



Psychological Barriers and Unintended Consequences in Outreach Campaigns Promoting Natural Shorelines with Property Owners

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Extension role



- Social marketing to encourage voluntary behaviors (e.g., natural shorelines, AIS prevention)
- Promote science-based recommendations
- Understand audience and craft targeted strategic communication strategies
- Help natural resource professionals and conservationists communicate more effectively

False assumptions

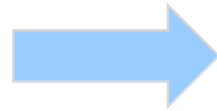


- Knowledge deficit model
 - Audiences simply lack specific knowledge to support and adopt new practice
- More information = better outcomes?
 - Effective communication is about explaining the science better or getting out more information
- Little empirical support
- Communicating scientific reasons for behavior change important but info alone often not enough to change behaviors

Communication outcomes

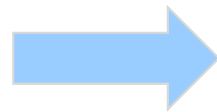


Mediated
communication



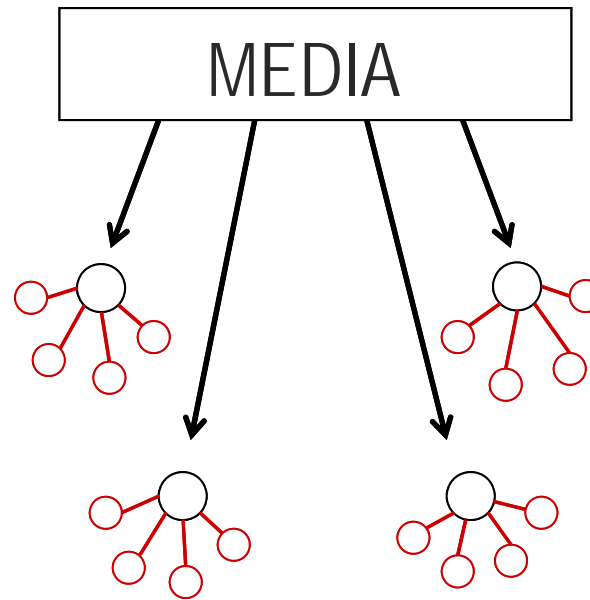
Knowledge/
Awareness

Interpersonal
communication



Attitude/
behavior
change

Two Step Flow of Information



○ = Opinion leaders

○ = Individuals in contact with opinion leaders

Motivated reasoning and perceptual filters



- See what we want to see and seek info that confirms pre-existing attitudes
- Use short cuts when faced with choices about complex scientific issues
- Connect info to what we already know and believe
- Same science mean different things to different people

Self Enhancement Bias



Motivation and the perception of shoreline impact



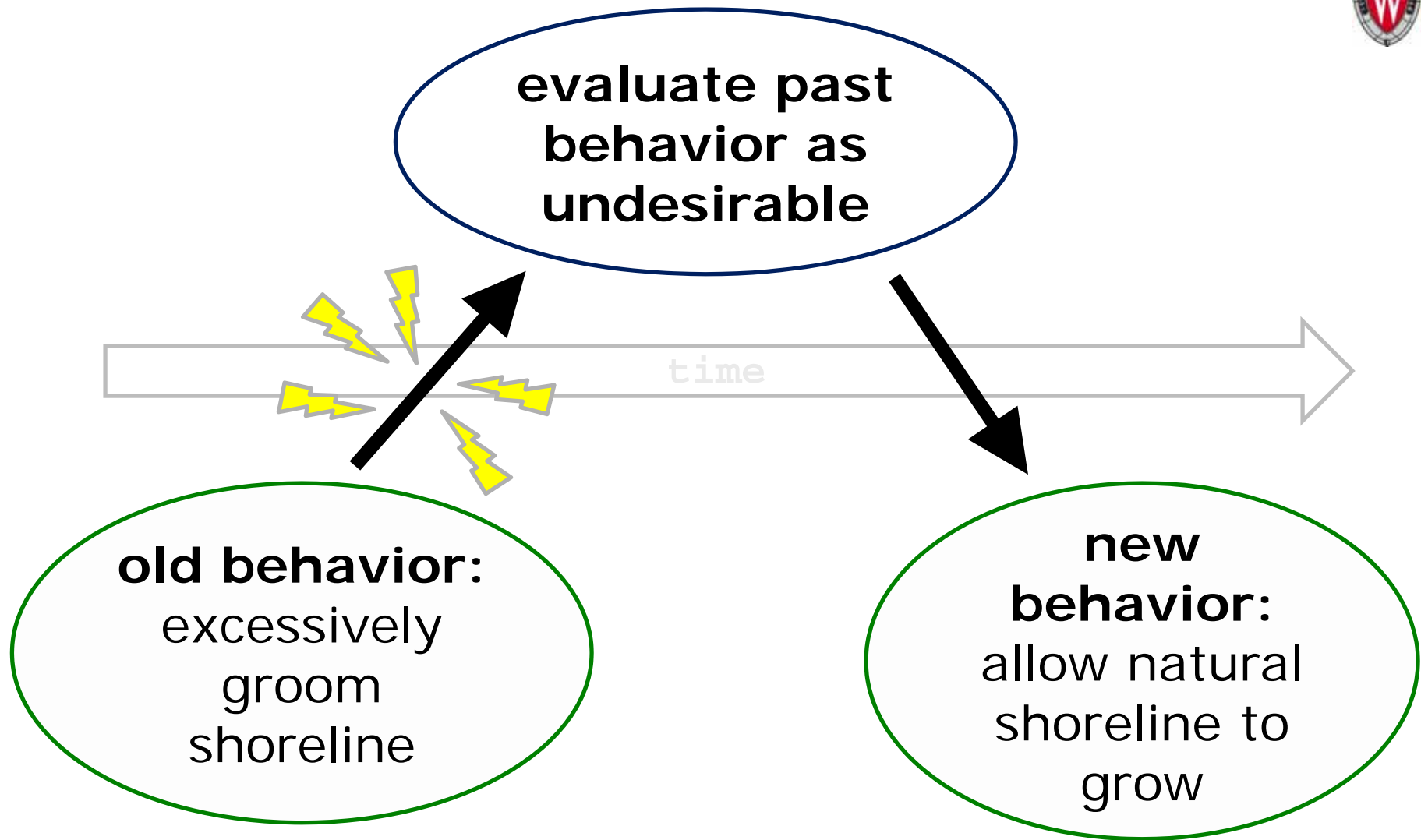
Theory of Motivated Cognition

Preference for a particular outcome can influence the selection of cognitive strategies for accessing, constructing, and evaluating beliefs.

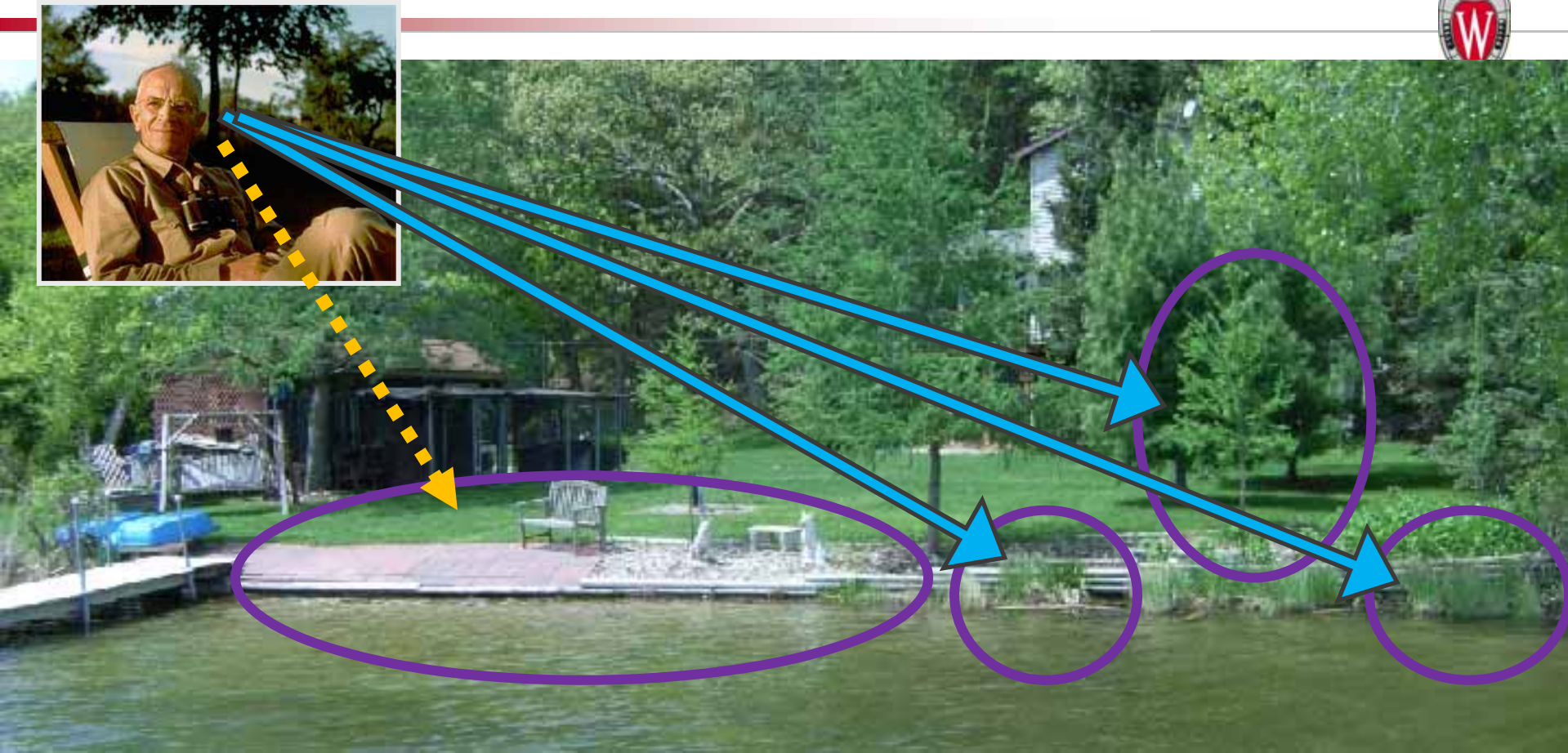
– Kunda, Z. (1990). *The case for motivated reasoning*.
Psychological Bulletin, 108(3), 480-498.

In other words: people see what they want to see.

People motivated to avoid negative conclusions about past behaviors



Motivation and the perception of shoreline impact



Motivation and perception of shoreline impact



Field Study:

- Central Wisconsin
- 71 property owners
(59% response rate)
- Rated photos of shorelines on 4 measures:
natural beauty, water quality, habitat, usability
- **8 photos:** 1 photo of their own shoreline
+ 7 photos of other participants' shorelines

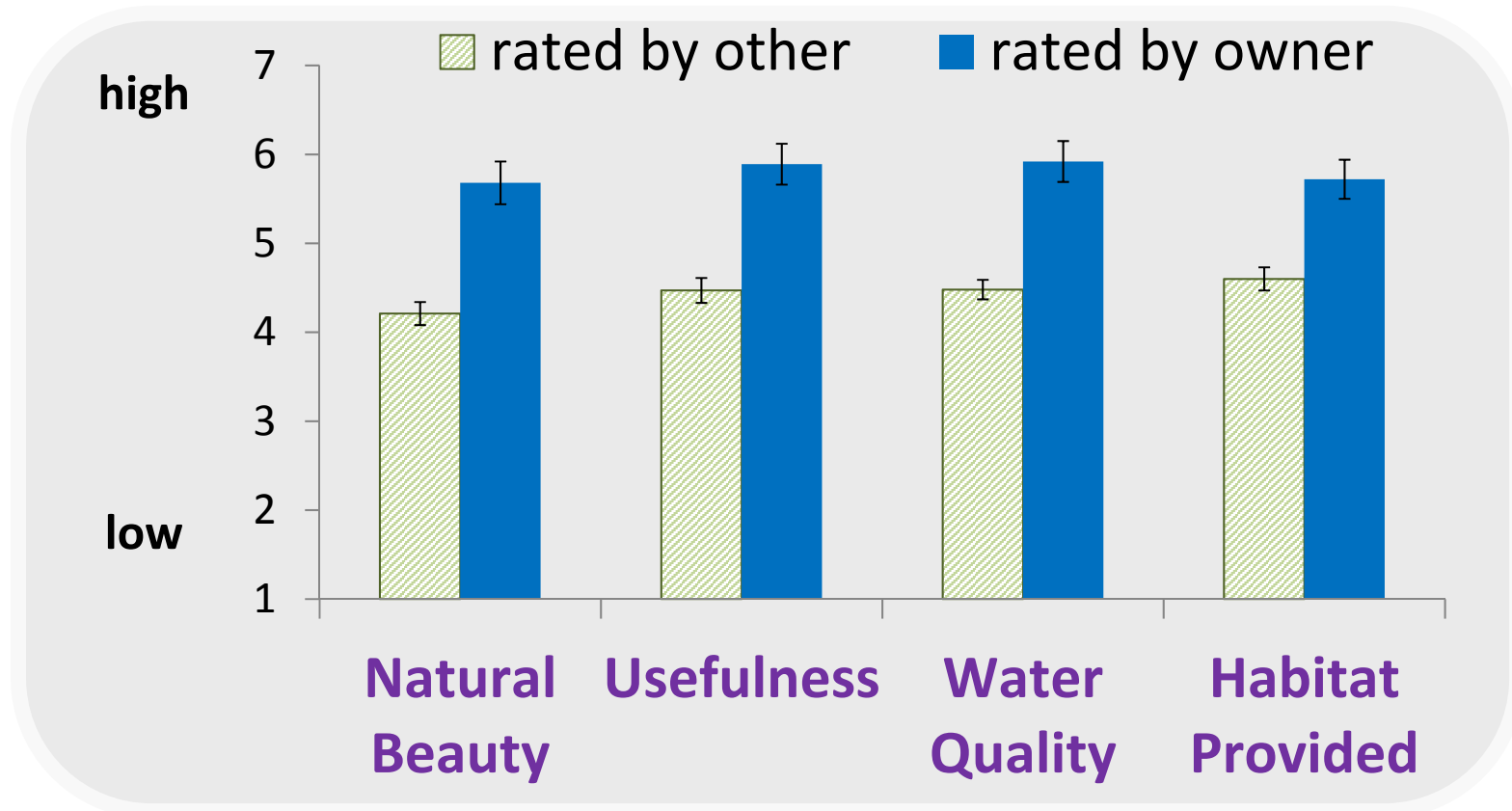


Results:

Motivation and perception of shoreline impact

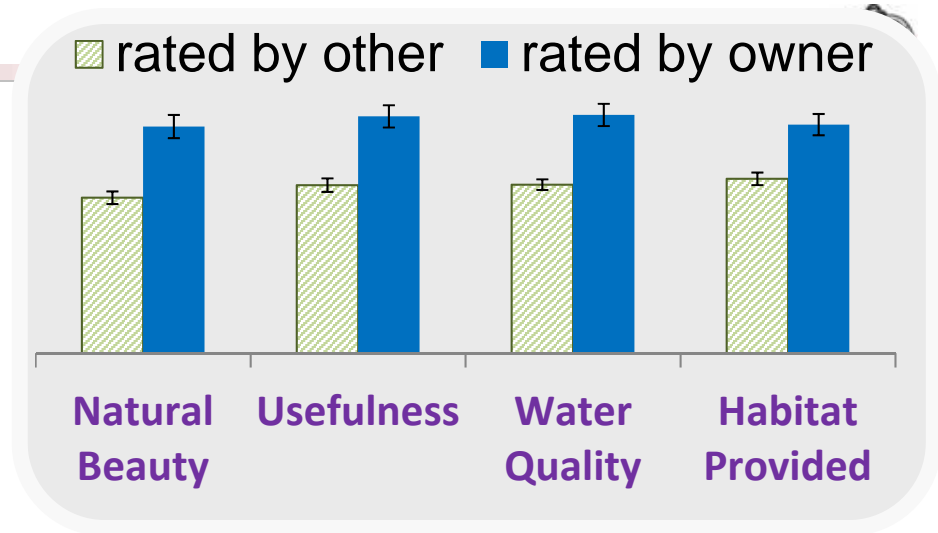


Owners underestimate their own shoreline's impact



error bars show 95% confidence intervals

Implications



- Suggests individuals are motivated to underestimate environmental risk to protect self view
- Owners are unlikely to improve their shoreline if they don't perceive a problem.

Reactance Theory



Why not just give people objective feedback? Reactance in Action

- Shoreline vegetation scores
- From county lakes assessment
- Range 0 – 11; high=good



Outcome Measure

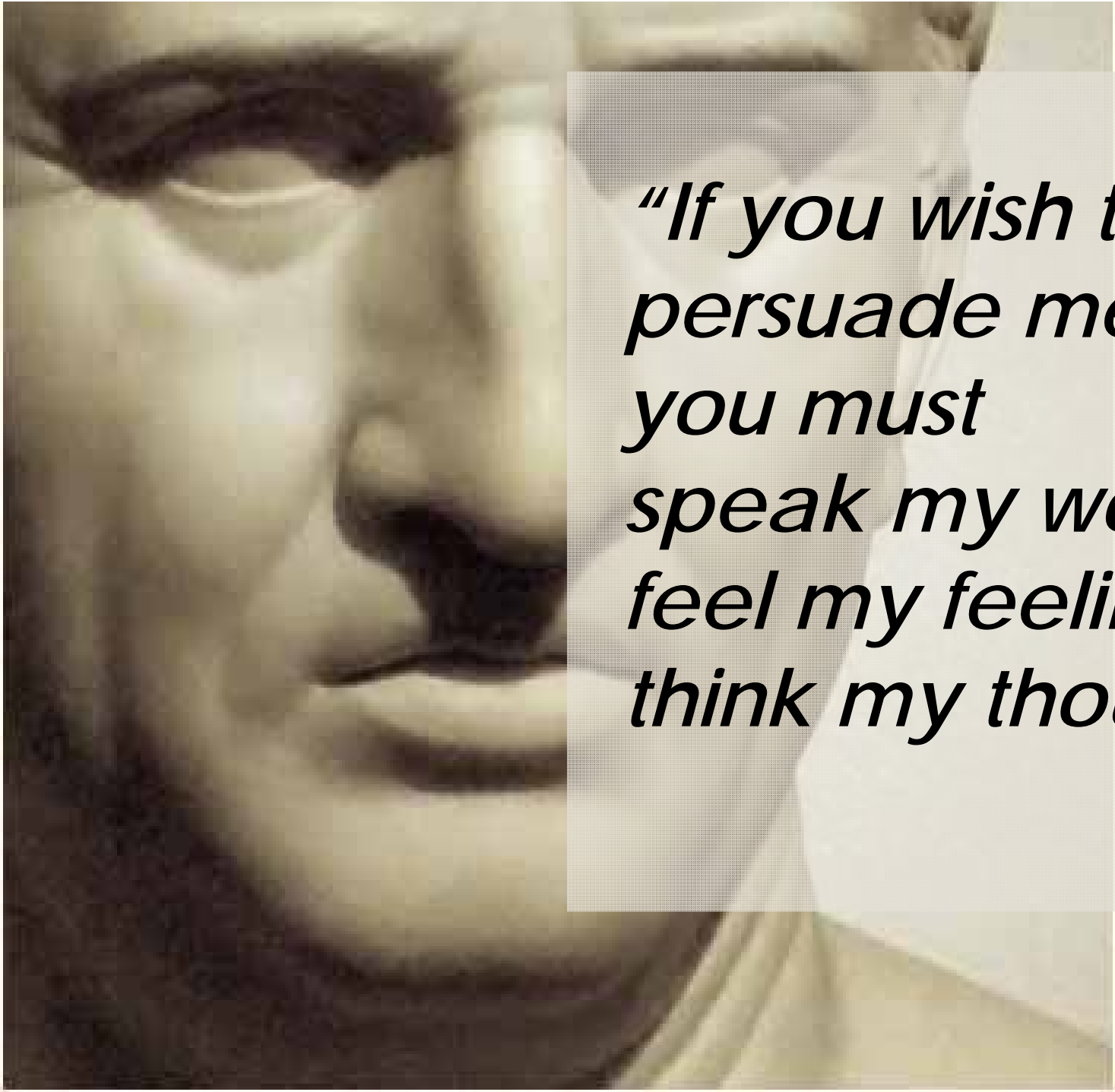
- Actual past behavior



Fear appeals



- Not easy to scare people
- Scaring people does not always produce attitude change
- Fear appeals can fail because they arouse too little/too much fear
- Self efficacy must rise to meet threat
- Common for people to deny or defensively distort communicator's message
- People tend to think bad things are less likely to happen to them than others



“If you wish to persuade me you must speak my words, feel my feelings and think my thoughts.”

Other contexts?



- Eurasian watermilfoil and 2,4-D
- Perceived regulatory overreach?
- VHS – success story or a sham?

Thank You!



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