Explaining the COVID Science Wars

In "Unmasking Scientific Expertise" (*Issues*, Summer 2021), M. Anthony Mills exposes the danger of the vacuous "follow the science" slogan that has been used by politicians, scientists, and others throughout the COVID-19 pandemic to command allegiance to particular scientific conclusions or policies and to shut down what is sometimes reasonable disagreement. The pandemic is rife with disagreements over the science or the scientific backing of public health actions. Some of those disagreements are militant enough to evoke the (admittedly overused) metaphor of a science war. The possible explanations for scientific disagreements are many. Here is a non-exhaustive list of explanations for the sometimes-stark disagreements among scientists, public health experts, and other science advisers during the pandemic, some of which Mills discusses.

Normal science in real time. Reasonable uncertainty over unsettled science generates normal, rational disagreement. There is nothing unusual here in need of a special explanation. It seems unusual only to outsiders who are not used to seeing scientific disagreements livestreamed and live-Tweeted.

Fast science, bad science. The pandemic has provided a breeding ground for bad science owing to the urgency of the situation. Fast science promotes bad science, and bad science promotes scientific disagreement.

Belief factions. Belief factions are rival networks of knowledge users, sometimes though not always formed along lines of political affiliation, that preferentially believe, endorse, or share information coming from within the network. Even seemingly politically neutral matters such as whether hydroxychloroquine is effective can become polarized by belief factions. Different science experts may be part of distinct networks.

Epistemic trespassing. Given the enormity and multidimensional nature of the problems faced, experts from different fields have become COVID researchers or thought leaders. They commit <u>epistemic trespassing</u> when they overstep their expertise, potentially leading them to spuriously challenge the "real experts."

Different disciplines, different disciplinary frameworks. Individuals from different research traditions such as evidence-based medicine and public health epidemiology sometimes rely on different standards or principles of evidence, reasoning, and decisionmaking, leading to disagreements that can be resolved only through higher order analysis.

Policy proxy wars. Policy conflicts rooted in disagreements over <u>values</u> or <u>decisionmaking</u> can masquerade as disagreements over science or evidence, fought by appealing to (or producing) research favorable to one's preferred policy and criticizing or discrediting unfavorable research rather than deliberating over the values and decisionmaking at issue.

Pandemic theater. Disagreements among experts may be exaggerated, amplified, dramatized, or concocted in network media, on social media, by politicians, or by others.

Of course, a list of explanations for disagreements among politicians and members of the wider public would look a bit different. Distinct explanations might better explain distinct disagreements. Because these distinct explanations often demand different responses, it is important to consider which explanations apply in a given case.

Finally, absent from this consideration is the notion that experts are not actually following the science. Though nonexperts may sometimes ignore the science, when scientific experts disagree it is more likely that they are interpreting or weighing research findings differently, perhaps for reasons above.

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