Tribalism, Nuclear Energy, Climate Change, and all that

As of this writing, we're still in a global health crisis, not knowing what the final toll of lost lives and suffering will be. A silver lining for me has been the thoughtfulness of friends and neighbors. However, I've realized that most of them share my political and social values. But caring for one another isn't a monopoly of liberals or conservative. Instead, it's a sad commentary on our increasing polarization and separation into "tribes", preventing honest discussion.

Why has this worsened? One reason is our separate news sources. My tribe watches mostly MSNBC and CNN. With conservatives its Fox News, while decades ago nearly everyone watched Cronkite or Huntley/Brinkley.

Opinions reflect political outlooks, but there must be some factual commonality to reach solutions on important issues. This is especially true of scientific information, brought into sharp focus by covid19. Medical experts don't know everything, but they know more than politicians about the virus. Dismissal of scientific expertise is harmful and in the case of covid19, dangerous.

Excellent covid19 information specifically for Californians is available at [https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/ncov2019.aspx](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/ncov2019.aspx)

For most other scientific issues, reports from the National Academy of Sciences (NAS), of which I am proud to be a member, are authoritative and objective.

Breaking with one’s tribal beliefs takes courage. Whether you agreed with his impeachment vote or not, Senator Mitt Romney demonstrated such courage. Let's look at some examples of "tribal beliefs" of liberals and conservatives.

THE LIBERAL TRIBE. My liberal tribe isn't immune to 'tribal beliefs,' even on scientific issues. Generally, it opposes 'GMOs' (genetically modified organisms), but the NAS finds no significant health risk to humans and finds net benefits to global food supply and nutrition. Please read [https://sciencebasedmedicine.org/national-academy-of-sciences-report-on-gmos/](https://sciencebasedmedicine.org/national-academy-of-sciences-report-on-gmos/) GMOs can be misused, but as former Energy Secretary Ernest Moniz observed, "a problem which can be managed doesn't mean it will be managed." But don't therefore dismiss the benefits of GMO technology.

Another example is nuclear energy. During a panel discussion about climate change it was suggested that nuclear energy has a role to play. A member of my tribe took vehement exception. But some prominent climate scientists, equally concerned about climate change, believe it does. Please read this interview with climate scientist Kerry Emanuel: [https://pulitzercenter.org/reporting/kerry-emanuel-climate-scientist-nuclear-energy](https://pulitzercenter.org/reporting/kerry-emanuel-climate-scientist-nuclear-energy) since I cannot succinctly summarize it. Some in my tribe reference Stanford's Mark Jacobson, whose clean energy plan has no nuclear component: [https://web.stanford.edu/group/efmh/jacobson/WWSBook/WWSBook.html](https://web.stanford.edu/group/efmh/jacobson/WWSBook/WWSBook.html) However, I agree with Emanuel that Jacobson's proposal involves many 'ifs', technical and political.
Nuclear energy involves a 'subtribe' within my liberal tribe, having an equally insistent position that we *must* place very heavy reliance on nuclear energy, their avatar being Michael Shellenberger: [http://environmentalprogress.org/founder-president](http://environmentalprogress.org/founder-president). Some in this subtribe assert that promotion of solar energy is a ploy by the fossil fuel industry to promote gas-fired electricity generation. From a risk management perspective, one must multiply two numbers: a very small number (the probability of serious outcomes) by a very large number (the damaging consequences of such events,) both numbers being highly uncertain.

Climate change is a *global* problem with no single global solution. What works in nuclear-powered France isn't advisable for nations with unstable governments and poorly trained technicians. Personally, I support rapid development of "Generation IV" reactors which have significant advantages in safety, proliferation, waste disposal, and cost over current designs.

An example of a political belief of my tribe asserts that "Trump has done nothing right." While tariffs on China were not the right strategy, he was correct in confronting China's disregard of intellectual property rights and other trade abuses.

**THE CONSERVATIVE TRIBE.** The obvious scientific example of conservative tribalism is denial of human-caused climate change. Even as the evidence becomes overwhelming, most conservatives continue to deny it. Please download this excellent non-technical report from the National Academy of Sciences, using this tinyurl version for the link: [http://tinyurl.com/yx3y79va](http://tinyurl.com/yx3y79va).

Some political traits of the conservative tribe are: Opposition to nearly all attempts to reduce gun violence and blind defense of all Trump's statements, no matter how false or outrageous. While Washington Governor Jay Inslee was desperately dealing with his state's horrendous covid19 outbreak, President Trump called him a "snake". That's indefensible. So are his recent tweets encouraging demonstrations against Democratic Governors following the advice of their medical experts to curtail the virus. What conservatives will display the courage to break with their tribe and condemn such language?

Other conservative tribal beliefs oppose co-operating with international entities like the World Health Organization, which the Chinese initially misled about the severity of the viral outbreak. But in his continual blame-shifting, Trump's withdrawal of WHO funding is cruel and ill-advised. Another conservative belief opposes essential roles for the federal government. But I'm not aware of any conservative refusing some of its two trillion dollars.

Can we overcome tribalism and find common ground on which to solve urgent problems? I had hoped the pandemic would overcome tribalism. But the recent example of the Wisconsin legislature's action in forcing an election and putting assumed political advantage above public health showed how naive that hope was. Still, we must try if we are to preserve a functioning democracy. One suggestion is for citizens of goodwill, both conservatives and liberals, to meet together with a facilitator over meals to explore ways of bridging the divide and restoring civility to our nation. Those willing to try please, contact me at [http://tinyurl.com/yd78v68k](http://tinyurl.com/yd78v68k)

Happy Earth Day.