
- Match methods to research questions.
- Celebrate diversity of methods and approaches.
- Learn from samples from 1 to very large N.
- Large N isn't necessarily better than small N.
- Software is a tool.
- Use validated dictionaries (such as in LIWC and DICTION) where possible.
- Follow rigorous protocols when creating custom dictionaries.
  - ➢ Short, et al. (2010) *Organizational Research Methods*

Future Research Directions

- Larger datasets (not necessarily a good thing)
- More variety of methods
- More complex content analysis
- Cognitive psychology register "meets" sociology register
- Analysis of images: pictures, video

Saying
'I did a content analysis study'
is like saying
'I statistically analyzed my data'.

Thank you!