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

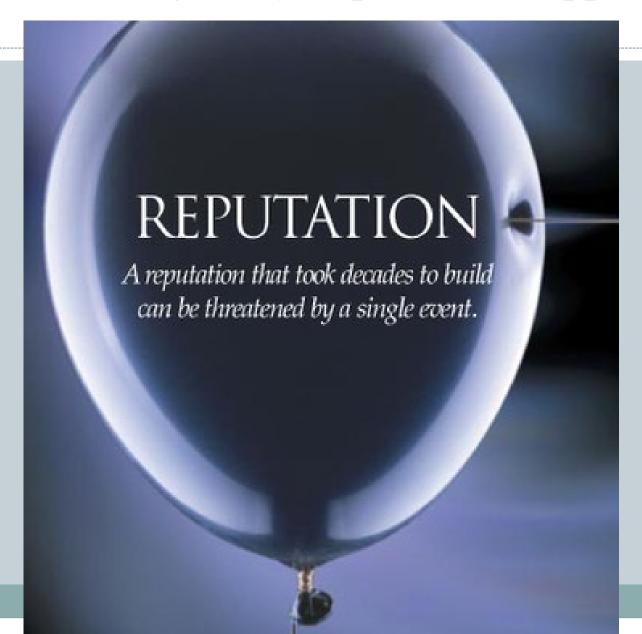
Managing the Message: The Effects of Firm Actions and Industry Spillovers on Media Coverage Following Wrongdoing

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?
 - oContent of firms' announcement of actions are choices and are a reflection of the "mind of the strategist" mental model
 - OMedia coverage are choices and are reflections of the "eye of the beholder" mental models

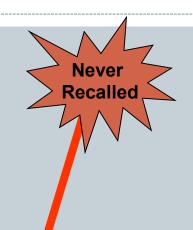
Bad Actions Negatively Impact Social Approval



And Spills Over to Others

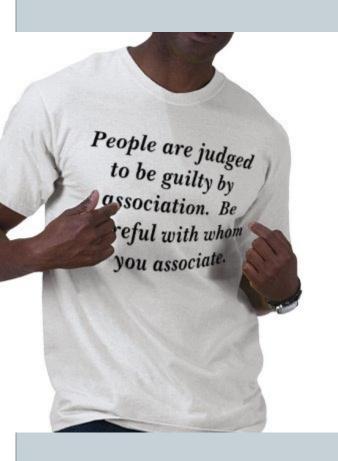








Theory of Spillovers



Cognitive Categorization Theory

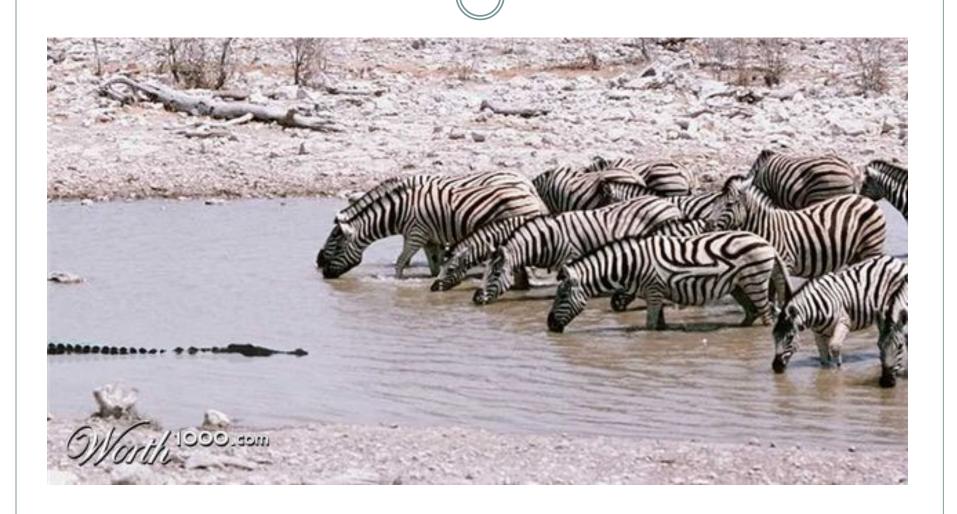
→ Generalization:

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



Threat-Reducing (Technical) Actions:

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

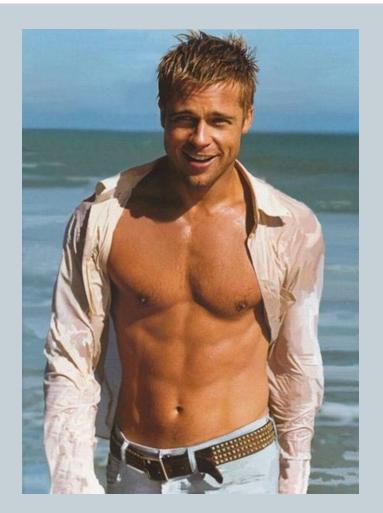
Attention-Deflecting (Ceremonial) Actions:

 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?

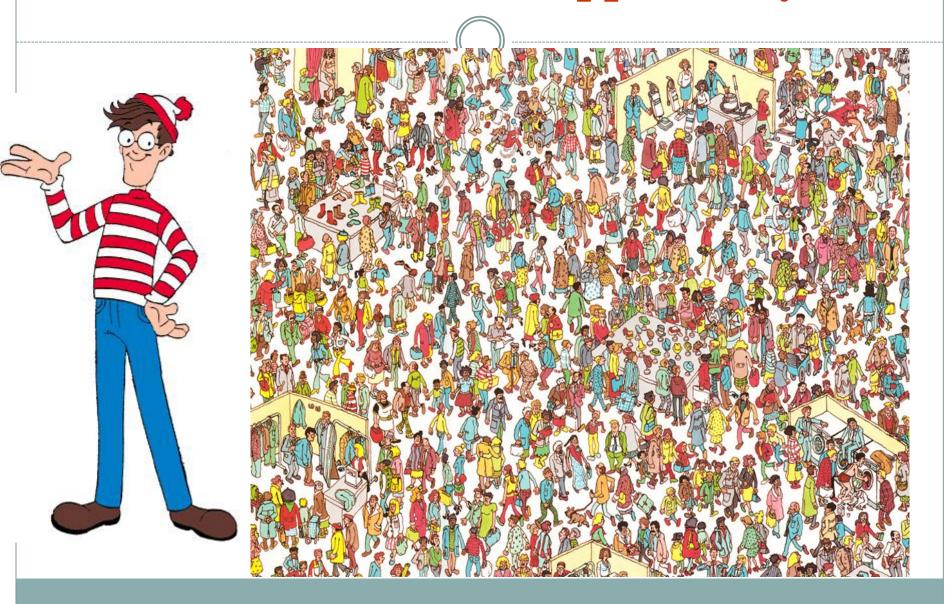


Proactive threat-reducing actions



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
- o 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:
Does It Generate Electricity?

WORKING PAPER

BENJAMIM, REGER, PFARRER, STRICKLING

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.



A farm that will milk us of millions

n all the publicity given to the opening of "the world's largest wind farm" off the Kent coast lastweek, by far the most important and shocking aspect of this vise project was completely overfooked. Over the coming years we will be giving the wind form's Swedish owners a soul of £1.2 billion in subsidies. That same sum, invested now in a single nuclear power station, could yield a saggering 13 times more electricity, with much greater reliability.

The first all-soo-common missake in the glowing coverage accorded to the inauguration of this Thance wind farm by the Climate Change Secretary, Chris Huhne, was to accept unquestioningly the claims of the developer, Vancatall, about its output. The array of 100 three-megawast (MW) surbines, each the height of Etackpool Tower, will have, it

was said, the "capacity" to produce

was said, the "capacity" to produce 300,000 (or even 240,000) homes. This may be true as shose rare moments when the wind is blowing at the right speeds. But the wind, of course, is inserminent, and the average output of these surbines will be barely a quarter of that figure. The latest official figures on the website of Mr Huhne's own department show that lastyear the average output (or "load factor") of British's offshore nurbines was only 26 per cent of their capacity.

Due to its position, the wind form's owners will be lucky to got, on average, 7xMW from their wardmills, a fraction of the output of a proper power station. The total amount of electricity the turbines actually produce will equate to the average electricity usage not of 240,000



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

homes, but of barely half that number. A far more significant omission from the media reports, however, was any mention of the colossal subsidies this wind form will earn. Wind energy is subsidised through the system of Renowables Obligation Certificates (ROCs), unwiningly paid for by all of us

through our electricity bills. Our electricity supply companies are obliged to buy offishere wind energy at three times its normal price, so that each kilowan hour of electricity receives a

200 per cent subsidy of £100.

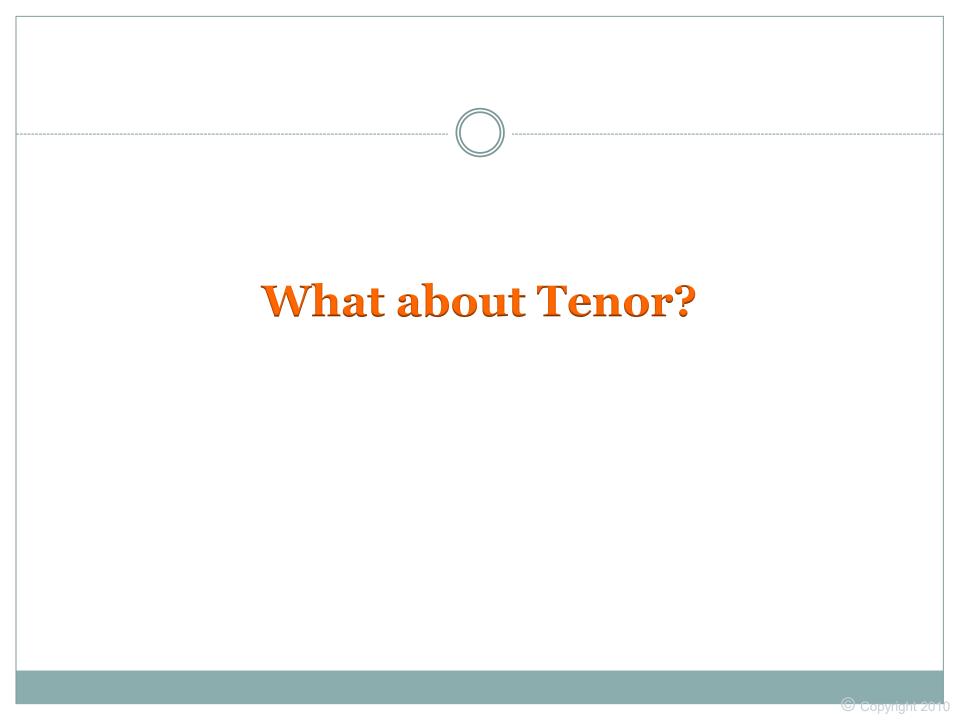
This means that the 75MW produced on average by Thancs will receive subsidies of £50 million a year, on top of the £30-40 million cost of the electricity itself. This is guaranteed for the narbines' estimated working life of 20 years, which means that the need to be the cost of the surplines'. mount that the sotal subsidy over the next two decades will be some £1.2 billion. Based on the costings of the current Prench nuclear programme, that would buy a gigawan (1,000MW) of carbon-free nuclear generating capacity, reliably available 24 hours a day — more than 13 times the average output of the

The 100 surbines opened lass week cost (780 million to build, which means that the £100 million a year its owners hope to earn represents a 13 per con-return on capital, enough to excite the interest of any investor. And these surbines are only the first stage of a project eventually designed to include 341 of them, generating subsidies of £200 million a year.

A final claim for the Thanes wind form (which Mr Huhne beaus is "only the boginning") is that it will crease "green jobs" - although the developers say that only 21 of these will be permanent. These are thus costing in "green subsidies" alone, £3 million our job our year, or in million for each job over the next 20 years. The Government gaily praules about how a wants to create "400,000 green jobs", which on this basis would eventually cost us £22.8 trillion or 17 times the entire annual output of the

UK ocenomy.

If all this sounds dizzyingly surreal, the fact remains that we must begin to grasp just what the green fantasies of Mr Huhne, the RU and the rest are costing us. Even the Queen, we learn, tried to claim a "fuel powerty" allowance for her soaring electricity bills, which have risen 50 per cent in the passyent But a crucial first sup sowards goining some grip on reality must be for those who report on these wind farms to stop hiding away the colossal price we are all now having so pay for one of the greeness scams of our age.



Tenor Matters!



Why does tenor matter?

Tenor is framing

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

Measured by affective content

O Pennebaker, Booth & Francis, 2007; Pennebaker, & Francis, 1996; Pennebaker & King, 1999

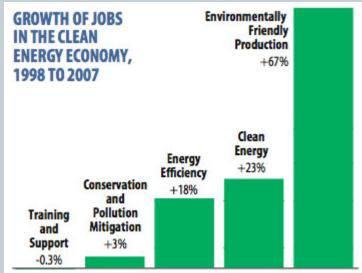
Frames & affect are more influential and memorable than specific content

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

Content Interactions with Tenor



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

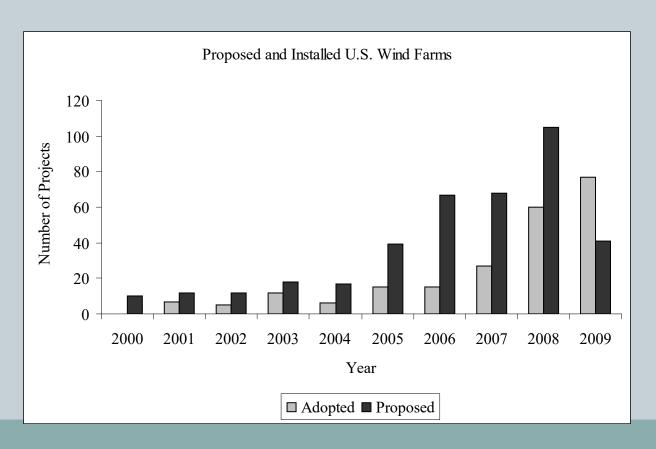


Setting: US Wind Power Industry

2000-2009

- Commercial Wind Projects
- 20 MW or larger

- 224 Operational389 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.
 - Future research should be informed by which issues are important to the context.
 - Not content alone, however: content X tenor matters.
- **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'.

