

# It's Always Both: Changing Individuals Requires Changing Systems and Changing Systems Requires Changing Individuals

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“The i-frame and the s-frame: How focusing on individual-level solutions has led behavioral public policy astray,” by Nick Chater and George Loewenstein

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## Abstract:

S-frames and i-frames do not represent two opposed types of intervention. Rather they are interpretive lenses for focusing on specific aspects of interventions, all of which include individual and structural dimensions. There is no sense to be made of prioritizing either system change or individual change, because each requires the other.

## Main Text:

We suspect others will stress that what Chater and Loewenstein (C&L) call s- and i-frame interventions are more complementary than they acknowledge. For example, vaccine mandates—a putatively s-frame intervention—may be more effective when combined with i-frame, text-based nudges (Patel et al. 2022). We wholeheartedly support research on complementarity between light-touch nudges and systemic reforms (Sparkman et al 2021, Milkman et al 2021, Kelly et al 2010, Brownstein et al 2021, Madva et al 2023). While C&L gesture toward valuable forms of complementarity (4, 9, 34; §§3.1-3.3), they systematically overlook a theoretically richer and practically more important set of interrelations between individuals and systems.

First, s- and i-frames are not two opposed types of intervention. Rather, they are literally *frames*, interpretive lenses for focusing attention on specific aspects of interventions. C&L treat nudges as paradigmatic i-frame interventions, but they could just as easily see them through the s-frame. Nudges change the structures within which individuals make choices—their choice *architecture*—rather than persuading individuals directly. Conversely, sugar taxes (an ostensible s-frame intervention; Table 1) can be considered through an individualist lens; such taxes “responsibilize” (Shamir 2008) obesity by shifting the burden of food choice to individuals—usually the most price-sensitive individuals with the fewest affordable, healthy options.

Thus C&L’s taxonomy, despite its intuitive appeal, is ill-conceived. The “i-frame” collapses light-touch interventions like calorie labels with deep and thoroughgoing changes to beliefs, values, and habits. The “s-frame” collapses policy distinctions between carrots, sticks, taxes, bans, subsidies, and handouts—a motley crew that includes plastic-bag bans, health-food subsidies, changes to building codes, and nationwide overhauls to wealth redistribution and universal healthcare. This dichotomy seems gerrymandered to portray i-frame interventions as merely subsidiary, almost ornamental aids to “far more important” system change (19). “The *real* problem,” C&L write, “lies not in human fallibility, but in institutions, laws and regulations that render such fallibility irrelevant”

(26, emphasis added). Given this, “behavioral scientists should prioritize applying behavioral insights to s-frame reform” (9).

Depicting i- and s-frames as opposed interventions leads to two foundational problems. The first is incoherence, as if one frame only regards individual behavior (and not the systems guiding that behavior) while the other only regards systems (rather than the individuals guided by those systems). Both taxes and nudges are changes to structures, themselves enacted by individuals, and designed to change individual behavior. Like all interventions, both involve individual and structural components. Acknowledging this doesn’t forestall comparisons between interventions. It forces more productive comparisons regarding which interventions to compare, and how. One researcher might compare a carbon tax to a renewable-energy subsidy. Another might compare nudges to use less electricity to nudges to join local climate advocacy groups. The first compares two financially impactful policies, the second two nudges. Both comparisons can incorporate i-frame and s-frame questions. An i-frame question: will individuals understand the tax better than the subsidy? An s-frame question: which nudge will have stronger system-altering effects? We therefore acknowledge the practical utility of distinguishing individual from structural factors. Both are relevant to assessing interventions. A truly complementary approach will try to determine which bundles of structurally-enabled, individually-enacted, system-changing, choice-shaping packages are most effective and just, given their aims. It will not, however, contrast carbon taxes—seen purely as a policy change—to nudges discouraging electricity consumption—seen purely as attempts to change individual behavior.

The second foundational problem is that calls to prioritize system change over individual change are self-undermining. C&L nowhere acknowledge that changing laws, institutions, and social systems requires a critical mass of individuals—citizens, activists, politicians—to understand and desire system change. C&L’s oppositional, either/or treatment thus obscures how nudges, education, and persuasion campaigns can be effective tools for boosting citizens’ willingness to become politically active and support structural change. Elsewhere we’ve called for cultivating “structure-facing virtue:” the *individual-level* disposition to know about, care about, and take action to *change systems* (Madva 2019, Madva et al 2023).

Consider, by contrast, C&L’s passing shot at growth-mindset research encouraging students to think differently about individual-level traits like intelligence (22). C&L neglect to mention that students can adopt growth mindsets toward systems. Encouraging the belief that systems can change motivates individuals to change them (Stewart et al. 2010; Johnson and Fujita 2012). In fact, C&L implicitly acknowledge the importance of shaping how individuals think about systems when they recount corporations’ devastating, wide-ranging, decades-long campaigns *to shape public thinking* to maintain the status quo. Corporations have poured staggering resources into coaxing people into embracing ideologies of personal responsibility to keep existing systems in place. Should we let corporations continue to brainwash us unfettered, or should we rigorously explore tactics for individuals to resist these ideologies?

Properly appreciating how s- and i-frames guide attention can facilitate a more comprehensive grasp of the factors contributing to social stability and change. We’re sympathetic to C&L’s speculation that undue academic attention to certain nudges has played some (unquantifiable) role in impeding various policy reforms. Yet C&L ignore a similarly plausible hypothesis running in the opposite causal direction: *failed* efforts to change systems may drive researchers to seek more practicable options. Gun control (§2.5.6.) represents an agonizingly obvious example. Overwhelming majorities of Chicago’s citizens and scientists prefer and have repeatedly sought impactful gun regulations. Their efforts have fallen short not because they discount s-frames but because of permissive gun laws in surrounding states, Supreme Court decisions, and other factors beyond Chicago’s control. Facing these obstacles to system change, what would C&L have Chicagoans do?

Keep passing new laws for the Supreme Court to overrule? Invade Indiana and seize its guns? All things considered, Chicagoans have powerful enduring reasons to squeeze as much juice out of individual change as they can.

Of course, neither Chicagoans nor anyone else should quit pursuing policy change. Rather, debates about prioritizing changing people or changing policy should give way to investigations of how individuals, who are themselves shaped by social systems, can most effectively work together to understand, attend to, criticize, and change those systems when justice demands it.

## References

Brownstein, M., Kelly, D., & Madva, A. (2022). Individualism, Structuralism, and Climate Change. *Environmental Communication*, 16(2), 269–288. <https://doi.org/10.1080/17524032.2021.1982745>

Johnson, I. R., & Fujita, K. (2012). Change we can believe in: Using perceptions of changeability to promote system-change motives over system-justification motives in information search. *Psychological Science*, 23(2), 133–140. <https://doi.org/10.1177/0956797611423670>

Kelly, D., Faucher, L. and Machery, E. (2010). ‘Getting Rid of Racism: Assessing Three Proposals in Light of Psychological Evidence,’ *The Journal of Social Philosophy*, 41(3): 293-322.

Madva, A. (2019). “[The Inevitability of Aiming for Virtue](#),” in *Overcoming Epistemic Injustice: Social and Psychological Perspectives*, edited by B. R. Sherman and G. Stacey. Rowman & Littlefield International, p. 85–100.

Madva, A., Kelly, D., and Brownstein, M. (2023). Change the People or Change the Policy? On the Moral Education of Antiracists. *Ethical Theory & Moral Practice*. DOI: [10.1007/s10677-023-10363-7](https://doi.org/10.1007/s10677-023-10363-7)

Milkman, K.L., Patel, M., Gandhi, L., Graci, H.N., Gromet, D.M., Ho, H., Kay, J.S., Lee, T.W., Akinola, M., Beshears, J., Bogard, J.E., Bутtenheim, A.M., Chabris, C.F., Chapman, G.B., Choi, J.J., Dai, H., Fox, C.R., Goren, A., Hilchey, M.D., Hmurovic, J., John, L.K., Karlan, D.S., Kim, M., Laibson, D.I., Lambertson, C., Madrian, B.C., Meyer, M.N., Modanu, M., Nam, J., Rogers, T., Rondina, R., Saccardo, S., Shermohammed, M., Soman, D., Sparks, J., Warren, C., Weber, M.M., Berman, R., Evans, C.N., Snider, C.K., Tsukayama, E., Van den Bulte, C., Volpp, K.G., & Duckworth, A.L. (2021). A megastudy of text-based nudges encouraging patients to get vaccinated at an upcoming doctor’s appointment. *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 118 No. 20 e2101165118 <https://doi.org/10.1073/pnas.2101165118>

Patel, M. S., Fogel, R., Winegar, A. L., Horseman, C., Ottenbacher, A., Habash, S., Dukes, J. L., Brinson, T. C., Price, S. C., Masoudi, F. A., Cacchione, J., & Yehia, B. R. (2022). Effect of Text Message Reminders and Vaccine Reservations on Adherence to a Health System COVID-19 Vaccination Policy: A Randomized Clinical Trial. *JAMA Network Open*, 5(7), e2222116. <https://doi.org/10.1001/jamanetworkopen.2022.22116>

Shamir, R. (2008). The age of responsabilization: On market-embedded morality. *Economy and Society*, 37(1), 1–19. <https://doi.org/10.1080/03085140701760833>

Sparkman, G., Attari, S.Z., & Weber, E.U. (2021). Moderating spillover: Focusing on personal sustainable behavior rarely hinders and can boost climate policy support. *Energy Research & Social Science*. Volume 78, <https://doi.org/10.1016/j.erss.2021.102150>.

Stewart, T. L., Latu, I. M., Branscombe, N. R., & Denney, H. T. (2010). Yes we can!: Prejudice reduction through seeing (inequality) and believing (in social change). *Psychological Science*, 21(11), 1557–1562. <https://doi.org/10.1177/0956797610385354>