



# SFI TRANSMISSION

## COMPLEXITY SCIENCE FOR COVID-19

**STRATEGIC INSIGHT:** The analogies we live by are shaping our thoughts about our current situation.

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I was struck by a recent headline on BuzzFeed about the current coronavirus pandemic: “The Disorienting Thing Is You Can’t Compare this to Anything.”<sup>1</sup> It’s true that this pandemic is, literally speaking, like nothing we’ve ever experienced before. However, as humans, the only — and universal — way we make sense of novel situations is by making analogies to situations we have previously experienced. Contra BuzzFeed, coronavirus-related analogies are everywhere to be seen.

The way people conceptualize a situation drives their behavior in that situation. This means that the analogies we use to make sense of new situations can be powerful forces — for better or worse — in determining how we act. With this in mind, I’ve been collecting some of the analogies made by influential people about various aspects of the COVID-19 pandemic, and thinking about how these analogies are shaping our understanding and behavior in response to this “uncomparable” situation.

### **IS THIS JUST THE FLU?**

On March 9, President Trump tweeted, “So last year 37,000 Americans died from the common Flu. It averages between 27,000 and 70,000 per year. Nothing is shut down, life & the economy go on. At this moment there are 546 confirmed cases of CoronaVirus, with 22 deaths. Think about that!”<sup>2</sup> While a bad flu season might seem, on the surface, analogous to what we are experiencing, this analogy neglects some all-important facets of the novel coronavirus. Not only is it more infectious than typical flu viruses, it has at least 10 times the fatality rate. We have a vaccine for flu, albeit an imperfect one. Most importantly, the illness caused by the novel coronavirus is often very different from flu. The scholar Zeynep Tufekci drove home this last fact using another vivid analogy: “By January 29, it was clear that COVID-19 caused severe primary pneumonia in its victims, unlike the flu, which tends to leave patients susceptible to opportunistic, secondary

pneumonia. That's like the difference between a disease that drops you in the dangerous part of town late at night and one that does the mugging itself.”<sup>3</sup>

The seasonal flu analogy has misled many people into minimizing our current situation, and has fostered serious misunderstandings of what the real perils are. As recently as March 21, the conservative pundit Bill Mitchell tweeted his corollary of Trump's analogy: “I do not understand how our hospitals can handle 670,000 flu cases every year, but a few thousand COVID-19 cases overwhelm the system. We have been dealing with massive flu outbreaks for decades. To me this is all part of the hype.”<sup>4</sup> One reader replied with their own (sarcastic) analogy: “I do not understand how McDonalds can serve two billion hamburgers every year, but when I order five million at the drive-thru it overwhelms the system.”<sup>5</sup>

### **IS THIS LIKE A NATURAL DISASTER?**

One emergency room physician warned the *LA Times* that we need to make critical decisions “before we are in the throes of the tsunami.”<sup>6</sup> Similarly, NPR reporter Mara Liason warned, “This is a wave that hasn't crested yet.”<sup>7</sup> The journalist Joy Reid noted, “the coronavirus hurricane is hitting all 50 states plus all the territories at once.”<sup>8</sup> A newspaper in Tennessee told readers that “Coronavirus...will be like a flood. It will take time and action to subside.”<sup>9</sup> *The New York Times* quoted one scientist's response as to when things will return to normal: “It's like asking a fireman when you can move back in, but your house is still on fire.”<sup>10</sup> And even when the fire has subsided, we're told that “As long as the virus persists somewhere, there's a chance that one infected traveler will reignite fresh sparks in countries that have already extinguished their fires.”<sup>11</sup>

The natural-disaster analogy is more legitimate than the flu analogy — it has the right urgency — but it can also mislead us. Natural disasters are times for panic buying, stockpiling supplies like pasta and toilet paper. This incorrect conception of our situation has led to unnecessary hoarding. Perhaps even worse, the thought of a natural disaster makes people want to flee to a safer location, to quite literally “head for the hills.” One insightful tweeter noted the problem with this facet of the analogy: “I'm realizing that many people are responding to COVID-19 with the muscle memory of a natural disaster. After fires, we evacuate. Before hurricanes, we evacuate. It's time to realize: WE ARE THE HURRICANE. Running does nothing but bring the hurricane to others. Stay home.”<sup>12</sup>

### **ARE WE AT WAR?**

President Trump has called the pandemic “our big war,” and referred to himself as “a wartime President.”<sup>13</sup> Much has been written about the President's invoking “war powers” via the “Defense Production Act” to force American companies to manufacture medical equipment. Presidential candidate Joe Biden has also used a war analogy with respect to healthcare workers: “As president, I would never send an American soldier anywhere in

the world without the equipment and protection they need. We should not do any less for the heroes on the front lines of the battle we're in now.”<sup>14</sup>

The war analogy is appealing and in many ways apt, but again there are dangers lurking. Conceptualizing a situation as “war” can make people feel more nationalistic, xenophobic, willing to suspend civil rights, and susceptible to political exploitation, as was noted in a *New York Times* op-ed: “Amid all the signs of conflict — declarations of emergency, mobilizations of National Guard troops, the exercise of extraordinary powers — there is enduring constitutional danger in treating this crisis like a war.”<sup>15</sup>

If you pay close attention, you will encounter myriad variations on these and other analogies, in television news programs, newspapers, social media, and even casual conversations. As I heard one radio commentator analogize about analogies: “We are in uncharted waters. We need some navigational buoys.” Indeed, as humans we continually swim in a sea of analogies and metaphors that unconsciously but deeply shape our understanding of everything we encounter.<sup>16,17</sup> In making sense of our current difficult situation, we need to become more aware of how the analogies we live by are shaping our thoughts. Analogies are our buoys in troubled waters, our lighthouses in this dark storm, but we need to use them carefully to safely guide us to the other shore.

## REFERENCES

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