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PAYNE INSTITUTE COMMENTARY SERIES: **VIEWPOINT**

Crisis Breeds Change: COVID and Heatwaves Spur Citizens to Environmental Action

By Greer Gosnell

As a behavioral economist having researched environmental behaviors for over a decade, I was struck when I read that the "how to live a sustainable lifestyle" search on Google skyrocketed to 5000% its 2019 level weeks after the COVID lockdowns took hold.

Crisis—along with a stark break in routine—appeared to refocus people's attention on their everyday actions, and a bigger picture.

Now, as a brutal and enduring heatwave draws California householders to their thermostats, householders' deliberate and seemingly altruistic behavior changes have so far prevented three days of rolling blackouts in Southern California.

As policy makers, grid operators, and regulators point fingers about lack of preparation and hasty renewables development on the supply side, households and businesses have collectively stepped in to balance the grid on the demand side.

Can crisis increase our environmental prosociality?

Western society and innovation, and particularly affluent pockets therein, have made it exceedingly easy to ignore the environmental footprints of our consumeristic lifestyles.

At bars and restaurants, we eat, pay, and leave without ever even seeing a raw vegetable. At home, we nobly disappear our plastic containers and boxes into our blue bins so that they may receive new life (ignoring that only 35% of that waste actually gets recycled in the US, and even that relied on a

willing China to accept our plastics). We send our kids to childcare and schools, minimizing our exposure to the paper hand towels, Lysol wipes, and diapers that find their way to our landfills. Out of sight, out of mind.

Weeks into lockdown, as our apartment buildings' trash and recycle bins overflowed and reams of hoarded toilet paper stacked up in our precious storage space, it became impossible to ignore the immense resources in our everyday mundane activities—from the plastic bags, containers, and bubble wrap to the Amazon boxes to the thousands of miles of embodied shipping emissions—which are normally not so salient.

In *Thinking Fast and Slow*, Nobel Prize winner Daniel Kahneman taught us about our System 1 and System 2 modes of thinking, the former characterized by instinctive and emotional reactions and the latter by careful and considered deliberation. COVID ripped us out of our routines, our habits, our underlying worldviews even, and System 2 took the reins in a number of domains that had previously run on autopilot.

We broke our habits to remember to bring masks when we left the house. We learned to grocery shop online. We stopped driving and flying to work, wearing pants, and making doctors' appointments, instead sleeping in or exercising during our commute hours and embracing telemedicine.

Stuck at home, we started composting, gardening, and signing up for green energy plans. And we also started using energy differently, morphing established energy pattern conventions and (perhaps temporarily) mangling the trusty "duck curve".

A new crisis in California

This week, another type of crisis has struck in California. Climate change is, as promised by my Environmental Science professor ten years ago, breeding more extreme and frequent heat waves and weather events. I am sweating through one of the worst California has experienced in recent decades as I write these words.

And my fellow Californians are right there sweating with me. I received an email from SDG&E on Wednesday, August 19, thanking my peers and me for our cooperation: "We know we have asked a lot of you during this heatwave and pandemic, but it's been remarkable to see our community and our state come together to meet this challenge."

Has grappling with a salient, visible, and close-to-home pandemic made us more cooperative? Without a true 'counterfactual'—that is, a view of this exact heatwave in the absence of a global pandemic—it's an impossible question to answer. But these small wins may be the start of a trend.

Behavior as a policy tool

When I began my PhD program at the London School of Economics in 2012 with aspirations to understand whether human behavior change could contribute meaningfully toward climate change mitigation, I was met with the stomach-curdling eyerolls of many established economists who were also my new peers.

A few years later, when my colleagues and I found that providing information and targets to airline captains on a monthly basis to reduce their fuel use prevented over 20,000 tons of carbon dioxide from entering the atmosphere (along with almost $6 million in savings for our study partner, Virgin Atlantic) over eight months, some of their ears perked (is it possible that firms are leaving money on the ground?).

Behavioral researchers have found that simply telling households that they consume more energy than their neighbors can promote conservation. That observably environmental behaviors lead to social signaling and social contagion. That switching up the order of a menu or increasing vegetarian options in a cafeteria can change the sustainability (and nutrition) of our dietary choices. That we do, indeed, have altruistic bones in our body.

Yet, behavior change strategies that leverage these findings have remained largely unexplored as meaningful environmental policy strategy.

A vision unfolding

The crises of 2020, as horrific and unthinkable as they continue to be, present a silver lining and an immense opportunity. Perhaps we can now deeply grasp the meaning of collective action to solve a global crisis. Perhaps we now have an understanding that every single individual has an impact. And perhaps we can focus more attention on developing innovative consumer-led solutions—including energy demand response to avoid blackouts and enable more intermittent renewable energy generation—to the greatest challenges of our time.

Last weekend, I finally picked up my first compost bin from a local grassroots composting group. There I met a wonderfully diverse group of women. Mia has been spearheading a successful urban food growth and distribution micro-operation just up the street. She was chatting with Wendy who volunteers her home for composting bucket exchanges. "And *another* new composter!" Wendy shouted, as I approached her front yard and joined the conversation. COVID has grown her operations tremendously.

My hope is that these new habits stick—become our new "System 1" behaviors—and that we grow these community ties and contributions as we settle into a new sense of normal going forward, to mend the divides of our country while also healing our sick planet.

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Greer is a Senior Researcher at the Payne Institute for Public Policy at the Colorado School of Mines. Her research combines experimental and behavioral economics to reveal cost-effective climate change mitigation strategies at the microeconomic level. Her current research focuses on commercial fuel efficiency, residential energy and resource use, virtual grid capacity, and energy and development. She is also a BITSS Catalyst promoting transparency and reproducibility in social science research.

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