

Expanding the Territory of Behavioral Design

Systems Design and Foresight

Ruth Schmidt — Institute of Design, IIT
April 27, 2021

What's next for nudging and choice architecture?

“It might be more productive to shift from creating *nudges* to reducing *sludge*; that is, eliminating the barriers that make otherwise good decisions difficult. **Or even more ambitiously, identifying projects where behavioral scientists can be involved at the very start, helping to create the blueprints of a program before ground has ever been broken.**”

Richard Thaler

Thaler R. (2020). What's next for nudging and choice architecture?. *Organizational behavior and human decision processes*. 10.1016/j.obhdp.2020.04.003.

Lots to celebrate...

Hundreds of international nudge units advising governments

Tackling entrenched societal issues such as poverty and public health

Incorporation into public policy

Demonstrable successes in cost-saving and user adoption

Integrated in companies like Google, Morningstar, Microsoft, Lemonade

Increasing adoption of Chief Behavioral Officer roles

Nobel Prize winning thought leaders as public intellectuals

Recent launches of multiple professional societies

Boom in graduate programs and enrollment

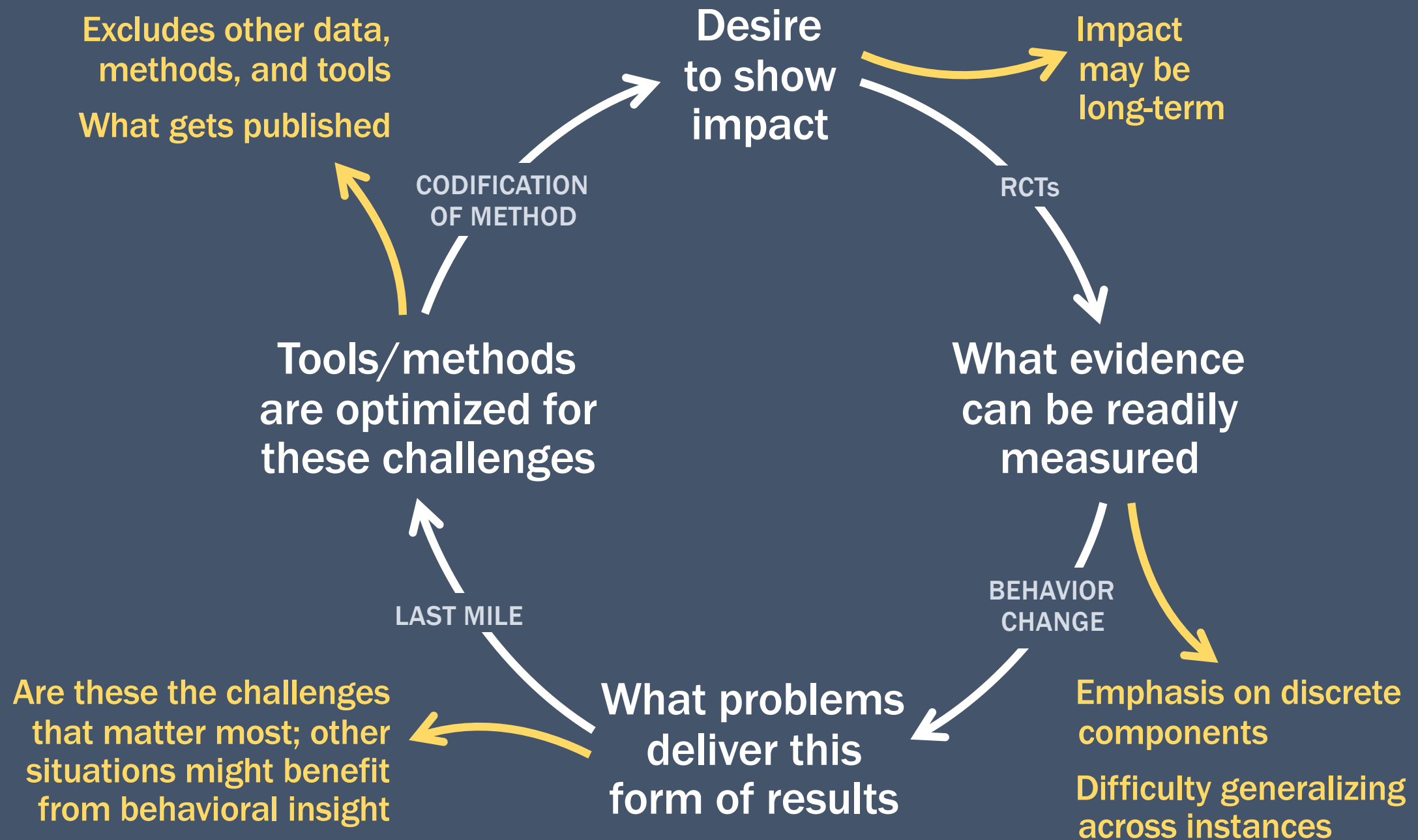
Conferences oriented toward practical application in addition to academia

Proliferation of behavioral science/design training and courses

Dedicated specialized commercial offerings and businesses

...but is
behavioral
design also a
victim of its
own success?

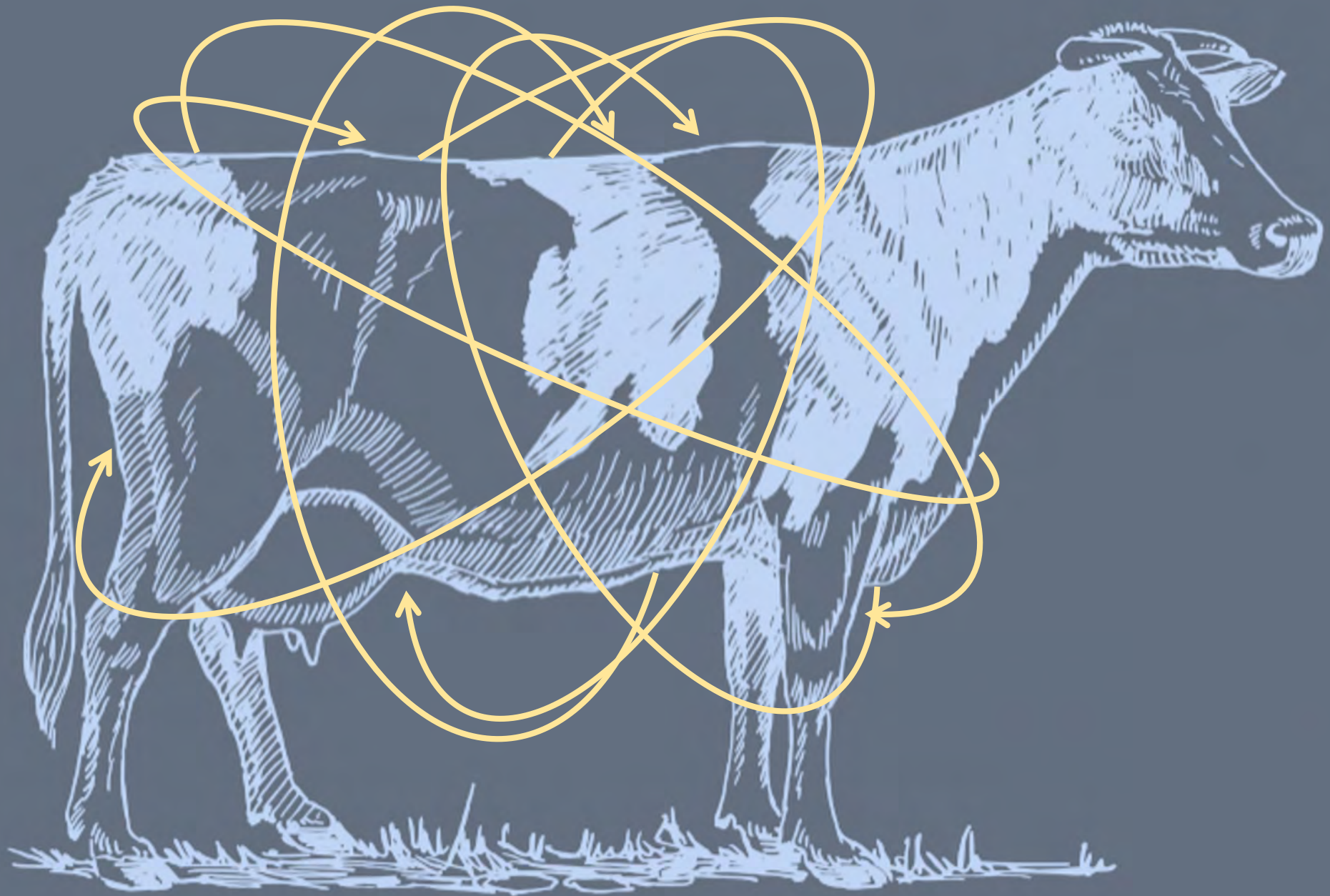
Behavioral design's proven track record tackling last mile challenges has contributed to a steady diet of more of the same; over time, this has led to a kind of tautological standoff, where **the nature of problems that the field is tasked with solving are those that current methodology happens to solve well, but which has also inadvertently contributed to typecasting it as a discipline fit to address only certain types of problems.**



Design **In** Systems

For

Of



What do
we really
mean by
“context”?

“Context is king, we preach. There is no one-size-fits-all, we argue. Human beings are complicated, we pronounce. **And yet, we set up expectations on projects around large effects across populations. We focus on a few interventions and test them in isolation.**”

Neela A. Saldanha

Behavioral Design 2021 State of the Field

<https://medium.com/behavior-design-hub/behavioral-design-2021-c46c5b8221b3>

Mask-wearing prevents viral spread



**Evolving
understanding
of disease
transmission**

**Inconsistent messaging
about N-95 masks**

**Identity/
politization
of masks;
reactance**

**Requires wearing
mask correctly over
nose and mouth for
full benefits**

**Loss of non-
verbal cues**

**Visceral
discomfort;
“maskne”**

**Legacy
perceptions of
mask-wearing**

**Wear a
mask**

**Individual
store
policies**



Black and brown
populations more
vulnerable to
Covid-19 effects



Black Men and the Dilemma of Wearing Masks During the COVID-19 Pandemic

Aug 18, 2020 | *Blog, Minority and Community Health*

On April 3, 2020, the Centers for Disease Control (CDC) made a statement encouraging all Americans to wear cloth face coverings upon leaving their homes. In response, Black men have expressed their concern about such a recommendation. Their concern is based in that wearing masks could expose them to racial profiling and harassment from law enforcement officers. An example of such concern can be seen in the [Twitter posting of Aaron Thomas](#), a Black man living in Ohio: "I don't feel safe wearing a handkerchief or something else that isn't CLEARLY a protective mask covering my face to the store because I am a Black man living in this world. I want to stay alive but I also want to stay alive." Such a tweet has been reposted more than 18,000 times since its original posting. Based on his statement, Thomas has decided to not wear a mask so that he can "stay alive."

The New York Times

For Black Men, Fear That Masks Will Invite Racial Profiling

African-American men worry that following the C.D.C. recommendation to cover their faces in public could expose them to harassment from the police.



As the coronavirus spreads, black men face two concerns: the virus and those who see their covered faces as threatening. *Brittainy Newman/The New York Times*

By **Derrick Bryson Taylor**

Published April 14, 2020 Updated May 26, 2020

Is the WHO Definition of Health Aging Well? Frameworks for “Health” After Three Score and Ten

On April 7, 2019, the World Health Organization (WHO) turned 71—surpassing the proverbial life span of “three score and ten.” Its definition of health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” has been a guiding framework for the Centers for Disease Control and Prevention (CDC), Pan American Health Organization, and other WHO partners.^{1(p43)} This circa-1948 definition reflected postwar optimism for the control of communicable diseases and the promise of the world’s children. Since then, communicable diseases such as smallpox, polio, diphtheria, and tetanus have been brought under control, infant and

childhood mortality have fallen, and life expectancies worldwide have dramatically risen.

Longer lives foreground a new health concern: living well with multiple chronic conditions. Chronic diseases are prevalent, nearly ubiquitous, in older adults. More than two thirds of Americans aged 65 years and older are managing two or more diseases; one in seven is managing six or more diseases.² Globally, noncommunicable diseases now account for 73% of deaths and a wide spectrum of disabilities.³ The WHO definition of “complete” health thereby sets either unrealistic expectations for older adults or categorically excludes them from frameworks of health. Do we need a new definition

of health to incorporate aging populations into its basic tenets? What measures will advance attention to the health needs of this growing, at times vulnerable, and largely overlooked population?

Context matters. Important changes in population aging and disease management in the years urge new consideration of the particular health needs

elderly as an essential component of health in an aging world.

WHO FRAMEWORK FOR HEALTH, 1946–1948

In the summer of 1946 in New York City, the United Nations (UN) convened the International Health Conference, which led to the creation of the WHO in 1948.⁴ Sixty-one nations, including the United States and members of the UN, signed

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This editorial was accepted May doi: 10.2105/AJPH.2019.305

Cara Kiernan Fallon, Jason Karlawish, “Is the WHO Definition of Health Aging Well? Frameworks for “Health” After Three Score and Ten”, *American Journal of Public Health* 109, no. 8 (August 1, 2019): pp. 1104-1106. <https://doi.org/10.2105/AJPH.2019.305177>



How Race, Class, and Geography Keep Some People From Great Workouts

In
Design **For** Systems
Of

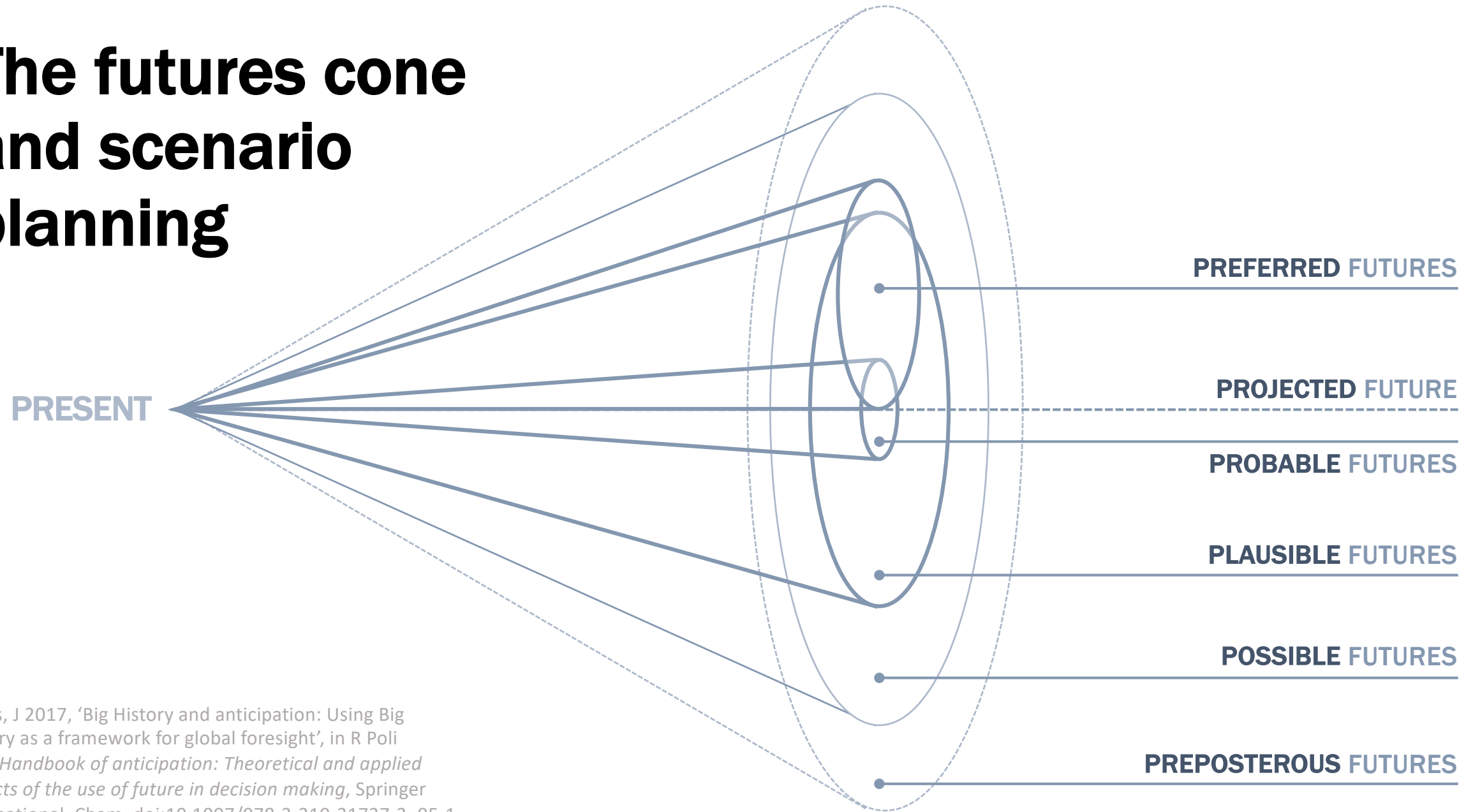
Designing for systems can result in “brittle” solutions

Value — assuming that definitions of success are universal or shared across system stakeholders

Persistence — insufficiently accounting for changes in system conditions over time

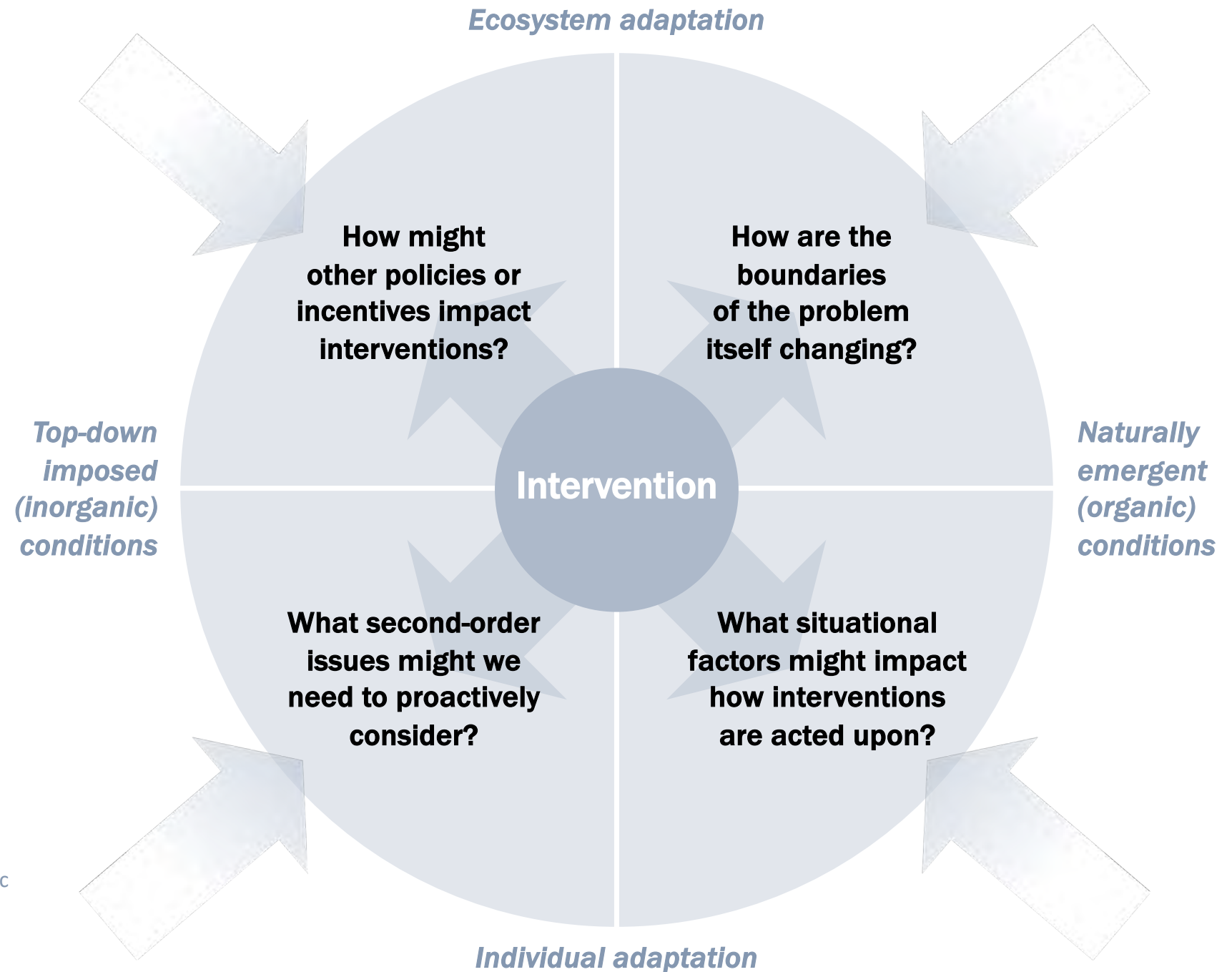
Stability — failing to recognize that interventions often function within inherently unstable systems

The futures cone and scenario planning



Voros, J 2017, 'Big History and anticipation: Using Big History as a framework for global foresight', in R Poli (ed.) *Handbook of anticipation: Theoretical and applied aspects of the use of future in decision making*, Springer International, Cham. doi:[10.1007/978-3-319-31737-3_95-1](https://doi.org/10.1007/978-3-319-31737-3_95-1),

Behavioral planning



Schmidt, R. and K. Stenger (2021),
'Behavioral planning: Improving behavioral
design with "roughly right" foresight', *Strategic
Design Research Journal*, 14(1): 138–148.
<https://doi.org/10.4013/sdrj.2021.141.12>.

Data
are not
objective
(or always
quantitative).

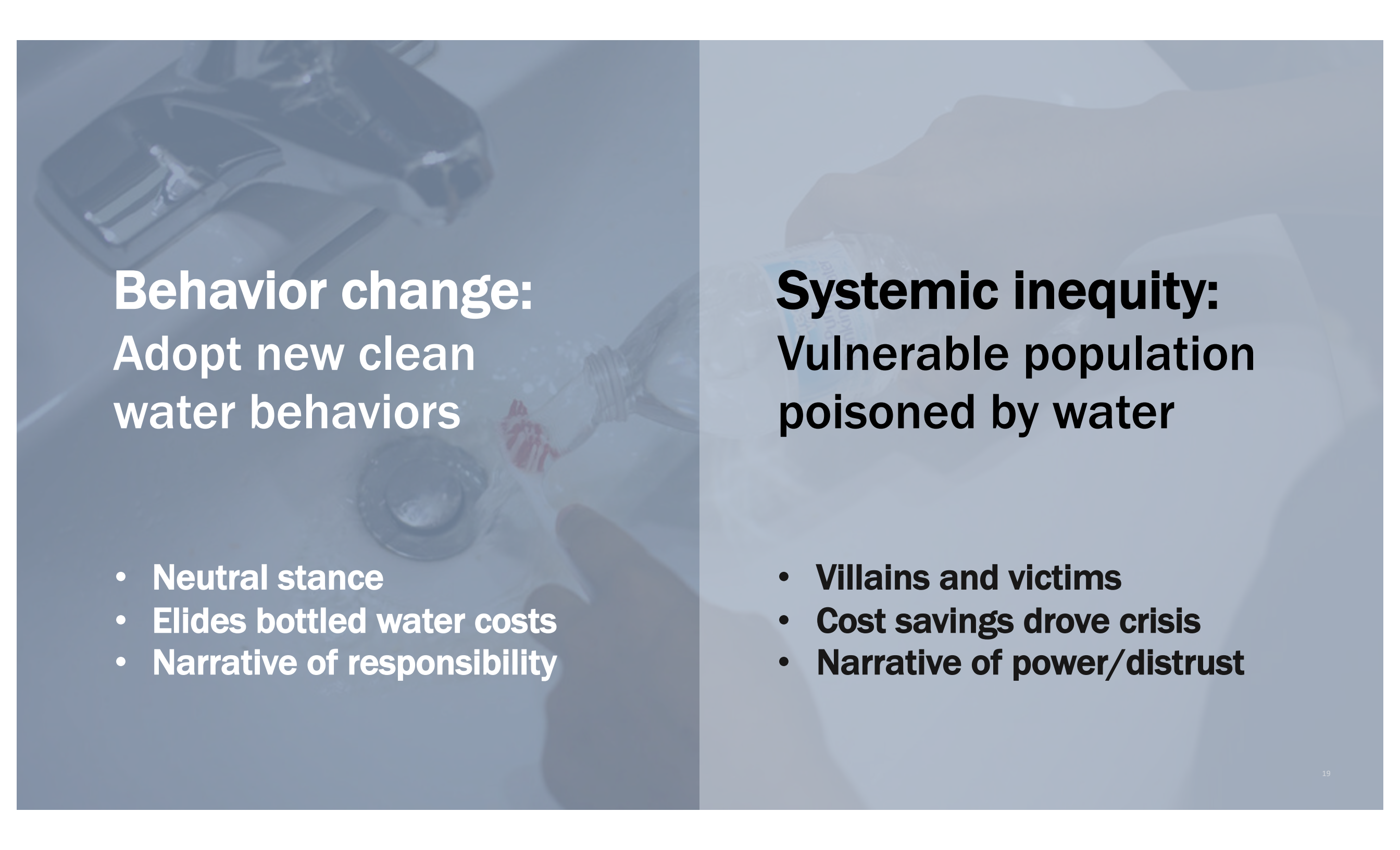
“But understanding and making sense of the data, with an actual human perspective, is the first step in designing behavioural interventions. This involves **a multi-disciplinary approach, and critical judgement, to defining THE problem within a set of many problems.**”

Faisal Naru

Behavioral Design 2021 State of the Field

<https://medium.com/behavior-design-hub/behavioral-design-2021-c46c5b8221b3>



A background image showing a hand pouring water from a plastic bottle into a glass. The image is semi-transparent and serves as a backdrop for the text.

Behavior change: Adopt new clean water behaviors

- **Neutral stance**
- **Elides bottled water costs**
- **Narrative of responsibility**

Systemic inequity: Vulnerable population poisoned by water

- **Villains and victims**
- **Cost savings drove crisis**
- **Narrative of power/distrust**

Data Genocide of American Indians and Alaska Natives in COVID-19 Data

A report card grading U.S. States' quality of COVID-19 racial data and their effectiveness in collecting and reporting data on American Indian and Alaska Native populations.

D+

THE UNITED STATES
OVERALL GRADE

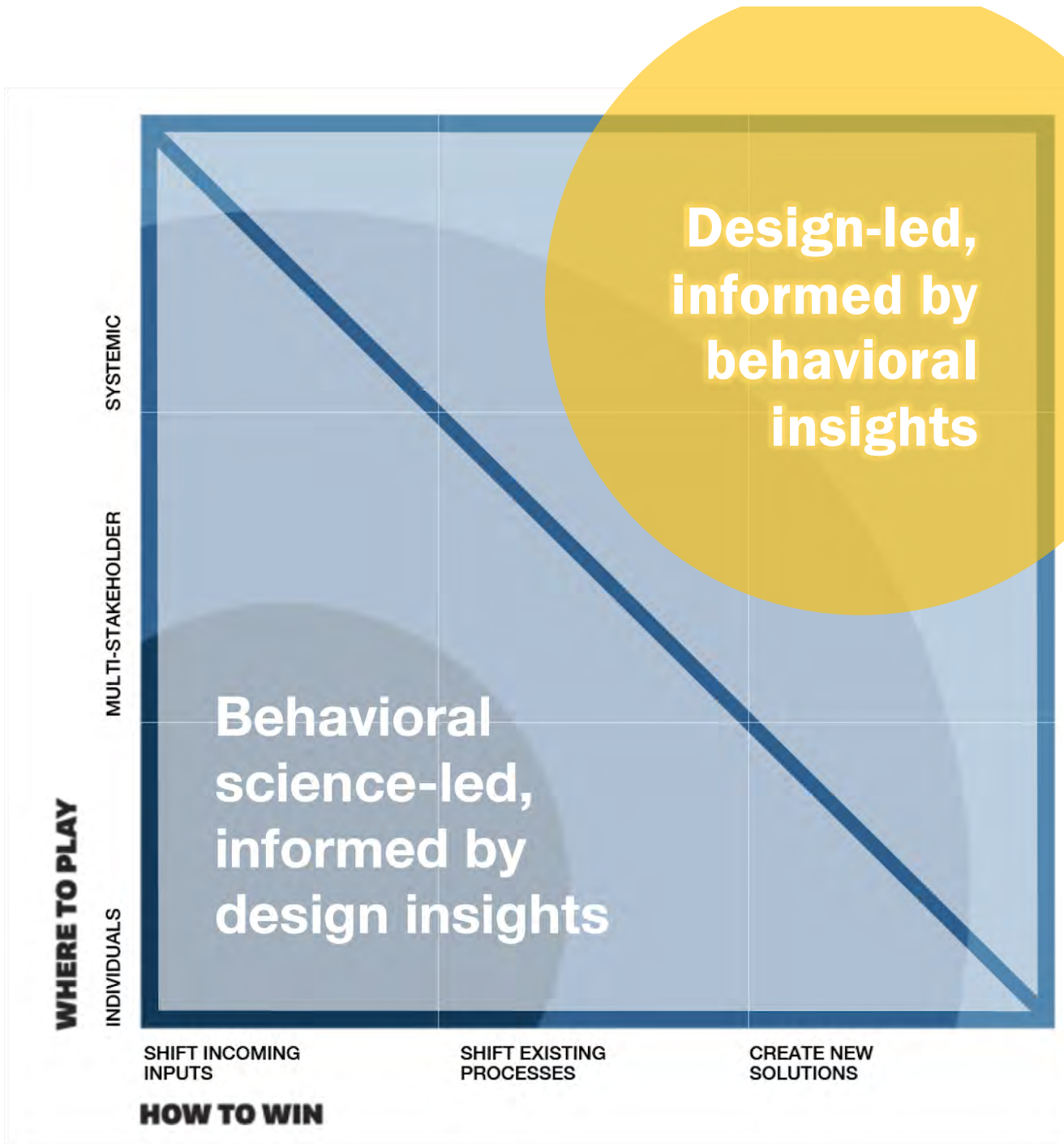


Urban Indian Health Institute (2021). Data Genocide of American Indians and Alaska Natives in COVID-19 Data. Seattle, WA: Urban Indian Health Institute.

In

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Design **Of** Systems

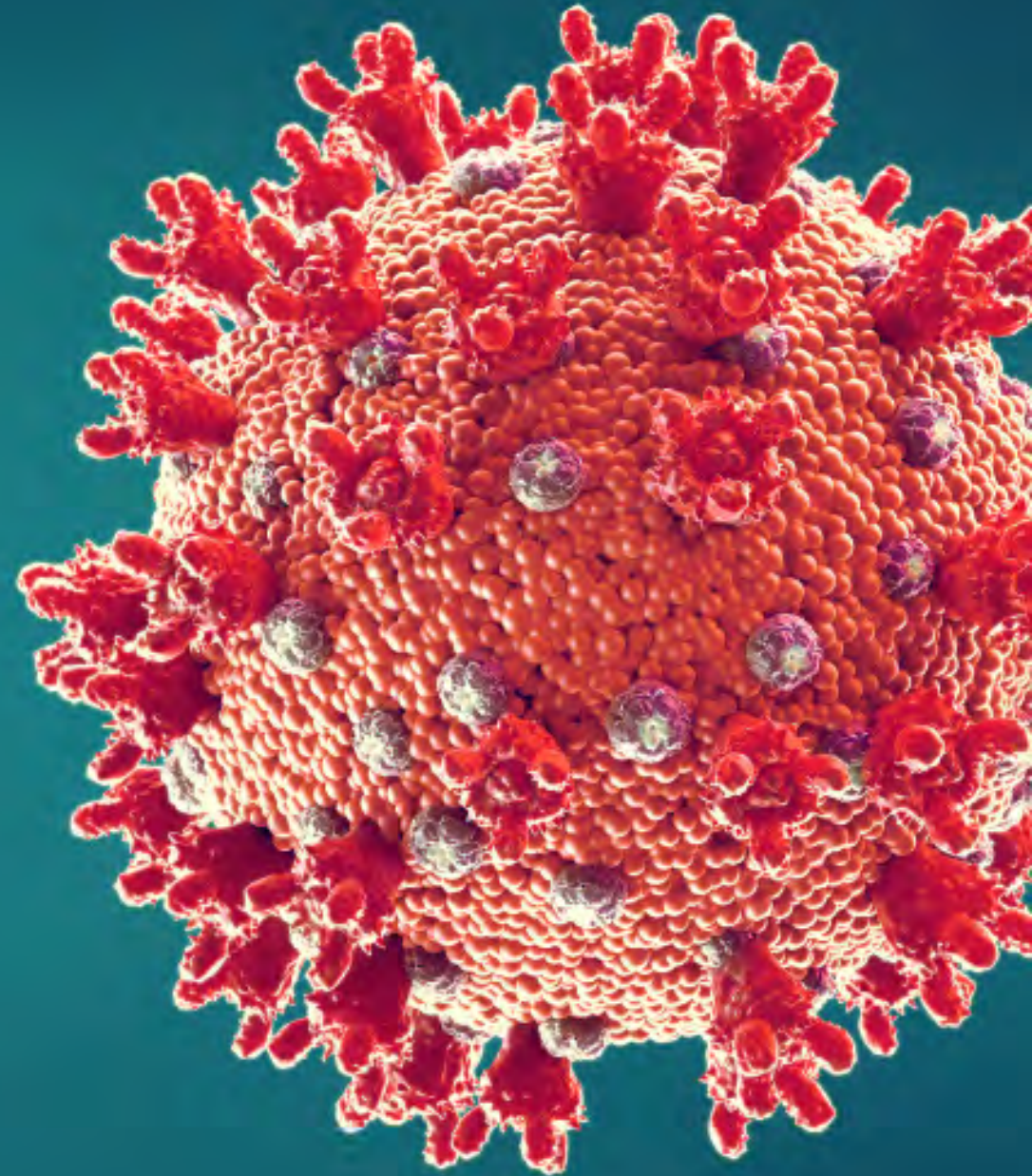


Solving problems or identifying opportunities

From S. Reid & R. Schmidt (2018) A New Model for Behavioral Design, behavioralscientist.org

The accidental field experiment of Covid-19 displayed both the potential and limitations of behavioral design when solving for real-world complexity.

Creating effective, sticky solutions needs both strong analysis—behavioral science’s center of gravity—and synthesis—design’s superpower—to envision not just *what works* based on what we know from the past but new opportunities about *what could be*.



**“Choice
infrastructure”
may be as
important
as choice
architecture**

“...consumer choice models which work rather well under normal circumstances completely fall apart when we have sudden demand shocks (recall the sanitizer, facial masks, and even toilet paper shortages)... [and] that behavioural design which works perfectly well in developed countries (e.g., 20-second handwashing advice) is useless in the developing world (e.g., where water is in short supply).”

Ganna Progrebna

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Behavioral science

Behavioral systems design

Context

Conditions

Users

Agents

Behavior

Interactions

Achieving
trans-
disciplinarity:
who is invited
to the table?

“...self-recognized communities promoting methodological rigor and scientific standards to distinguish true behavioural science from the rest. But I see **there is a risk to amplify a self-centred view and to freeze look-alike practices. We should take care of not creating a small world looking at his self-reflection.**”

Richard Bordenave

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Novelty

**Silver
bullet**

**Flavor
of the
month**

**Increased
clarity of
value**

**Initial
integration**

**Capability
development**

Democratization

**Who gets included?
What does “good”
look like?
When is genuine
expertise essential?**





article


Rethinking the role of experts and expertise in behavioural public policy

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University of Canberra, Australia and University of Southampton, UK

Nudge and behavioural public policy tools have won support from governments across the world for improving the effectiveness of public interventions. Yet nudge still attracts strong criticisms for promoting paternalism and manipulation as legitimate government actions. To move beyond this divide, this paper offers a comprehensive reorientation, which is necessary because the intellectual foundations of the policy are at fault. A more secure foundation can be achieved by expanding the cognitive scope of behavioural policy, and ensuring that it does not rely on the narrow assumption that intuitive reasoning is flawed and that expert advice is always preferable. This shift in the cognitive range of nudge moves behavioural policy toward citizen reflection and initiative, pointing away from expert-led interventions. It amounts to more than incremental advances in nudge practice. As a result, nudge can escape the charge of not respecting individual autonomy. What we call 'nudge plus' would link more closely with other types of governmental intervention that embrace citizen involvement.

Self-nudging and the citizen choice architect

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Abstract: This article argues that nudges can often be turned into self-nudges: empowering interventions that enable people to design and structure their own decision environments – that is, to act as citizen choice architects. Self-nudging applies insights from behavioral science in a way that is practicable and cost-effective, but that sidesteps concerns about paternalism or manipulation. It has the potential to expand the scope of application of behavioral insights from the public to the personal sphere (e.g., homes, offices, families). It is a tool for reducing failures of self-control and enhancing personal autonomy; specifically, self-nudging can mean designing one's proximate choice architecture to alleviate the effects of self-control problems, engaging in education to understand the nature and causes of self-control problems and employing simple educational nudges to improve goal attainment in various domains. It can even mean self-paternalistic interventions such as winnowing down one's choice set by, for instance, removing options. Policy-makers could promote self-nudging by sharing knowledge about nudges and how they work. The ultimate goal of the self-nudging approach is to enable citizen choice architects' efficient self-governance, where reasonable, and the self-determined arbitration of conflicts between their mutually exclusive goals and preferences.

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