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Leaders Need to Harness Aristotle's 3 Types of Knowledge

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If you're working to improve your leadership capability, what exactly should you be trying to develop? The experience of the 2020 pandemic offers a powerful lesson: A critical skill a leader must bring to the table is the ability to figure out *what kind of thinking* is required to address a given challenge. Bring the wrong kind of thinking to a problem and you'll be left fruitlessly analyzing scientific data when what's desperately needed is a values-informed [judgment call](#). Or, just as bad, you'll trust your instincts on a matter where a straightforward data analysis would expose how off-base your understanding is.

Drucker Forum 2020

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Mistakes like this happen all the time, because different kinds of human effort require different kinds of knowledge. This is no novel claim of our own — it's only what Aristotle explained more than 2,000 years ago. He outlined distinct types of knowledge required to solve problems in three realms. *Techne* was craft knowledge: learning to use tools and methods to create something. *Episteme* was scientific knowledge: uncovering the laws of nature and other inviolable facts that, however poorly understood they might be at the moment, "cannot be other than they are." *Phronesis* was akin to ethical judgment: the perspective-taking and wisdom required to make decisions when competing values are in play — when the answer is not absolute, multiple options are possible, and things *can* be other than what they are. If you're a farmer designing an irrigation system or a software

engineer implementing an agile process, you're in the *techne* realm. If you're an astronomer wondering why galaxies rotate the way they do, you're in the *epistemic* realm. If you're a policymaker deciding how to allocate limited funds, you're in the *phronesis* realm.

The reason that Aristotle bothered to outline these three kinds of knowledge is that they require different styles of thinking—the people toiling in each of these realms tend toward habits of mind that serve them well, and distinguish them from the others. Aristotle's point was that, if you have a *phronetic* problem to solve, don't send an *epistemic* thinker.

But imagine that you're a leader of a large enterprise that has challenges cropping up regularly in all three of these realms. There are plenty of *techne* problems as you work to adopt effective methods and tools in your operations. You also have *epistemic* challenges; anything you approach as an optimization problem (like your marketing mix or your manufacturing scheduling) assumes there is one absolutely right answer out there. And firmly in the realm of *phronesis* would be anything you label a "strategic" matter — decisions on mergers and new product launches, for example, involving trade-offs and recognizing that the future holds various possibilities. As a leader presiding over such a multifaceted organization, it's a big part of your job to make sure the right kinds of thinking are being marshaled to make those different kinds of decisions. This means that you personally need to have some facility with all the different modes of thinking — at least enough to recognize which one is the best fit to a given problem, and which people are particularly adept at it.

That's all the more true for the largest leadership challenges in the modern world, those that are scoped so broadly and are so complex that all these kinds of thinking are called for by one problem, in one facet or another. Think, for example, of a corporation facing a liquidity crisis. Its leaders need to marshal *epistemic* expertise to discover the optimal resolution of loan covenants, issuance restrictions, and complex financial instruments — and the *phronetic* judgment of where short-term cuts will do least damage in the long run.

This brings us to the Covid-19 global pandemic and the challenges it has presented to leaders at all levels — in global agencies, national and local governments, and businesses large and small. To be sure, almost all of the world was blindsided by this catastrophe and early missteps were unavoidable, particularly given misinformation at the outset. Still, it has now been 10 months since patient zero. How can the devastation still be running so rampant — and have segued, unchecked, from deadly disease to economic disaster?

Our diagnosis, not as medical experts but as students of leadership, is that many leaders stumbled in the fundamental step of determining the nature of the challenge they faced and identifying the different kinds of thinking that had to be brought to bear on it at different points.

In the early weeks of 2020, Covid-19 presented itself as a scientific problem, firmly in the epistemic realm. It immediately raised the kinds of questions to which absolute right answers can be found, given enough data and processing power: What kind of virus is it? Where did it come from? How does transmission of it happen? What are the characteristics of the worst-affected people? What therapies do most to help? And that immediate framing of the problem caused leaders — and the people they influence — to put enormous weight on the guidance of epistemic thinkers: namely, scientists. (If one phrase should go down in history as the mantra of 2020, it is “follow the science.”)

In the U.K., for example, this translated to making decisions based on a model produced by researchers at Imperial College. The model used data collected to date to predict how the virus would spread in weeks to come (quite inaccurately, unfortunately). At the frequent meetings of the Scientific Advisory Group for Emergencies there was one government official in attendance, and early on, he tried to inject some practical and political considerations into the deliberations. He was promptly put in his place: He was only there to observe. Indeed, members expressed shock that someone from the world of hashing out policy would try to have influence on “what is supposed to be an impartial scientific process.”

But the reality was that, while scientific discovery was an absolutely necessary component of the response, it wasn’t sufficient, because what was happening at the same time was an escalation of the situation as a social crisis. Very quickly, needs arose for tough thinking about trade-offs — the kind of political deliberation that considers multiple dimensions and is informed by different perspectives (Aristotle’s phronetic thinking). Societies and organizations desperately needed reliable processes for arriving at acceptable balances between factors of human well-being too dissimilar to plug into neat equations. Pandemic response was not, as it turned out, a get-the-data-and-crunch-the-numbers challenge — but since it had been cast so firmly as that at the outset, it remained (and remains) centered in that realm. As a result, leaders were slow to begin addressing these societal challenges.

What was the alternative? What should a great leader do in such a crisis? We believe that the right approach with the Covid-19 pandemic would have been to draw on all the relevant, epistemic knowledge of epidemiologists, virologists, pathologists, pharmacologists, and more — but to ensure that the scope of the problem was understood

as broader than their focus. The tendency of the epistemic habit of mind is to go narrow, into pockets of science where it is possible to arrive at absolute, can't-be-otherwise answers. The right approach would have been to factor those contributions into what was understood from the outset to be a sprawling, complex system of a challenge that would also call on holistic thinking and values-balancing decisions. If leaders had from the outset framed the pandemic as a crisis that would demand the highest level of political and ethical judgment, and not just scientific data and discovery, then decision-makers at all levels would not have found themselves so paralyzed — regarding, for example, mask mandates, prohibitions on large gatherings, business closures and re-openings, and nursing home policies — when testing results proved so challenging to collect, compile, and compare.

We admit we are painting with a broad brush here, undoubtedly some leaders balanced competing priorities and managed the calamities of 2020 more effectively than others. Our objective here is not to point fingers but simply to use the extremely prominent example of Covid-19 to underscore a fundamental but under-appreciated responsibility of leadership.

Part of your job as a leader is to frame the problems you want people to apply their energies to solving. That framing begins with comprehending the nature of a problem, and communicating the way in which it should be approached. Calling for everyone to weigh in with their opinions on a problem that is really a matter of data analysis is a recipe for disaster. And insisting on “following the science” when the science cannot take you nearly far enough is a way to paralyze and frustrate people beyond measure.

This ability to size up a situation and the kinds of knowledge it calls for is a skill you can develop with deliberate practice, but the essential first step is simply to appreciate that those different kinds of knowledge exist, and that it's your responsibility to recognize which ones are called for when. Aristotle's efforts notwithstanding, most leaders haven't thought much about realms of knowledge and what problems they can solve. Expect that to change as enterprises, and societies, take on increasingly complex and large-scale challenges — and leaders are increasingly judged on the thinking that goes into them.



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