

Advancing environmental outcomes through Behavior Centered Design

Sam Gray



Rare inspires change so people and nature thrive.



Rare has run nearly **500** behavior change campaigns in more than **60** countries



Rare's behavior change campaigns, on average, increase adoption by **18 percentage points**



Transform the environmental field by equipping environmentalists everywhere with **the science of human behavior**



**Almost every
environmental challenge has
at least one thing in common.**





Behavior



We have a spectrum of effortful and automatic ways of thinking and deciding.



Weighing
options,
calculating costs
and benefits



Reacting
automatically,
quickly

The most common tactics for behavior change are designed for one kind of thinking.

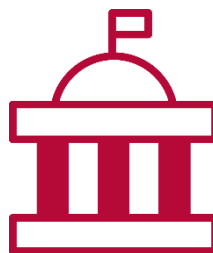
- Material incentives ('pay them')
- Rules and regulations ('stop them')
- Information ('tell them')



These levers are sometimes necessary but often do not work on their own.



- Financial incentives can backfire.
- Payments can crowd-out other motivators.
- Incentives can drain limited resources.
- Fines can be seen as just the 'cost' for behavior.



- Rules often need enforcement.
- Rules do not work if norms are misaligned.



- Correcting an information-deficit rarely leads to lasting behavior change or even a change in beliefs.
- Caring/knowing is not a pre-requisite to change.

The levers of behavior change

Emotions drive us to act.

People take the lead **from others**.

The context in which we make decisions matters... a lot.





Emotional appeals

Using emotional messages in
addition to or instead of
appeals to reason



2009

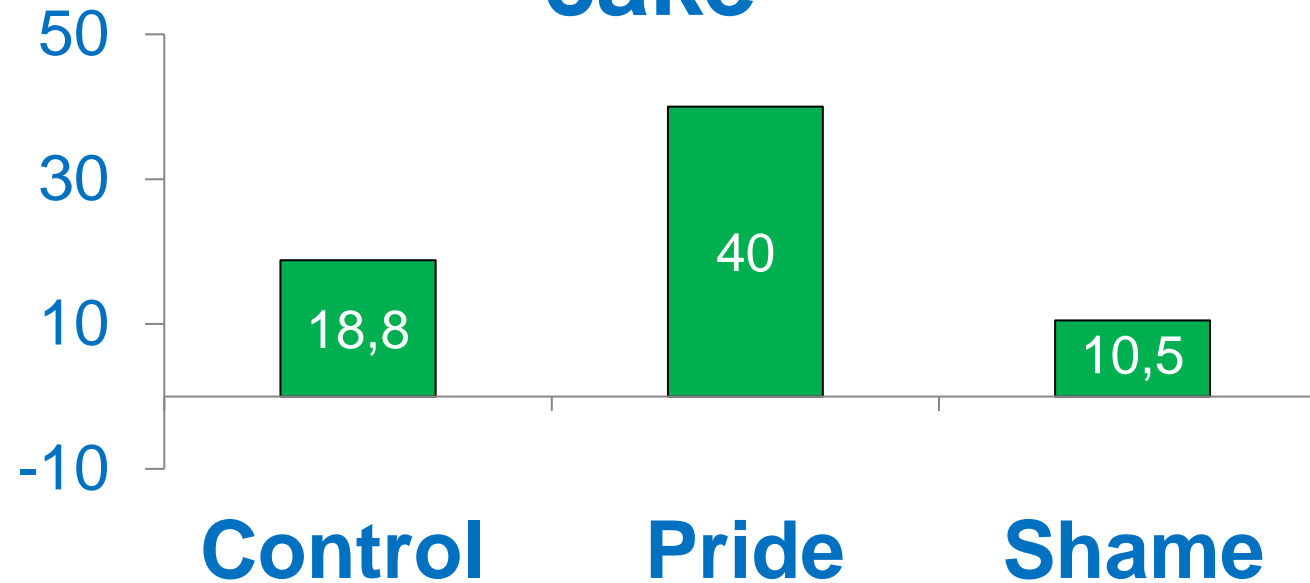
Affective Forecasting and Self-Control: Why Anticipating Pride Wins Over Anticipating Shame in a Self-Regulation Context

Vanessa M. Patrick
University of Houston

HaeEun Helen Chun
Cornell University, hc633@cornell.edu

Deborah J. Macinnis
University of Southern California

% that completely resisted eating the cake



The influence of anticipated pride and guilt on pro-environmental decision making

Claudia R. Schneider^{1,2,3*}, Lisa Zaval^{1,2,3}, Elke U. Weber^{2,3,4,5,6}, Ezra M. Markowitz^{2,7}

“We find evidence that anticipating one’s positive future emotional state from green action... leads to higher pro-environmental behavioral intentions compared to anticipating one’s negative emotional state from inaction. This finding suggests a rethinking in the domain of environmental and climate change messaging, which has traditionally favored inducing negative emotions such as guilt.”

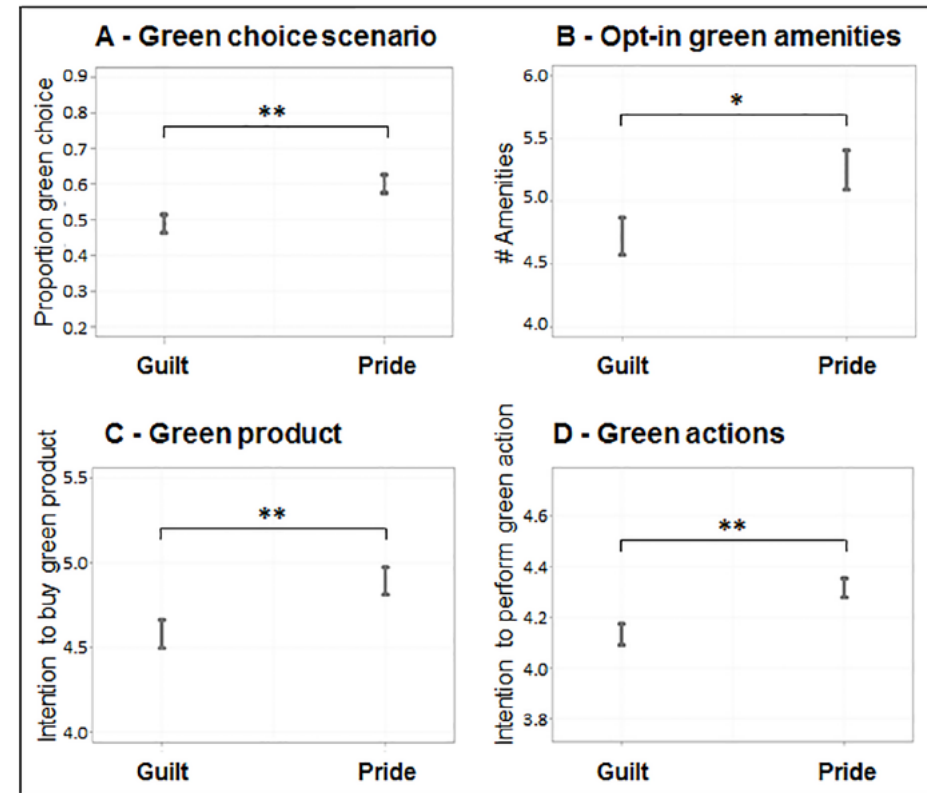
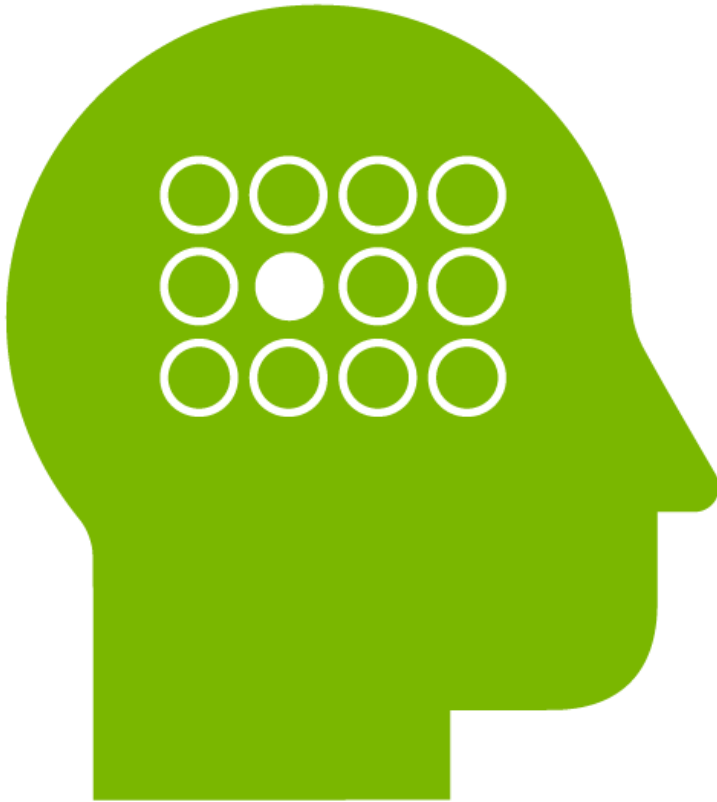


Fig 1. Influence of pride and guilt inductions on pro-environmental behavior per outcome measure.



Social Influences

The behavior, beliefs, and expectations of others

Static norm.

“30% of Americans make an effort to limit their meat consumption.”

Dynamic norm.

“Over the last 5 years, 30% of Americans have started to make an effort to limit their meat consumption.”

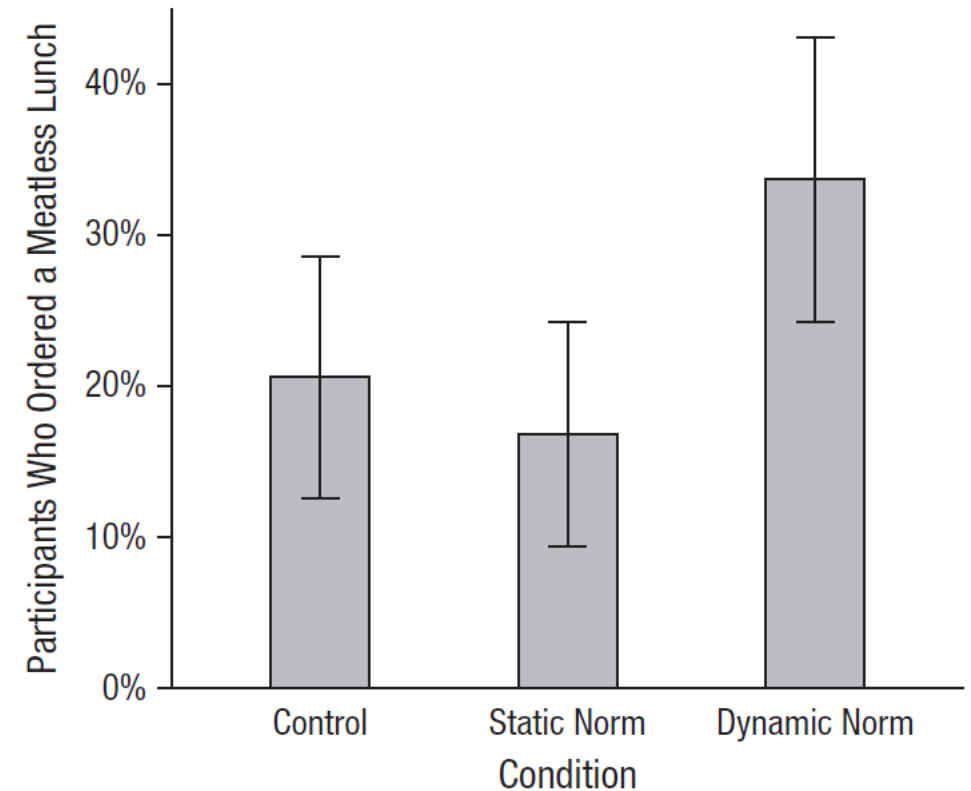


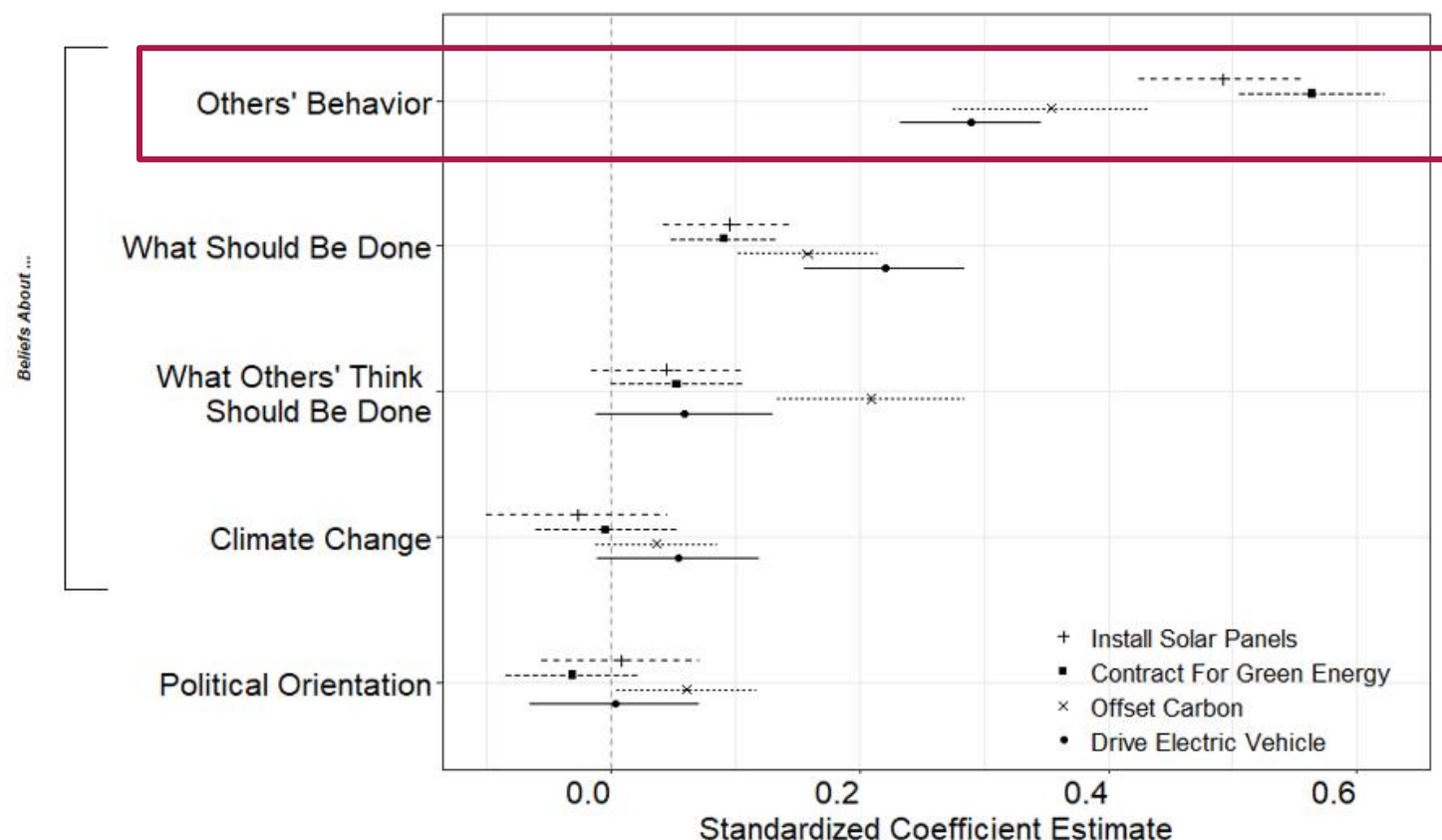
Fig. 3. Results from Experiment 4: the percentage of patrons who ordered a lunch without meat in each condition. Error bars represent 95% confidence intervals.

Dynamic Norms Promote Sustainable Behavior, Even if It Is Counternormative



Gregg Sparkman and Gregory M. Walton
Department of Psychology, Stanford University

The biggest predictor of people's intention to do these things is whether they think other people are doing them.



Helping the Climate Because Others Do: An Exploratory Analysis of the Psychological Predictors of Intention to Perform High Impact Pro-Environmental Behaviors

Erik Thulin^{1*} and Abdurakhim Rakhimov²



Choice architecture

The context in which
information and
choices are presented



50 simple ways to make your life greener

Expert tips on how to be kinder to the planet
- from cooking and cleaning to fashion and finance

Domestic uptake of green energy promoted by opt-out tariffs

Felix Ebeling¹ and Sebastian Lotz^{2,3★}

10X

GREEN ENERGY
ENROLLMENTS

When the
default was
set to green
energy

Empowering interventions to promote sustainable lifestyles: Testing the habit discontinuity hypothesis in a field experiment

Bas Verplanken*, Deborah Roy





At the University of Cambridge, doubling the vegetarian offerings increased the proportion of plant-based sales by up to 80%



Available at:
<https://behavior.rare.org>

EMOTIONAL APPEALS

Using emotional messages in addition to or instead of reason

Leverage emotions

- Tap into core emotions such as fear, happiness, sadness, and anger

Personalize the message

- Put a human face on campaigns and focus on a single story over abstract statistics
- Tailor messages to make them personally relevant, palatable, and appealing to the target audience

INFORMATION

Information about what a behavior is, why it matters, and how to do it

Provide step-by-step instructions

- Offer workshops or trainings on a behavior
- Provide resources that contain how-to knowledge for a behavior

Build awareness and understanding

- Provide informational forums, meetings, or materials that fill knowledge gaps about a behavior and its importance
- Give feedback on performing a behavior

RULES & REGULATIONS

Rules that constrict or promote a behavior

Mandate behavior

- Enact mandates that require certain behaviors

Prohibit behavior

- Enact prohibitions that limit or forbid certain behaviors

CHOICE ARCHITECTURE

The context in which information is presented

Direct attention

- Make desired behavior the default option
- Make desired behavior salient to direct attention to it (or away from something else)

Simplify messages and decisions

- Streamline complex processes (without changing major costs or benefits)
- Provide decision-aids for behaviors with many steps or options

Use timely moments and prompts

- Target moments of transition and habit formation
- Provide prompts and reminders about behavior

Facilitate planning and goal setting

- Support implementation intentions for doing a behavior
- Use commitment devices where present decisions restrict future ones

MATERIAL INCENTIVES

Increasing or decreasing real or perceived costs, time, or effort for doing a behavior

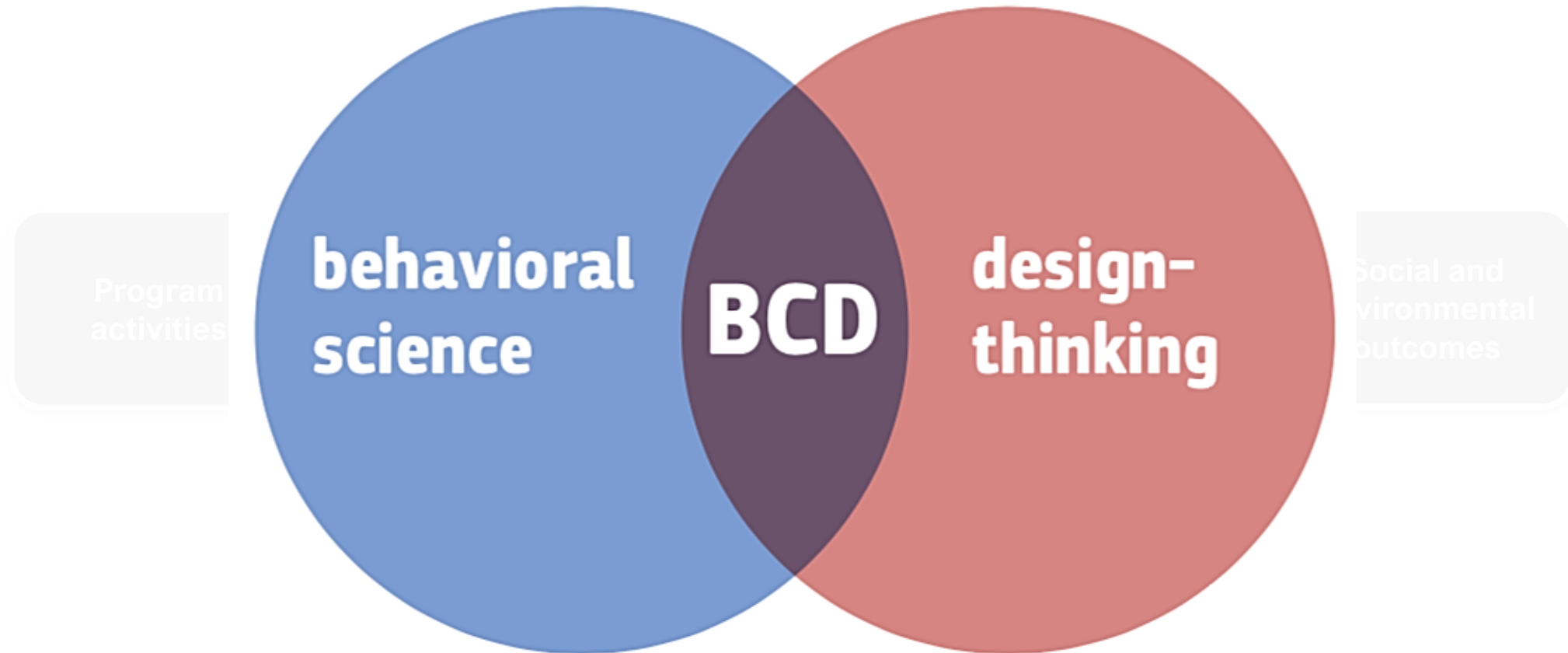
Make it easy or the alternative hard

- Make the desired behavior more convenient and accessible to do (e.g., remove barriers, provide substitutes)
- Introduce friction points to make the undesired behavior more difficult

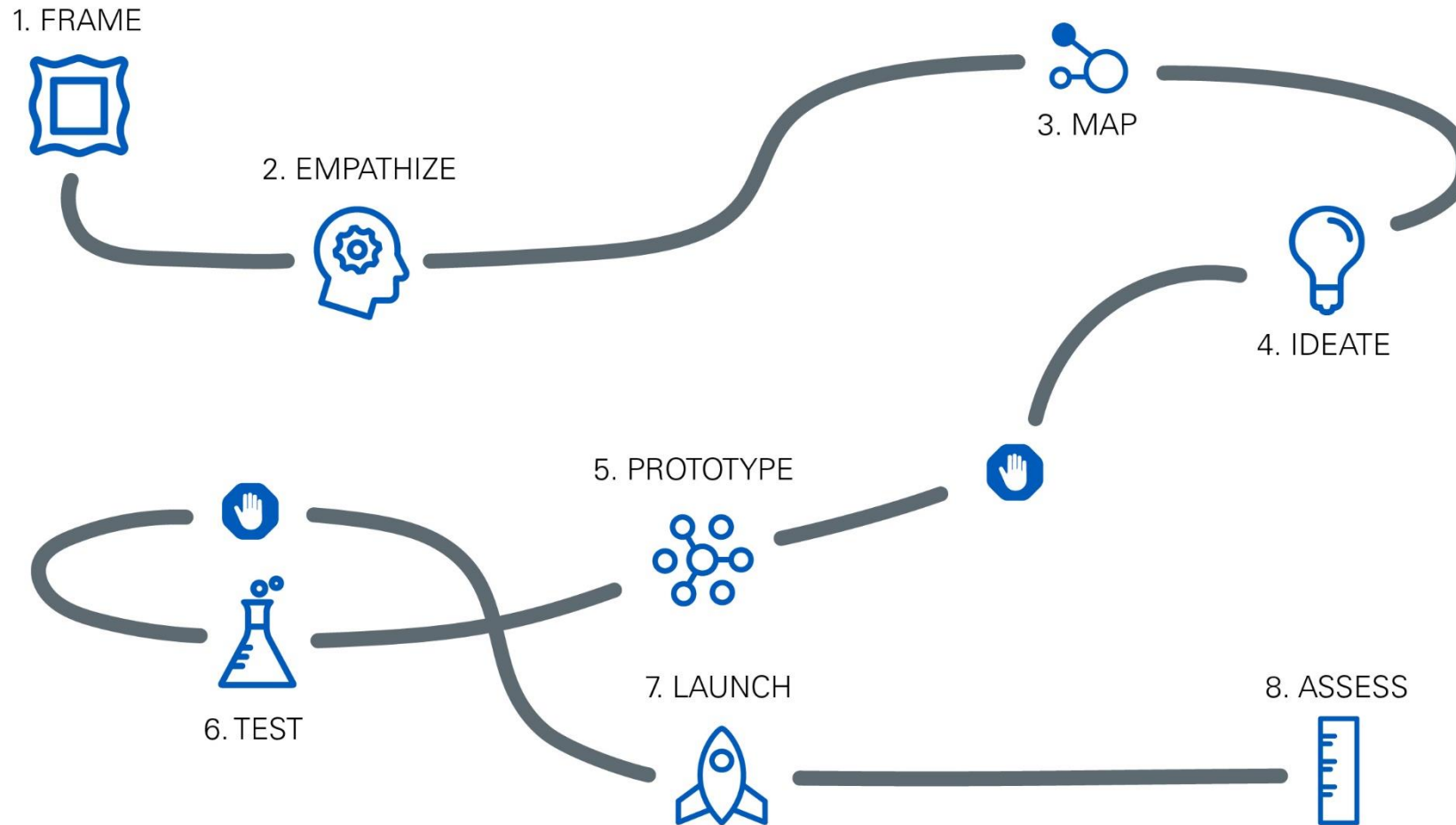
Give rewards or penalties

- Reward to incentivize or reinforce good behavior
- Penalize or fine for cases of undesired behavior

Behavior-Centered Design



Behavior-centered design



Behavior Change for the Environment Starts Here



behavior.rare.org



CENTER FOR
BEHAVIOR & THE
ENVIRONMENT