EDITORIAL

There are no hours or days in Coronatime

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The days blend together, the months lurch ahead, and we have no idea what time it is. The virus has created its own clock.

Dear readers

While searching for new ideas for my Editorial, I came across the following text on the WIRED website that I would like to share with you.

Time, the philosopher Aristotle once mused, is the measure of change. It does not exist on its own as a container to put things *into*; rather, it depends on what is shifting, reshaping, and what remains the same. It is the observance of before and after, now and then, the beginning and the end. In 2020, the coronavirus has become the fulcrum for change. And along the way, something has happened to time. Its march onward is no longer measured in days, but in confirmed cases of Covid-19 and number of deaths. Milan is no longer five hours ahead of New York, but several *weeks* ahead. The virus has created its own clock, and in coronatime, there is less demarcation between a day and a week, a weekday and a weekend, the morning and the night, the present and the recent past. The days blend together, the months lurch ahead. And while so much of the pandemic's impact has landed unequally across geography, race, and class, these distortions of time feel strangely universal. "2020 is a unique leap year," surmised David Wessel, an economic researcher, on Twitter. "It has 29 days in February, 300 days in March and 5 years in April."

Philosophers tend to think of time in terms of the metaphysical. Psychologists prefer to make sense of it through the brain. Cradled in our skulls is an internal metronome, one that's recently gone out of balance. "Time feels like it's waxing and waning," says Ruth Ogden, a psychologist at Liverpool John Moores University in the UK. Ogden's work focuses on the psychology of time perception. In her lab, people are presented with various images and asked to estimate how many seconds have passed. "If the stimulus is frightening – a picture of a mutilated body or a picture of an electric shock – they'll say it lasted for longer than something that's neutral, like a picture of a kitten."

Recently, Ogden has turned her attention to time perception during a pandemic. Do people perceive a day on lockdown as longer, or shorter? What about the weeks? Her

Why a snowflake on the cover?
Molecules of subfreezing water in supersaturated clouds nucleate around small dust particles and begin to form regular-shaped crystal structures in a hexagonal formation. By accretion of other droplets, each corner of the hexagon evolves a dendrite, branching out until a complex snowflake has formed. Snowflakes have different shapes because the direction and modalities of the crystallization process depend on temperature. However, all six dendrites of a single snowflake resemble each other as they are the product of the same thermal conditions. Understanding these relationships and the configuration of snowflakes has enabled scientists to infer local atmospheric conditions.

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lab has issued an ongoing survey on the relationship between those self-reported experiences of time and things like mood, physical activity, levels of socialization, anxiety, and depression. So far, more than 800 people have filled it out. "I had a little sneaky look at the data," says Ogden, "and what I'm seeing already is that people seem to be experiencing it differently. Half say it's going quickly, half say it's going slowly."

Time's elasticity has perplexed philosophers for millennia. It has inspired writers for centuries. More recently, it has captured the attention of psychologists like Ogden, who have crafted experiments to understand the conditions of time perception: whether people feel time differently when they're hot or cold, stressed or at ease, watching the clock or focused on something else. Time can disappear when we are deeply immersed in an activity we enjoy – the baking of sourdough bread, or the total absorption in an art project. Other studies suggest that fear and anxiety shape our sense of time just as powerfully. "There are distortions in time perception when you present people with threats," says Kevin LaBar, a cognitive neuroscientist at the Duke Institute for Brain Sciences.

And in the case of extreme boredom. When nothing is changing, our experiences of time become excruciatingly slow. One study, which punished a group of 110 undergraduates with an assignment to circle the numbers on sheets of papers, found that those who reported feeling bored grossly overestimated the amount of time they'd spent on the task.

Those studies measure time perception in terms of seconds or hours. The pandemic's scale stretches out further, to weeks and months at least. In the US, some states have been sheltering in place for nearly two months, a period that can feel at once both painfully long and, in hindsight, like almost nothing at all. Getting a handle on time proves slippery and elusive. Especially, LaBar says, if you're stuck at home day after day. "The brain likes novelty," says LaBar. "It squirts dopamine every time there's something novel that's happening, and dopamine helps set the initiation of the timing of these events." In this model, the brain clocks these novel experiences, stashes them away as memories, and then recounts them later to estimate the passage of time. No novelty, no dopamine – and then "perceptual systems don't bother encoding stuff," says LaBar.

Claudia Hammond, a journalist and the author of *Time Warped: Unlocking the Mysteries of Time Perception*, calls this the "holiday paradox." (This is "holiday" in the British vacationary sense, not the American 'when will Thanksgiving family dinner end' sense.) "When people go on holiday, they say it goes really fast. You get halfway through the week and you're suddenly

thinking, 'I can't believe we're halfway through,'" she says. "But when they come back, it feels like they've been away for ages." Those vacations are often filled with new experiences, and a break from the normal routine. Even "staycations" might involve visiting a local museum you never had time to check out before. Such adventures provide a whole slew of new memories to look back on – more than you might have in a usual week.

A "quarantine paradox," if you will, might apply the same logic. Days spent shut indoors might feel long but add up to very little in hindsight, making the months of repeated routines feel very short. Those who are on the frontlines of the crisis, meanwhile, may find their days moving at breakneck speed, but find each passing month longer than the last, as each memory stacks up against the next. Unmoored from the usual rhythms of our daily lives, time feels elastic, stretching infinitely ahead and then, without warning, snapping back.

In *Time Warped*, Hammond tells the story of Alan Johnston, a BBC reporter who was held captive by Palestinian guerrillas for four months. He could count the calls to prayer five times a day, but lost any sense of how long he had been in captivity. "Suddenly time becomes like a living thing, a crushing weight that you have to endure," Johnston told her. "It's endless, since you don't know when you're going to be freed, if ever."

Sheltering at home isn't imprisonment – not even close, despite what some protesters may claim. But Johnston's words can still resonate. This pandemic is lined with uncertainty, from what the virus will do this summer to when there will be a vaccine, and we're stuck in the middle of it. Or maybe still the beginning. Or maybe closer to the end. No one knows when this will be over, or what the world will look like on the other side. Our experience of time isn't just different because we are fearful or bored, cooped up or overworked. It has changed because we don't yet know what to measure it against. Coronatime has no scale.

"Time" has become a stand-in for all that we cannot control. It is both the breakneck speed at which things are changing, and the burden of how much is staying the same. We are scared this might go on forever. We are scared it might end too soon.

Take your time and enjoy reading.

Sincerely yours

Alessandro Devigus

Source: Arielle Pardes for WIRED: https://www.wired.com/story/coronavirus-time-warp-what-day-is-it/