

Can We Talk? How Geoscientists Can Deliver Unpopular Messages

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Objectives

- **Identify challenges of communicating technical information to a non-technical audience**
- **Discuss message development**
- **Define communities of interest**



What are the challenges?

- **Generally low level of scientific/technical literacy**
 - Doesn't allow you to ignore them...
- **Complex issues**
 - Natural-resource exploitation
 - Land-use decisions
 - Climate change
 - Natural hazards



What are the needs?

- **Technical knowledge**
- **Credibility**
 - **Subjective assessment**
 - **Determined by audience**
 - **Conflict of interest**
 - **Real or perceived**
- **Evidence-based methods**



What are the needs?

- **Communication skills**
 - Determine message
 - Communicate message
- **What is the message?**
 - Consistency and focus (Cal EMA/Harris):
SOCO (Howard)
- **Distinguish between message and what one actually says**
- **Frame the message (CRED, 2011)**

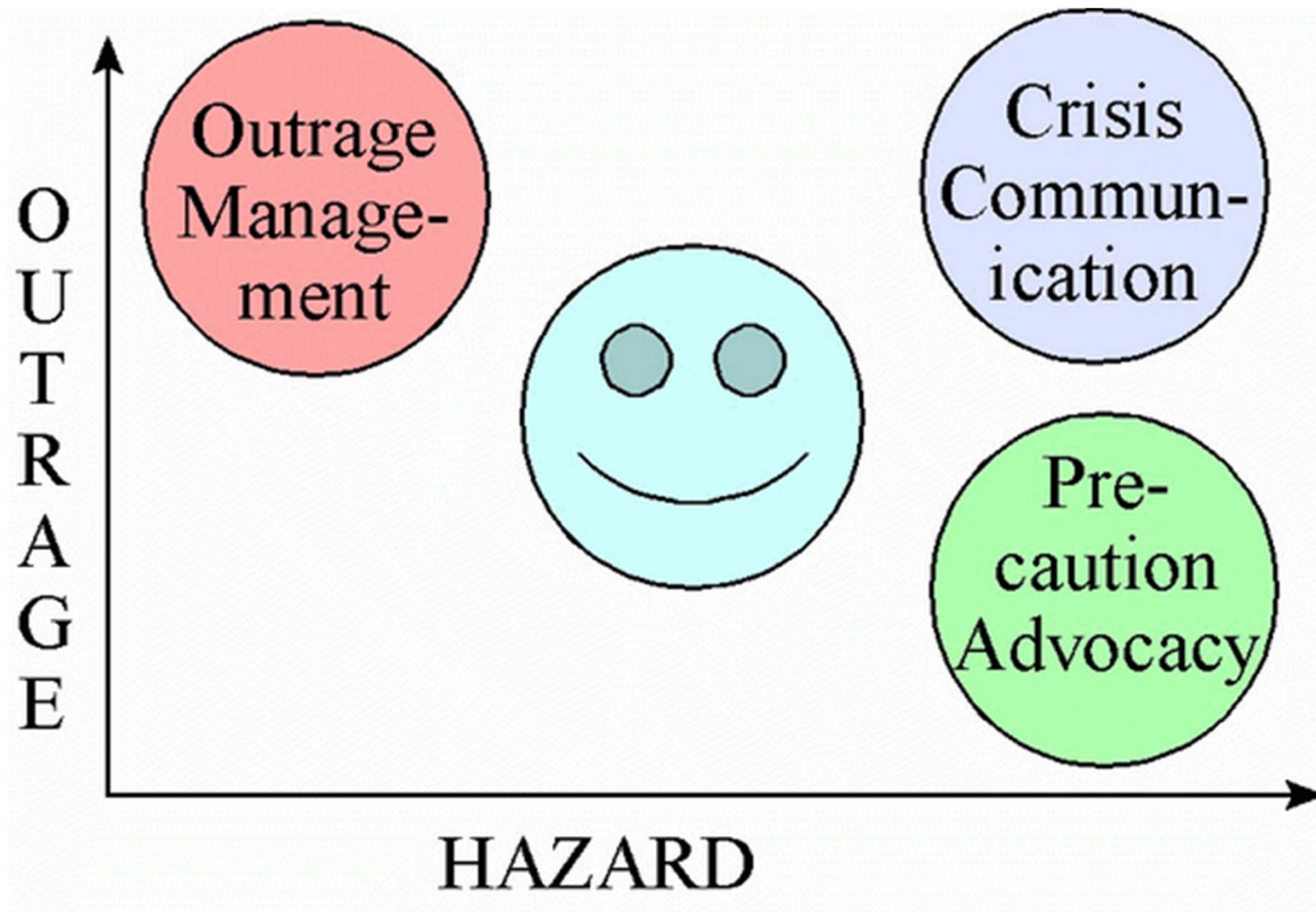


What's important?

- Subjective
- You don't get to determine this
- “Hazard vs. Outrage” (Sandman)
- **“In the absence of understanding, perception is reality.”**



Concern vs. hazard (Sandman)





Who's important?

- “Community” identification
- Leaders
 - Official vs. actual
- “Mavens” vs. “Spreaders” (Heath & Heath, *Made to Stick*)
- Who are your opponents?
 - Not a scientific debate
 - Do you understand social media?



Examples

- **“Don’t worry.”**
- **“If you see something, say something.”**
- **Vaccinations**
- **Climate change (CRED)**
- **What else?**



WTC environmental effects

- “...They did the best they could... [but]...They kept a lot from people because they didn’t want to scare us – but we were distrustful because either there was stuff they were telling us or they didn’t know.”

Kim Todd, Manhattan resident ([NEHA report](#))

Who is the community?

- **Possible defining criteria**
 - **Geographic location**
 - **Cultural/ethnic/religious**
 - **Language**
 - **Economic status**
 - **Home ownership**
 - **Public, private, non-profit sectors**
 - **Physical characteristics**
 - **Pre-existing medical conditions**



Who is the community?

- Is there an actual community?
 - Common interest(s)
 - Common (self-)identification
 - Beware assumptions
 - Social cohesion
 - Identifiable leaders
- FEMA Whole Community project



How best to engage?

■ Community “DNA”

- Definitions
- Constraints
- Concerns
- Vulnerabilities
- Leaders and trusted sources



Being a credible source

Outcome = Audience + Message + Medium

- **Start from the left...**
- **Respect your audience**
- **Be consistent**
- **Admit uncertainty**
- **The medium is *not* the message**



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