

The Scalpel and the Sword

Social Utility and Rational Decision Theory Applied to the Corona Virus©

By Donald W. Hudspeth

Virus in New York as of March 31 as 66,497 cases and 965 deaths.

Virus in Arizona as of March 31, 1157 cases and 20 deaths. The Arizona Governor has issued a stay at home order.

In law school in a case book we looked at the exorbitant number of injuries and deaths caused by certain machines used every day in our society:

Leading cause of death in first three decades of Americans' lives

More than 35,000 people killed in 2015, about 96 per day.

About three million nonfatal injuries

More than 2.3 million machine-related injuries treated in hospital emergency rooms.

Medical care costs and productivity losses exceeding 75 billion in 2017

7400 older adults died and more than 290,00 were treated in emergency rooms in 2016 as a result of this machine.¹

Looking at the injuries and fatalities alone there was a fairly broad consensus that use of the machine should be discontinued immediately. But it wasn't. Rather it is still in use every day. What is this machine? The automobile. The above statistics came from the Center for Disease Control and Prevention.

Why do we continue to use the automobile in the face of known, consistent and substantial harm? The answer is social utility. According to Quora "'social utility' is a service, or characteristic, that benefits the majority of the population of any given society. For example: a service which benefits about 80 or 90 % of population at the cost of the other 10-20% considered as social utility."²

Now, again referring to the Center for Disease Control and Prevention, as of March 28 the injury and death rates of the coronavirus were as follows:

¹ Center for Disease Control and Prevention, Winnable Battles, retrieved 03/29/2020 from https://www.cdc.gov/winnablebattles/report/motor.html and Center for Disease Control and Prevention, Public Health Gateway, Motor Vehicle Injury, retrieved 03/29/2020 from Injuryhttps://www.cdc.gov/publichealthgateway/didyouknow/topic/vehicle.html

² Quora, What is Social Utility, https://www.quora.com/What-is-social-utility.

Total cases: 103,321Total deaths: 1,668

• Jurisdictions reporting cases: 54 (50 states, District of Columbia, Puerto Rico, Guam, and US Virgin Islands)³

Comparing the death and destruction caused by the automobile versus that caused by the corona virus we have 103,000 cases virus versus 3,000,000 automobile, and 1668 deaths from the virus versus 35,000 by the automobile. However, since the virus injuries and death have occurred over a time period of, say, a month, it would be fairer to divide the automobile statistics by 12. We then would have 3,000,000/12 = 250,000 cases of *injury* per month for the automobile and 35,000/12 = 2,916 in *deaths* per month attributed to the automobile. Thus, on a monthly basis we have:

Monthly

	<u>Injuries (Cases)</u>	<u>Death</u>
Virus	103,000	1,668
Auto	250,000	2,916

As stated above as of March 31 New York as 66,497 virus cases and 965 deaths.

In Arizona as of March 31, there are 1157 cases and 20 deaths.

Automobile: By comparison in Arizona there are almost three auto accident fatalities each day from car crashes, i.e. 1000 deaths per year, and about 55,000 auto accidents.⁵ The Governor has not issued an order banning the automobile in Arizona.

There could be adjustments for risk, contagion, susceptibility and the rapid spread of the virus. But the risk and known occurrence consistently over time of harm caused by the automobile would seem to be about the same.

Even if, somehow, the death and illness caused by the virus exceed that of the automobile, the basic point still applies:

³ Center for Disease Control and Prevention, Corona Virus Disease 2019 COVID 19, retrieved 03/29/2020 from https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html

⁴ These figures are of March 28 and my comments are based on the information available at this time. All of the figures – for the virus and the automobile – come from the Center for Disease Control and Prevention.

⁵ Arizona Car Crash Statistics by the Kelly Law Team, reviewed 03/31/2020 at www.jkphoenixpersonalinjuryaorney.com >car-accident-statistics.

We make decisions which affect our quality of life according to their social utility. In effect, this may be a cost-benefit analysis. Few things are absolute. Consequences must be considered and balanced.

In law we often speak of "tailoring;" that is the principle that one size does not fit all nor is something likely to be suitable for all occasions. We look at the facts and the objectives and go from there.

We keep the automobile in spite of its known clear and present danger, and the risk we face every time we get on the road, because it is so beneficial to our lives in so many ways, both economic and personal. It would be devastating to our work and personal lives to live without it.

As shown, the death and illness caused by the virus are, and are likely to remain, lower than has been and will be caused by the automobile. Still we keep the automobile, even given its costs, because its social utility greatly exceeds it costs, but we close down the economy even at astronomical social cost. It seems that the logic applied to the automobile would be applied to the virus.

According to the Wall Street Journal epidemics like this have been handled completely differently in America in the past. During the Spanish flu of 1918, 675,000 Americans died, the government took no responsive action, Woodrow Wilson barely mentioned it, and there was minimal effect on the economy.⁶ So, in similar circumstances, our government adopted an exact opposite plan. The economy was kept open with no drastic medical relief measures.

The costs of shutting down the entire economy are exponentially higher (say 1,000 times?), than the harm caused by the automobile. Millions of businesses are closed. Many may never recover. Tens of millions of workers are unemployed. Savings, retirement savings are exhausted, investments and 401k's have lost one/third of their value in a few weeks. As they did in 2010, college grads are going into an economy in recession. This could be the second "lost generation" in ten years. I could go on and on about the severe and lasting hardship we are causing to businesses, their employees and the economy as a whole. Yet we keep the auto and close down the economy.

The economy of Arizona is very heavily based on construction and small business. During the Great Recession Arizona went from being the best or near best economy in the United States to one of the worst. The corona virus is likely to have the same effect in Arizona again, especially now that the Governor has shut down the economy.

And, these are just the financial and career costs. In addition, we have the huge social costs. The online airways are flooded with search requests seeking information about the effect of the virus and layoffs on child support, alimony and other court orders. And, the effect of "social"

⁶ What We Can Learn From the 20th Century's Deadliest Pandemic retrieved 03/29/2020 from https://www.wsj.com/articles/what-we-can-learn-from-the-20th-centurys-deadliest-pandemic-11583510468

distancing" in one place is "social closeness" in another. We have families – husbands and wives and children – at home 24/7. Most relationships did not contemplate all around the clock interaction. We know the story of the couple who divorces when the man retires. This is that scenario of unusual closeness for every family in America. Workers are coming to work because they need a break from "cabin fever" and the stress of the family being together without a break.

My purpose here is not to object to medically necessary protective and preventive measures. It is to ask "Have we wielded not a scalpel, but a sword?" My main point is that it appears we are closing down the economy on a non-tailored basis, with one rule across the country, without regard for incidence of outbreak. For example, the "size" of the outbreak shown on a map in the Northeast part of the country is the size of a baseball. The size of the outbreak in Arizona is the size of a dime. In New York they are desperate for hospitals and respirators. In Arizona the hospitals say "We have the beds, the respirators. We are ready."

The rationale for the shutdown is that we as individuals sacrifice for the greater good. But what if the greater good is matched or nearly matched by an equal and opposite harm? So long as the clear and present danger of widespread disease is there, then pandemic prevention would trump economic concerns. But what if the danger is not uniform such that it makes sense to "close New York," but not to "close Tulsa?" In that case in some locations the unmeasured, untailored cure could be worse than the disease. This is especially true if the disease runs its course but the economy stays in recession.

According to an article in Fortune magazine we have the artificial intelligence (AI) technology to forecast the path and presence of the disease.⁷ And, according to the article we have had that technology since the first day of the virus in China. Rather than acting from extreme fear we could have acted from science by shutting down or reducing economic and social activity in different parts of the country according to need. With travel restricted and monitored, the infection could be contained at that lower level, and remain less deadly in some defined areas, and there could be fewer economic restrictions.

There has been much talk about persons over 60 being most susceptible to the disease, and perhaps rationing scarce resources of medical care and supplies to younger persons who have more of their life ahead of them. One thing lost in this conversation is the fact that in some ways the decision has already been made. Because the baby boomers are older, when you destroy their business, destroy their retirement plan, savings and employment, they have less time to recover to a normal life, and their remaining years are likely to be extremely difficult. And who do they turn to? Their kids, family and friends have been similarly affected. It is, of course, a matter of individual choice, but living one's final years broke and humiliated may be a fate worse than death for many people. Moreover, the choice was made for the seniors. They did not have the option to choose, nor did the factory workers and service employees across America, regardless of where they live.

⁷ How AI is Aiding the Coronavirus Fight. Retrieved March 30, 2020 from https://fortune.com/2020/03/16/aicoronavirus-health-technology-pandemic-prediction.

This also seems to be a case of "Do as I say, not as I do." About half of the members of Congress are millionaires, but I have not heard one of them say: "I share your pain. I will not get a paycheck until you do." I hate to be so cynical, but it appears that the ones making these decisions where we lose most of everything and hope to get it back have steady paychecks. That makes it easier, for *them*.

It may turn out that in the end the tailored solution and the "blanket response" wind up being the same. But if the blanket response was not necessary at first, then millions of people have suffered unnecessarily early. As with our decision to keep the automobile we serve society best by weighing the costs and benefits of our decisions and tailoring our actions accordingly. A one-size-fits-all extreme reaction across the board is not supportable by any rational decision theory. It can only be explained by fear: Fear of the virus, fear of looking like the bad guy, and fear of criticism of a making more logical and tailored response.

The coronavirus relief bill has now been signed with benefits intended to begin within the week. With millions of businesses applying for loans at the same time, administration would seem to be a great challenge. Each bank or credit union will have thousands of applications to process. And, the Plan is signed in concept, now comes execution. According to my bank:

[Regarding] the Stimulus Package that was approved in Congress and signed by the President. We are all hearing details in the news that make it seem like this legislation is ready for banks to fund the stimulus. However, I also wanted to make you aware of a couple of things that still need to happen before we can move forward in any meaningful way on any financing related to this legislation.

- The SBA govt. agency has 15 days per the Cares Act to prepare guidance and instructions.
- We expect that it will take a week, possibly even a couple of weeks, for the SBA and Department of Treasury to finalize what information will be required to supply to receive the loans.
- No lender at this time has clear guidance on what is needed to be in the loan application yet.

Hopefully, this plan will work. It has to. Even if it does, the handling of this crisis reminds me of the story of Job in the Bible. When God gave Job a new wife and children, and doubled his wealth, did that end justify the means, i.e. in light of what was originally done, taken and suffered?⁸

⁸ This article was finished on March 31, 2020. April may bring changes in events that would affect the above analysis.