

The Power of “How”:

Using Tested Metaphors to Build Public Understanding about Environmental Health

Webinar 3 of a Three-Part Series

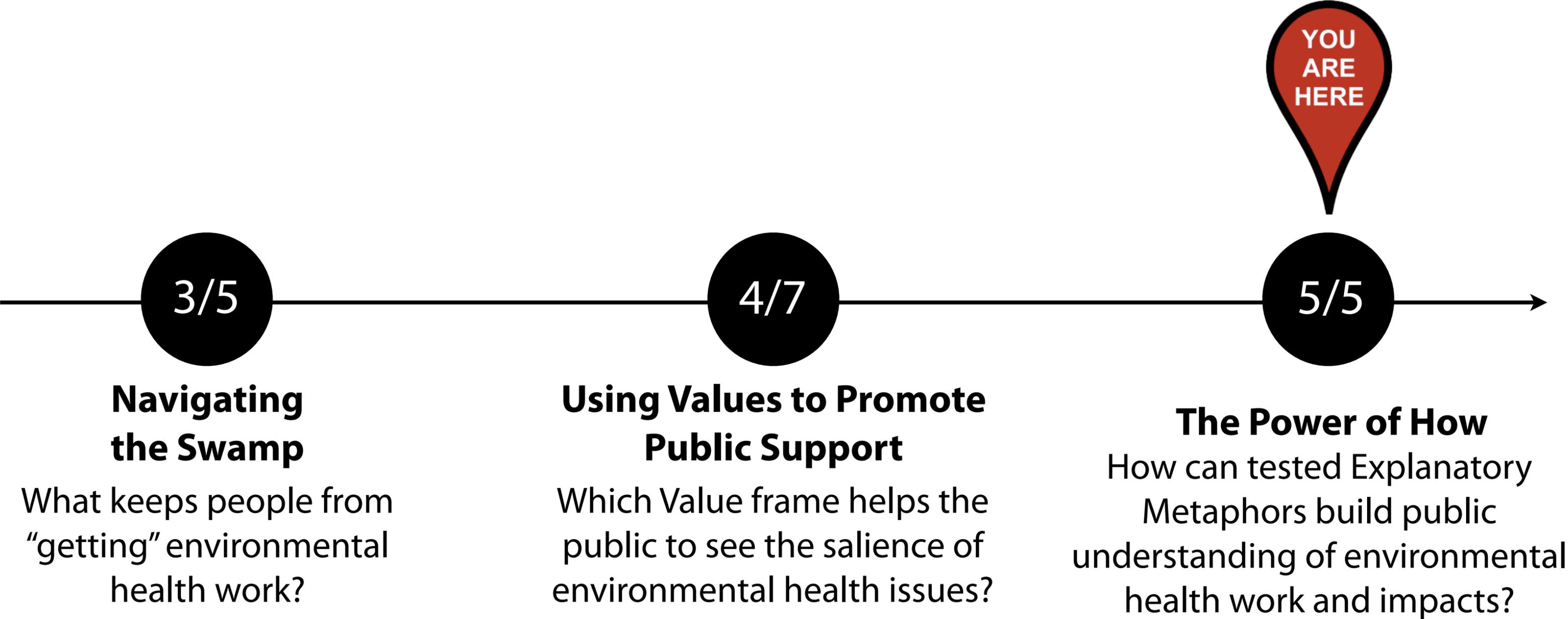
Sponsored by the American Public Health Association, the Centers for Disease Control and Prevention, and the Agency for Toxic Substances and Disease Registry

May 5, 2015

Presented by Jennifer Nichols, Ph.D.

Strategic reframing can build public understanding of environmental health work . . . but how does it work?

Our Learning Itinerary:





The Research Question:

How can environmental health professionals more effectively educate the public about

- the relationship between environments and public health?
- the challenges of addressing environmental health risks?
- the importance of environmental health research and regulation?
- the largely invisible work of thousands of highly trained environmental health professionals?

Research Base: n >4,500 Americans

PUBLIC PERCEPTIONS

- People, Polar Bears, and the Potato Salad: Mapping the Gaps between Expert and Public Understandings of Environmental Health (2012)

MEDIA CONTENT ANALYSIS

- The Media Narrative of Environmental Health (2012)

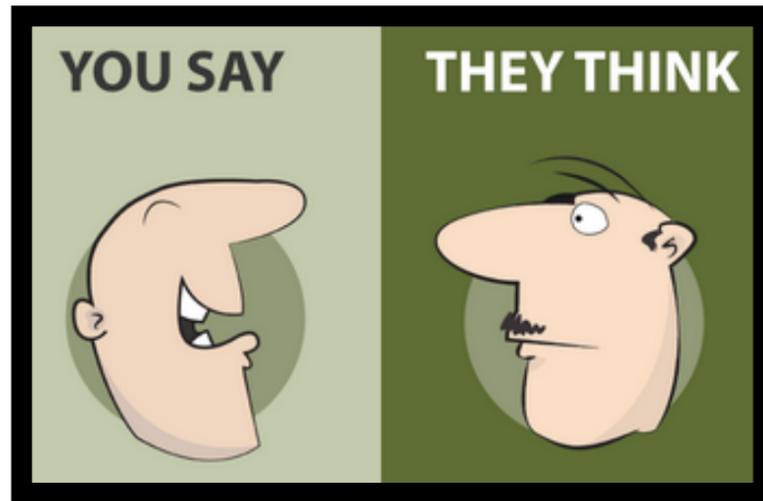
REFRAMING RESEARCH

- Using Values to Build Public Understanding and Support for Environmental Health Work (2013)
- Pictures in Their Heads (Video Memo summarizing our cultural models research)
- We Need a Ground Crew for Environmental Health Working Upstream: Using Explanatory Metaphors to Improve Public Understanding of Environmental Health and Its Workforce (2014)

STRATEGY & APPLICATIONS

- Talking Environmental Health: A FrameWorks Message Memo (2014)
- Building Public Understanding of Environmental Health: A Communications Toolkit (2014)

The Toolkit Models How to Use the Tested Metaphors



<http://frameworksinstitute.org/toolkits/environmentalhealth/>

Health Individualism

Health is each individual's responsibility
Household = environment

Everyone Is Responsible

Government is corrupt/inept
Business is greedy, focused
Community is key
Individuals must do what they can

Contamination

Threats to food, water, air

What's in the swamp of . . .

Environmental Health

Determinism

Result of modern life
Remediation, not prevention

Healthy Environment = Basic Right

Context influences health
Organization of the built environment matters
Social relations important
Economic conditions influence outcomes

Environmental Health Work?

= Black box
Taken for granted

Environmentalism

Extreme
Puts animals over people



CULTURAL MODELS AS BASIS FOR STRATEGIC COMMUNICATIONS



SOME MORE PRODUCTIVE THAN OTHERS



MULTIPLE MODELS AVAILABLE

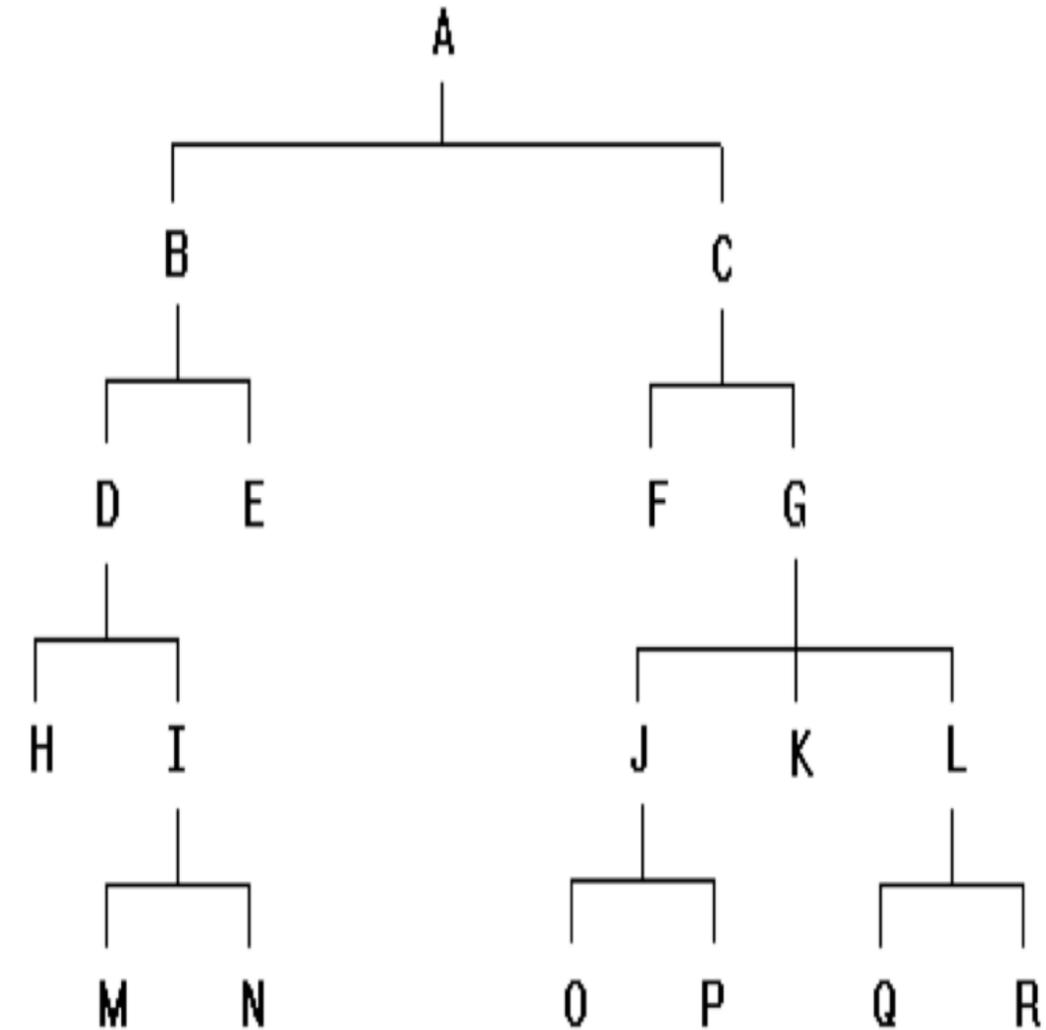
CHOOSE THE CUES THAT ACTIVATE THE MOST PRODUCTIVE

To frame is to make a set of choices



Values Guide People to the Intended Understanding

- Higher-level frames act as primes for lower-level frames
- Higher-level frames map their values and reasoning onto the lower-level frames
- Values are higher-level frames, so it's important to choose strategically



Fairness Across Places



The story you're telling:

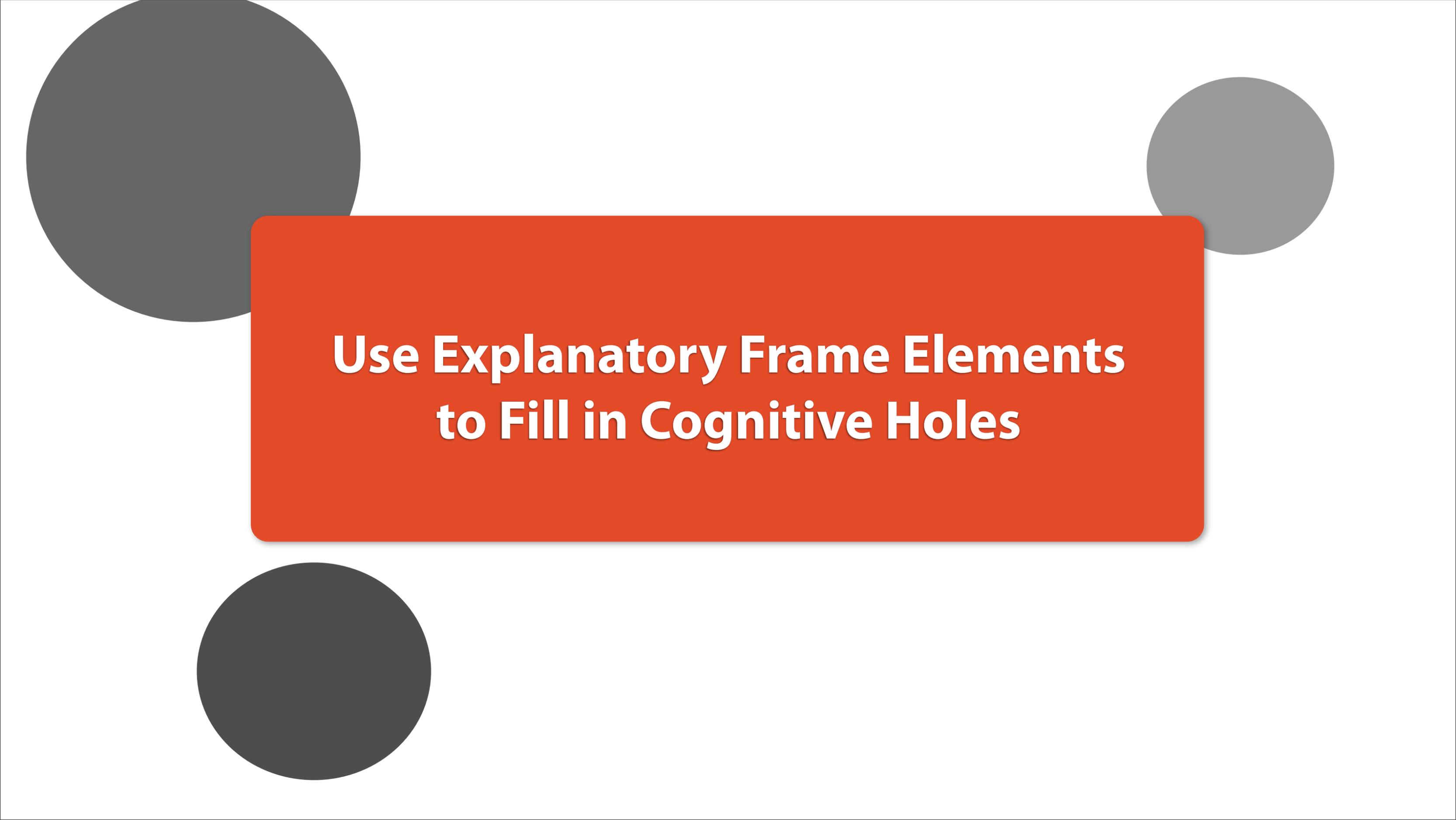
We need to make sure all Americans have healthy environments, no matter where they live.

Strategic way to redirect these public perceptions...

**Health Individualism
Willpower
Zero-Sum Thinking**

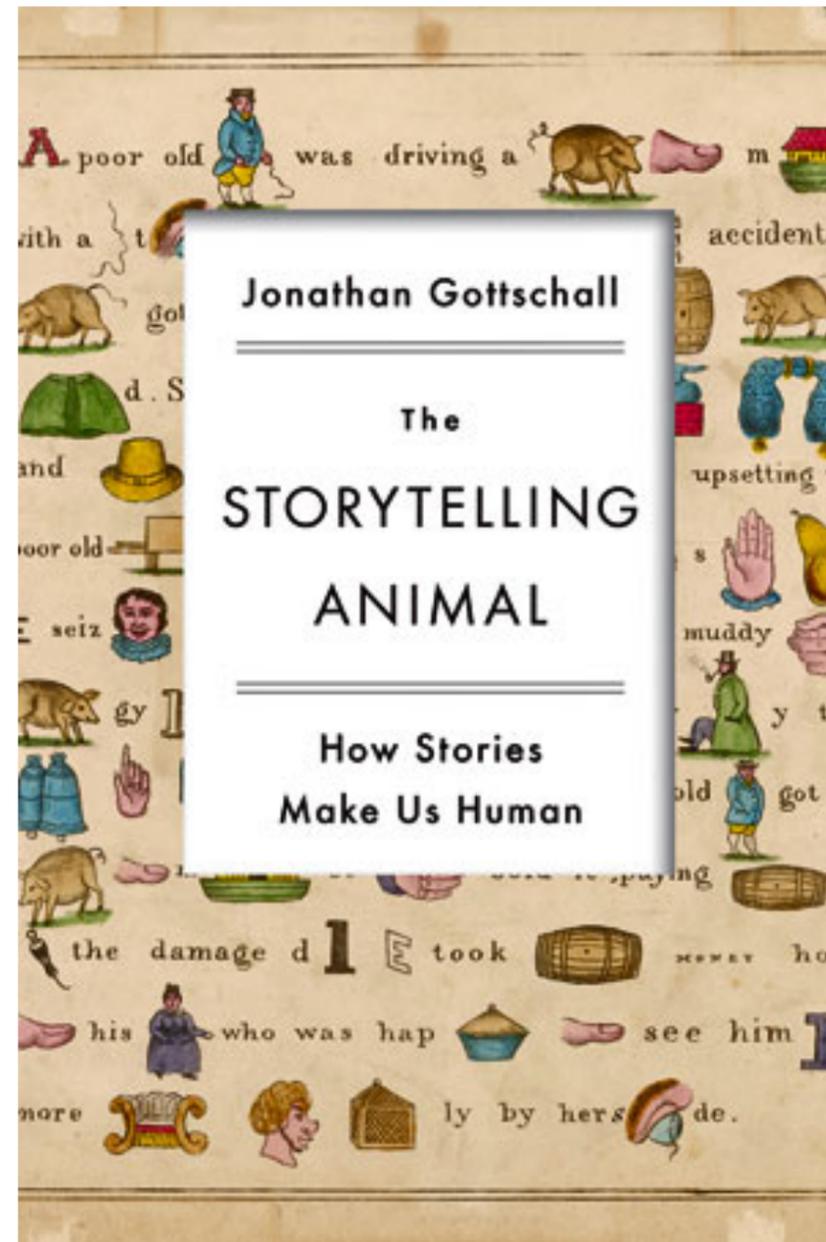
More powerful frame effects than these Values appeals...

**Health Individualism
Prevention
Protection**



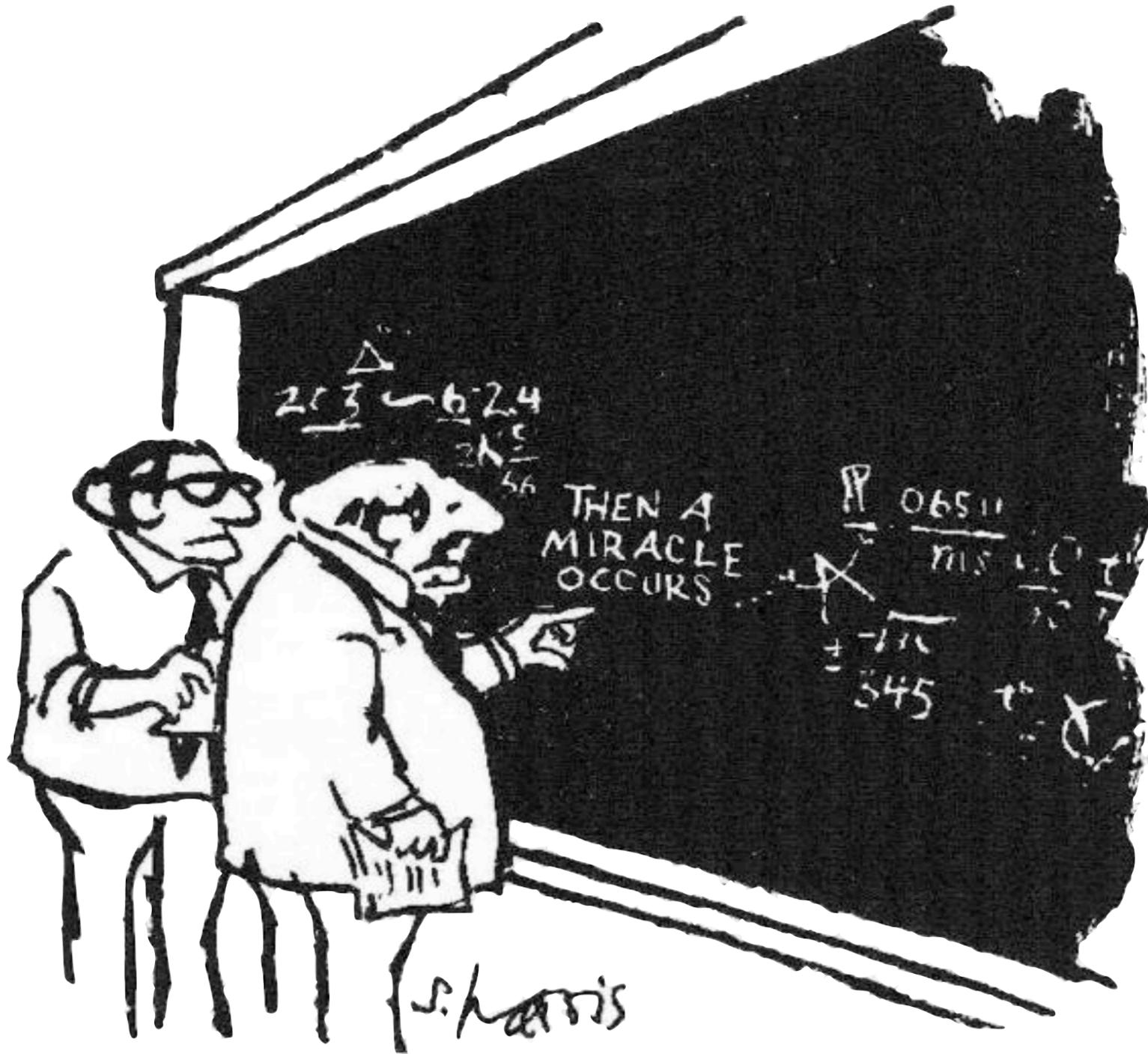
**Use Explanatory Frame Elements
to Fill in Cognitive Holes**

Why stories go awry



“Evolution has given us an ‘inner Holmes’ because the world really is full of stories (intrigues, plots, alliances, relationships of cause and effect) and it pays to detect them. The storytelling mind is a crucial evolutionary adaptation. But it is imperfect. It is addicted to meaning.”

The Power of "How"



- Explanation is an important communications goal
- Communications real estate is valuable--we need higher standards for what we use to fill it
- If we focus on explaining how things work, we help people become advocates for better change

"I think you should be more explicit here in step two."

Tools for Explanation



Explanatory Chains

Clear, concise sequences that unpack what affects what, and to what end



Explanatory Metaphors

Carefully developed and tested comparisons that help people quickly grasp the issue

Explanatory Chains Help You Navigate the Swamp

Establishing how an issue works helps the public think more productively about solutions.

A clear, concise sequence that shows what affects what, and with what results, gives the public information they need to connect underlying causes to visible consequences.





Explanatory Chains
spell out the
connections
between
underlying causes
and visible
problems.



Explanatory Chains work especially well when people are struggling to connect conditions to system-level causes.



Effective
Explanatory Chains
start a few steps
back from the
problem
("symptom") that
the communicator
wishes to highlight.



Explanatory Chains include a consequence, or outcome, that is clearly problematic to the public.



Explanatory Chains include a “link” that can be influenced by collective action or systemic/ structural changes.

DESCRIPTION

We need to address environment-related asthma triggers like carbon emissions. Low-income neighborhoods are more likely to experience higher asthma rates. Several studies have found that living in closer proximity to highways increases people's incidence rate of asthma. Children miss about 15 million school days each year because of asthma. Research shows that children with asthma are at higher risk of poor school performance. Better zoning and regulatory policies can reduce the effects of carbon emissions and particulate pollution.

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WHAT'S MISSING?

- Jumps into argument without an explanation of why this matters.
- Declarative statements are not explicitly linked to each other to connect cause and effect.
- The public outcome of this problem is implied, rather than stated.
- The benefit of the proposed solution is buried.

DESCRIPTION

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REFRAMED WITH EXPLANATION

Environmental conditions can have long-term consequences for our well-being, so addressing these conditions is a key to healthy communities. Air pollution from vehicle exhaust, for example, is linked to higher rates of childhood asthma. Because low-income neighborhoods are often located near highways and heavy traffic, children in these areas have a greater incidence rate of asthma. And it affects more than just their health: children with asthma have a higher risk of poor school performance, too, because they miss a lot of school days -- 15 million a year nationwide -- as a result of their illness. That makes it more likely they'll fall behind, which compromises their future outcomes. We can reduce air pollution's effects on children's well-being through stricter regulation of carbon emissions and better zoning policies.

WHAT'S CHANGED?

- Opens with an orientation to what's at stake -- starts a few steps back.
- Uses language cues to connect the flow of the argument for the reader.
- Introduces the solution and its benefit after explaining the problem.
- Spells out the underlying causes of a visible problem.

REFRAMED WITH EXPLANATION

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Explanatory Chains:

- Explicitly connect visible problems to underlying causes
- Link conditions to systems
- Provide interpretive context by beginning the chain a few steps back from the problem being highlighted
- Show an outcome that is a public problem
- Include a “link” that can be influenced by collective action or systems change

How does our reframe compare?

- Links problem (childhood asthma rates) to cause (neighborhoods with greater air pollution)
- Systemic bad health and lowered school performance are impacts of poor environmental conditions
- Opens with big-picture statement about connection between environments and health
- Children’s future success is compromised
- Supporting better regulation will improve conditions

Which of these is NOT a feature of Explanatory Chains?



- a) Explanatory Chains explicitly connect underlying causes to visible problems.
- b) Explanatory Chains jump into the problem right away to reinforce its urgency.
- c) Explanatory Chains show how the problem being discussed has consequences for the public.
- d) Explanatory Chains always point to a collective action or solution that can fix the problem.

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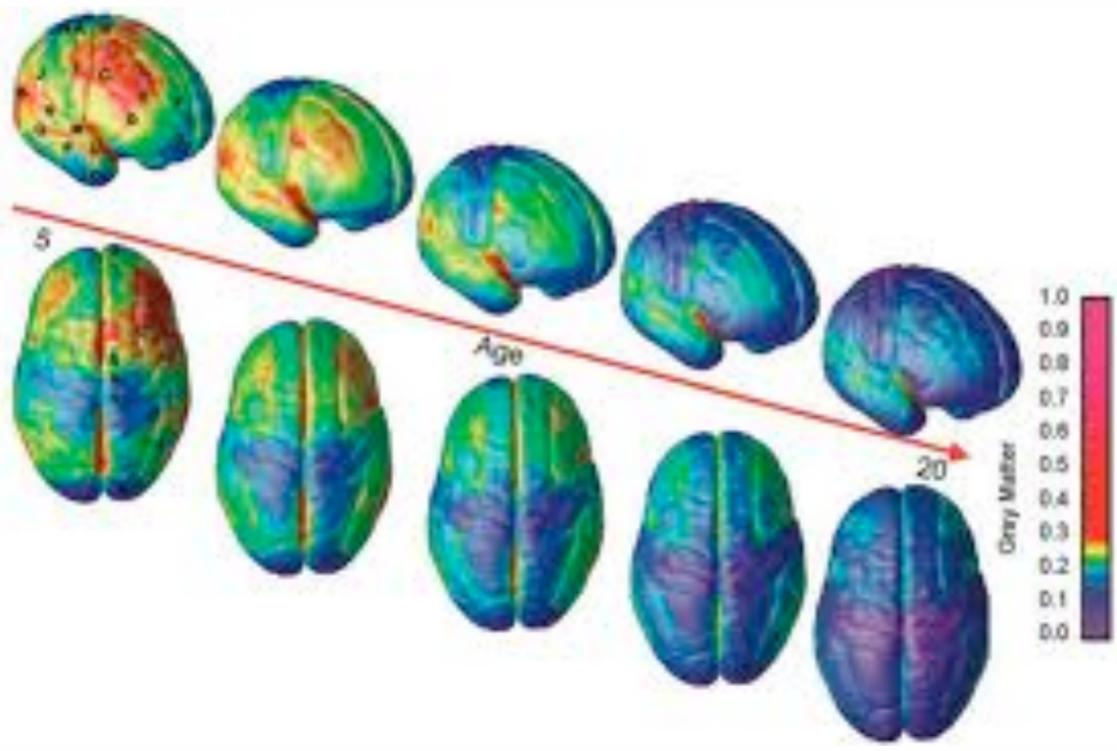
We Think and Act in Metaphor



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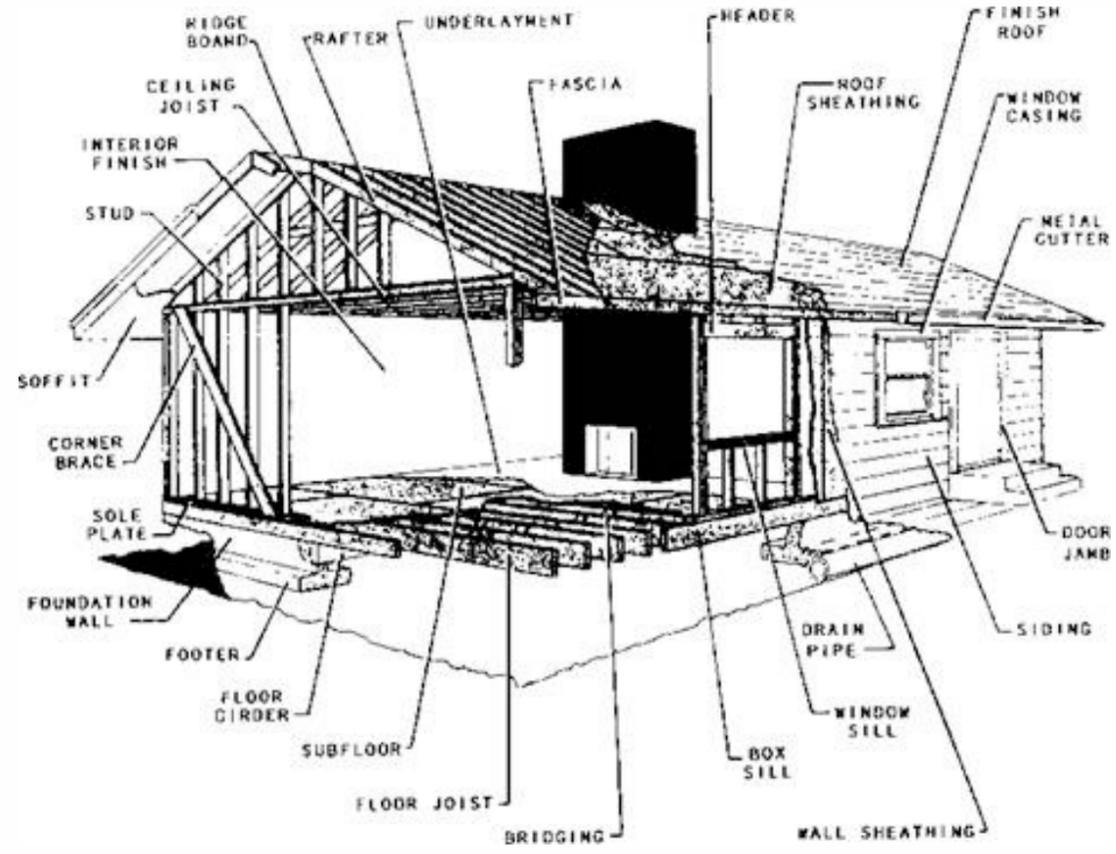


Explanatory Metaphors: Carefully crafted, tested analogies



Brain Development

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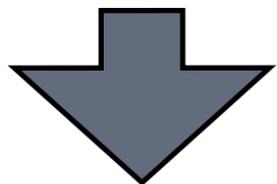
Building/Architecture

Why Are Explanatory Metaphors Powerful?

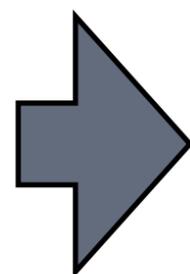
- **Clarifying:** help people understand process, how something works
- **Channeling:** nudge thinking in directions that allow new information to be incorporated and organized
- **Inoculating:** keep unproductive patterns of thinking from dominating
- **Sticky:** highly memorable and communicable



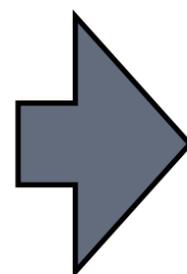
Candidate
Metaphors



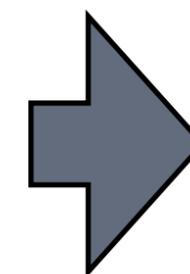
On the Street
Interviews
N ~ 30-40



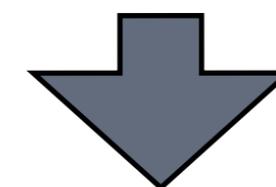
Experimental
Survey
N ~ 2000 - 8000



Persistence
Trials
N ~ 30-40



Usability
Match Trials
N ~ 25



Effective
Explanatory
Metaphor

Ground Crew



The story you're telling:

Just as we all rely on a highly trained and skilled ground crew for airport safety, Americans all count on the “environmental health ground crew” that studies our environment and how it might affect our health.

Strategic way to redirect these public perceptions...

- “Black Box” Thinking / Invisible Process
- Environmental Health = Contaminants
- Government Is Ineffective
- Health Individualism
- Many Causes, Few Solutions

Public thinking and talking with *Ground Crew*



Public thinking and talking with *Ground Crew*

Written with *Unframed Facts*

The Healthy Neighborhoods Program provides public health services to targeted areas in the City of Rosedale and the City of Sweetville with high rates of childhood lead poisoning, asthma triggers and other environmental health hazards.

Staff work with residents in their homes to identify and control lead hazards, reduce asthma triggers, and address other environmental health issues.

Reframed with *Ground Crew + Solutions*

Just as an airport ground crew makes sure all passengers arrive safely, the staff of the Healthy Neighborhoods Program ensure all of our residents live in safe, healthy homes. Some neighborhoods in Newburgh and Middletown have high rates of childhood lead poisoning, asthma triggers and other environmental health hazards. Our Healthy Neighborhoods “ground crew” helps residents to identify and control lead hazards, reduce asthma triggers, and address other environmental health issues. By providing these expert interventions as a public service, we’re making our cities healthier for all of us.

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Which of these sentences best uses the Metaphor *Ground Crew*?



- a) Similar to the way an airport ground crew carries out many responsibilities to keep people safe from takeoff to landing, we depend on an environmental health ground crew of highly trained experts to keep our environmental conditions safe, so we can all enjoy good health.
- b) An airport ground crew is a team of experts we count on to ensure flight safety. In the same way, environmental health professionals oversee our environmental conditions.
- c) Environmental health ground crews keep people safe from the many environmental hazards that can affect our health.

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Upstream Environments/ Downstream Health



The story you're telling:

We all live “downstream” from a range of environmental conditions that affect our health and safety, and that we can't control on our own. We need environmental health efforts to pay attention to what happens upstream.

Strategic way to redirect these public perceptions...

- Environmental Health = Contaminants
- Health Individualism
- Health = Health Care
- Fatalism
- Self-Makingness

Public thinking and talking with *Upstream/Downstream*



Framed with *Description and Facts*

The new Plan for a Healthy Los Angeles will provide guidelines to make Los Angeles a healthier place to live, work and play.

According to the Centers for Disease Control and Prevention (CDC), health-driven design policies can improve people's health by improving access to healthful food, reducing injuries, minimizing the effects of climate change, and making it easier for people to walk and bike. A growing body of research links the design of communities to some of the nation's most chronic health conditions, such as obesity, heart disease and mental health.

Framed with *Upstream/Downstream*

How cities are planned determines the health of our communities. This upstream planning -- of parks, sidewalks, safe buildings, and accessible services -- affects all of us who live downstream from those decisions. The Plan for a Healthy Los Angeles will provide guidelines to make Los Angeles a healthier place to live, work and play. By improving people's access to healthful food in their own neighborhoods, reducing injuries through safety improvements, minimizing the effects of climate change, and making it easier for people to walk and bike, we can reduce Angelenos' risk factors for chronic health conditions, such as obesity, heart disease and poor mental health.

Framed with *Description and Facts*

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Which of these sentences best uses the Metaphor *Upstream Environments/Downstream Health*?



- a) Too many deadly environmental problems -- toxic waste, pollution -- are beyond our personal control. That's why we need to go upstream to solve those problems before they hit us downstream where we live.
- b) Because environmental conditions affect human health, we rely on those working upstream -- to plan our cities, regulate industry, and keep our food supply safe, for example -- to take care of problems before they affect us downstream where we live, work, and play.
- c) Government and industry need to stop working against each other and manage our interests better by working together upstream to create better conditions downstream for all of us.

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Please complete the evaluation form at the link in the chatbox. We value your insights.

P.S. We will make this presentation available as a pdf.

We'd love to hear about your reframing efforts!

Please send your examples and success stories to us at environment@apha.org.

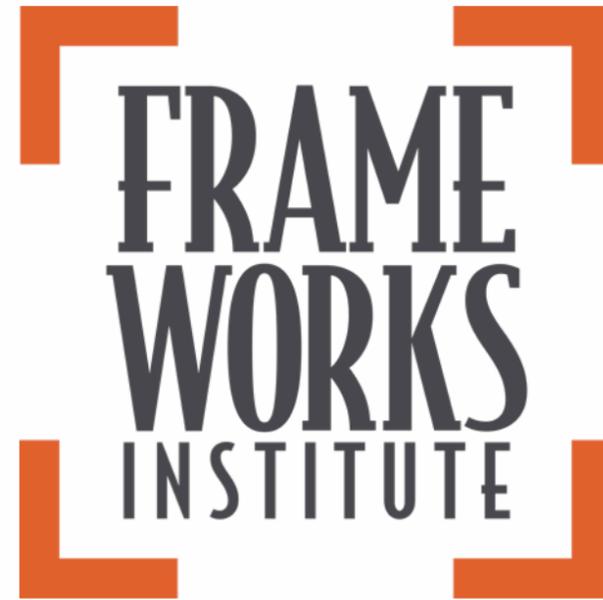


May the frames be with you!

“The advocates’ message tends to be complicated rather than simple, longer rather than shorter, and contrary to rather than consistent with popular understanding... For the most part, this means that we have to explain, our opponents just have to state; we need to change people’s minds, they just need to reinforce what people already think; we need to emphasize shared responsibility, they just need to highlight personal choice.”

–Wallack et al., *Media Advocacy and Public Health - Power for Prevention*, 1993.

<http://frameworksinstitute.org/toolkits/environmentalhealth/>



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