



# Risk and National Security: Towards an uncertainty theory of intelligence

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“It is a world of change in which we live, and a world of uncertainty. We live only by knowing something about the future; while the problems of life, or of conduct at least, arise from the fact that we know so little.”

Frank H. Knight, *Risk, Uncertainty and Profit*, 1921.

# Frank H. Knight



- ▶ The Distinction between risk and uncertainty:
- ▶ A 'risk' is a *measurable* certainty.
- ▶ 'Uncertainty' is an *unmeasurable* one.



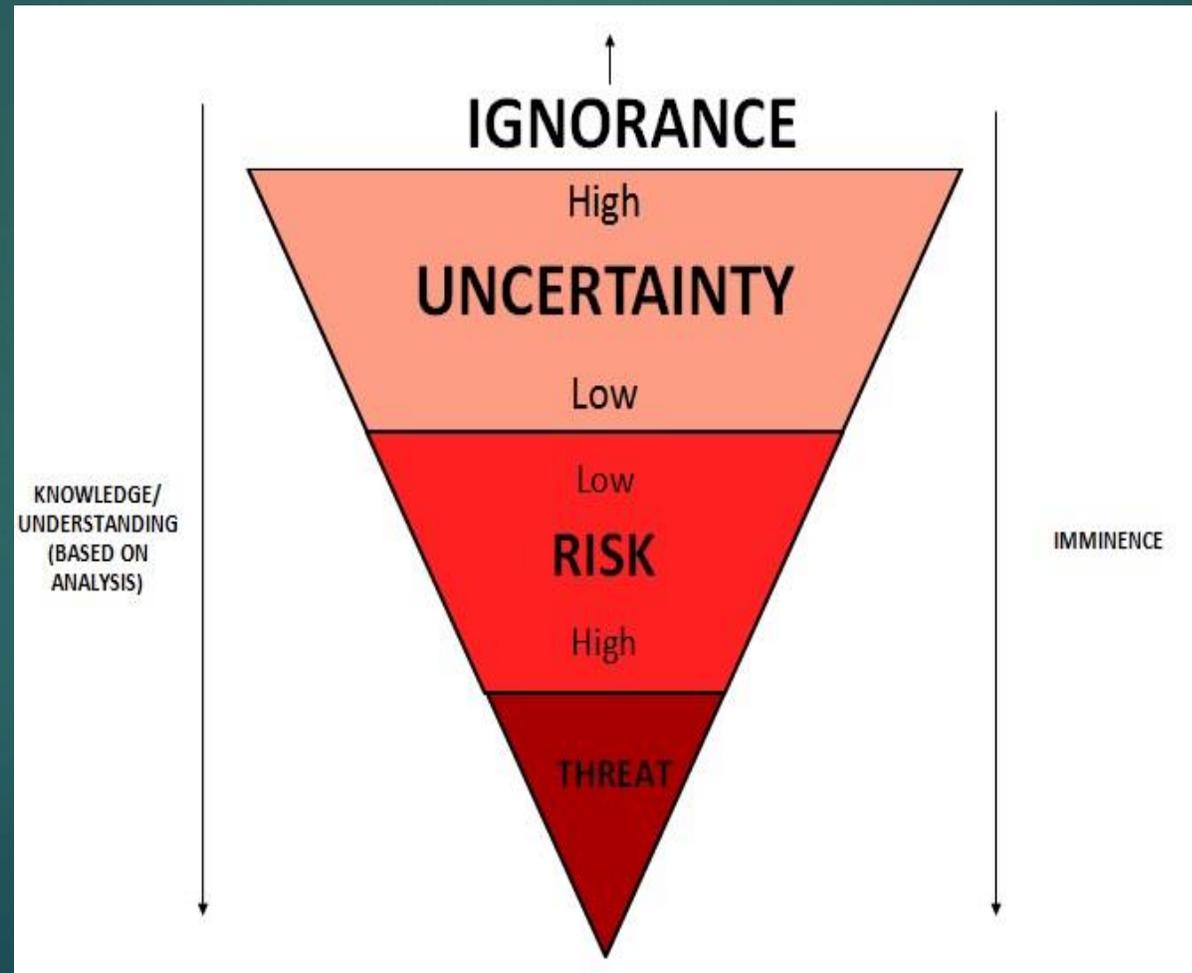
“a *measurable* uncertainty, or “risk” proper...is so far different from an *unmeasurable* one that it is not in effect an uncertainty at all.”

Frank H. Knight, *Risk, Uncertainty and Profit* (Boston, MA: Houghton Mifflin, 1921), p.20

# Ignorance

- ▶ “Matters covered by ignorance typically lie outside the disciplinary paradigm within which standard assessments of risk are conducted and are thus in a sense necessarily, rather than perniciously, excluded from day-to-day calculations and assessments. Nonetheless, ignorance in this sense is a different form of not-knowing from mere uncertainty; it is not adequately captured by being treated as simply extreme uncertainty.”
- ▶ Steve Yearly, *Making Sense of Science: Understanding the Social Study of Science* (London, Sage, 2004), p.137.

# Uncertainty, Risk and Threat: A Knightean Model

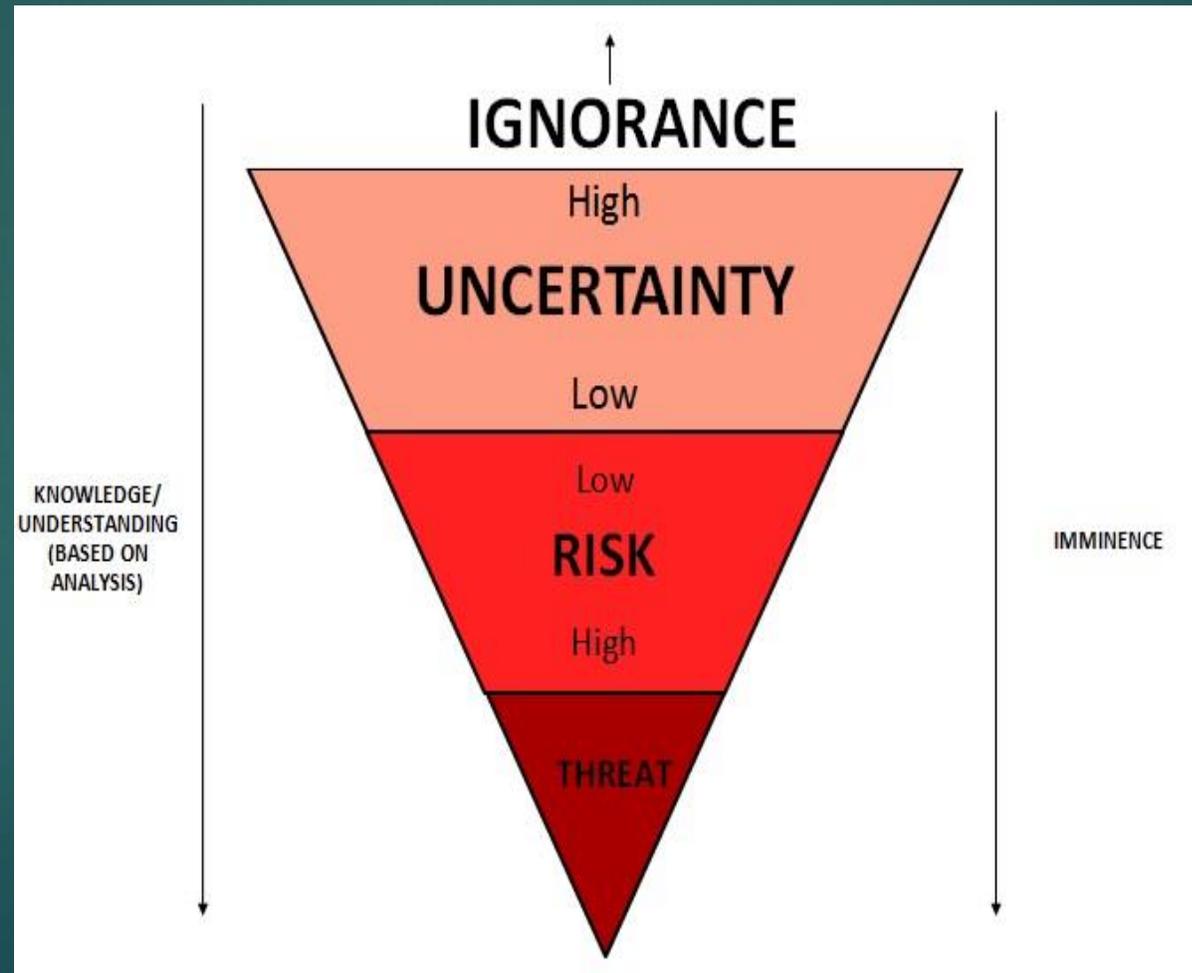


# Donald Rumsfeld, February 2002

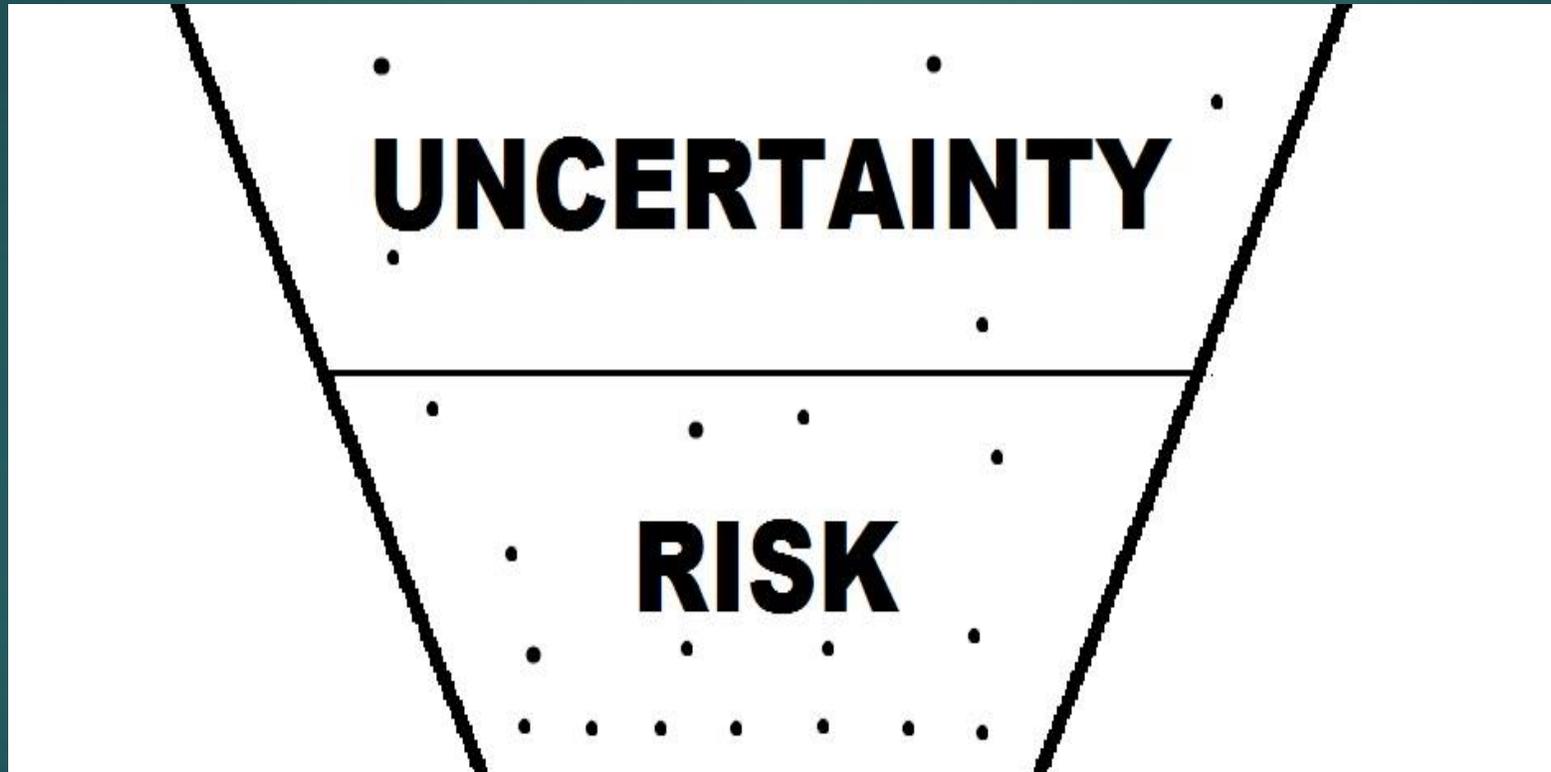
- ▶ “Reports that say that something hasn't happened are always interesting to me, because as we know there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones.”



# Uncertainty, Risk and Threat: A Knightean Model



# Identifying Risk by Policing Uncertainty: The Key Site



# The Preventive Science Parallel

- ▶ “shifting the locus of environmental responsibility further upstream in the industrial commitment process exposes more of the uncertainty about eventual downstream environmental effects: the uncertainty was already there, but concealed or ‘black-boxed’ as if all the upstream system were simply a given.”
- ▶ Brian Wynne, ‘Uncertainty and Environmental Learning: Reconceiving Science and Policy in the Preventive Paradigm’, *Global Environmental Change*, Vol. 2 No. 2, 1992, pp.111-127



The 'standard model' of intelligence analysis, as based on the science model of the "idealized policy expert":

"...idealized image of the scientific expert involves not simply knowledge, but also a large element of objectivity, of being above politics and partisanship. The idealized policy expert brings the neutral authority of science to bear on politics. Experts derive legitimacy from their ability to appeal to non-political professional standards: the use of dispassionate scientific methods of inquiry, validation through peer review rather than mere assertion, and other classic elements of Mertonian science."

Bruce Bimber, *The Politics of Expertise in Congress: The Rise and Fall of the Office of Technology Assessment* (Albany, NY, State University of New York Press, 1996), p.12



“The ‘causal chain’ here starts with the various outputs of human activity, producing changes in the biosphere, leading to changes in the climactic system, then changes in sea level (all these interacting in complex ways with varying delay-times). Out of all this must come a set of forecasts which will provide the scientific inputs to decision processes; these will contribute to policy recommendations that must then be implemented on a broad scale. But all the causal elements are uncertain in the extreme; to wait until all the facts are in would be another form of imprudence. At stake may be much of the built environment and the settlement patterns of people; mass migrations from low-lying districts could be required sooner or later, with the consequent economic, social and cultural upheaval.”

Silvio O. Funtowicz & Jerome R. Ravetz, ‘Science for the Post-Normal Age’, *Futures*, Vol. 25 No.7 1993, pp.750-1.



*"The awful news made Rupert glum,  
He feared for the life of his oldest chum..."*

# The Preventive Science Parallel

- ▶ “When problems *lack neat solutions*, when environmental and *ethical aspects of the issues are prominent*, when *the phenomena themselves are ambiguous*, and when *all research techniques are open to methodological criticism*, then the debates on quality are not enhanced by the exclusion of all but the specialist researchers and official experts” (my emphasis).
- ▶ Funtowicz & Ravell, ‘Science for the Post-Modern Age’, pp.753-4.

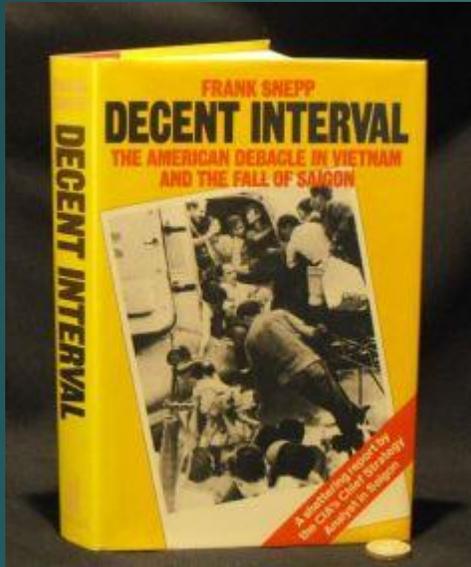
# Upstream Intervention and the Social Construction of Risk

- ▶ Munich. Beware of another “Munich.” Do not make the mistake with totalitarian regimes that the British made at the September 1938 meeting with Adolf Hitler near Munich, in which British Prime Minister Neville Chamberlain attempted to “appease” Hitler by assuring the Nazi leader that Britain would not oppose Germany’s attempt to annex part of Czechoslovakia. Hitler was not appeased. Germany kept gobbling up Europe. Conclusion: totalitarian regimes are never appeased.
- ▶ Military force. Totalitarian regimes must be opposed with overwhelming military force on the part of the Western democracies. Such regimes cannot be bluffed, nor is compromise an option.

# Upstream Intervention and the Social Construction of Risk

- ▶ Dominoes. Some areas of the world are especially vulnerable to a communist takeover, such as if one country is allowed to fall, the rest will tip over like a row of dominoes.
- ▶ Vietnam. South Vietnam is the most significant such “domino” in southeast Asia, perhaps in the world. If it is allowed to “go communist”, the entire region, not excluding Japan, is at risk of a communist takeover.
- ▶ America’s Mission. The US, for a variety of reasons, has the primary responsibility to lead the fight against communism, regardless of the cost to America in blood and treasure.

# Frank Snepp, former CIA Principal Analyst on North Vietnam



- ▶ “When I was training in the Agency to go to Vietnam, I was hit over the head with the domino theory. I was told that it was what would define the future of South Vietnam. The ideology that propelled us into the war obscured history, and it was obviously a terrible oversight because in embracing the domino theory we perpetuated our presence there, we justified staying in.”

# Investment in Preventive Measures and Structures: How Much is Enough?

- ▶ “Determining which level is safe enough is ultimately a political process; indeed, it may be said to rely more on values (and ethics) than on facts. Although science can inform us of the probability of things going wrong, science cannot decide how low the probability need be in order to be morally acceptable.”
- ▶ Jakob Arnsperg, *Risk* (Cambridge, Polity Press, 2009), p.34.