

Discussion of Debak Das and Rabia Akhtar’s joint essay on *Nuclear Learning in South Asia*<sup>1</sup>

### Introduction

As you well know, I am not an expert in South Asia. However, I care about knowledge production about nuclear weapons: how experts and policymakers convince themselves that they know something about those deadly pieces of technology. Learning plays a particularly important role in this process.

My comments will revolve around five cautionary notes on learning in the nuclear context and two epistemological suggestions, an opening one and a concluding one, to all of us as students of these matters, all in the spirit of Judith and Catherine’s effort to identify and travel the road to lower numbers.

Learning is supposed to be learning from the past, and once we have said that, we need to remember one specificity of the nuclear realm. It distinguishes itself by the claim that most of human history is irrelevant as a source of learning. This is the meaning of the so-called “nuclear revolution.”<sup>2</sup> The relations between war and strategy are supposed to have been fundamentally changed by this techno-political invention, so that previous conflicts would have very little to teach us about the dynamics of nuclear war. This intuition was most famously illustrated by the response attributed to Alain Enthoven: “General, I fought just as many nuclear wars as you have,” and it was most radically formalized by Herman Kahn in *On Thermonuclear War*.<sup>3</sup> The limits of validity of this claim are disputed, of course, but the possibility of such a claim being taken seriously is specific to the nuclear weapons realm. As a result, a lot of the learning is explicitly future-oriented and depends on the imaginaries of the future and of future conflicts which are deployed by the learners.<sup>4</sup>

### Five Cautionary Notes

1. Learning is not always good; it does not always mean learning the right lesson, contrary to what the scholarship tends to emphasize. A lot of the literature about learning was written in the 1990s within the liberal internationalist framework with an assumption of good faith, openness to learning, and a default positive assessment of learning, following the unexpectedly peaceful end of the Cold War. Our implicit understanding of learning as good

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<sup>1</sup> This is a revised version of my remarks at the workshop based on some of the discussion that followed. Thank you to everyone who engaged with those remarks and hopefully allowed me to clarify them.

<sup>2</sup> A classic and concise discussion is Robert Jervis, *The Illogic of American Nuclear Strategy*, Ithaca: Cornell University Press, 1984, chapter 1, and also his later *The Meaning of the Nuclear Revolution*. Ithaca: Cornell University Press, 1989. The point of these notes is not to exhaust the long literature on this subject, so I will not provide more references.

<sup>3</sup> Matthew Connelly, Matt Fay, Giulia Ferrini, Micki Kaufman, Will Leonard, Harrison Monsky, Ryan Musto, Taunton Paine, Nicholas Standish, and Lydia Walker, “‘General, I Have Fought Just as Many Nuclear Wars as You Have’: Forecasts, Future Scenarios, and the Politics of Armageddon,” *American History Review* 117(5), 2012.

<sup>4</sup> This is developed in Benoit Pelopidas, “Nuclear weapons scholarship as a case of self-censorship in security studies,” *Journal of Global Security Studies*, forthcoming. See also Zachary Zwald, “Imaginary Nuclear Conflicts: Explaining Deterrence Policy Preference Formation,” *Security Studies* 22(4), 2013.

and desirable is deeply ingrained. However, the possibility of learning dangerous lessons has been established for the South Asian context ever since Russell Leng and S. Paul Kapur noted that in both cases, "the learning that has occurred has been largely dysfunctional and dangerously hawkish."<sup>5</sup> Here I leave aside the issue of who is judging the quality of the lessons learned, which features are expected to characterize a good lesson, and how those characteristics are determined. The point is that instead of a binary good learning / bad non-learning, we should accept the possibilities that dangerous and inaccurate lessons are learned.

2. We have to learn from non-events, too, because not doing so would be tantamount to retrospectively denying the role of luck and contingency in avoiding nuclear use, falling instead for retrospective illusions of understanding and control.<sup>6</sup> However, deciding how close we came to disaster or which crisis was the most serious should only be the beginning of our questioning and not the end.

One would assume that treating a crisis as very dangerous or as the most dangerous ever would be enough to learn that in the future you should do everything to exercise crisis avoidance and prevention instead of crisis management. That is the most common assumption of unanimous learning from fear, with the experience of fear leading to prudence. However, my research on the memorialization of the "Cuban Missile Crisis" in France, conducted over the last three years, shows that this idea of unanimous learning from fear is faulty on at least two grounds. First, contrary to the British experience and our retrospective illusion of universal fear, France experienced very little fear over the "Cuban Missile Crisis." Second, there is a consensus that the Cuban missile crisis was the closest we came to nuclear war: most French analysts and policymakers do not dispute that. However, they would claim either that you needed to get very close for the deterrent effect to be triggered or that, in the end, the presence of the weapons on both sides meant that the risk was simply overstated.<sup>7</sup> In those two versions, claiming that a given crisis, or non-

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<sup>5</sup> S. Paul Kapur, "Revisionist ambitions, conventional capabilities and nuclear instability: why nuclear South Asia is not like Cold War Europe," in Scott Sagan (ed.), *Inside Nuclear South Asia*, Stanford: Stanford University Press, 2009, p. 202, quoting Russell Leng in part.

<sup>6</sup> In cognitive psychology, Daniel Kahneman describes how heuristic biases lead us to overconfidence as denial of the role of luck (*Thinking Fast and Slow*, New York: Penguin, 2011, part III). Of course, saying that we have to learn from non-events because otherwise we would not have anything to learn from is unsatisfactory in two important ways. Nuclear weapons tests should definitely be considered as relevant episodes to learn from, and there are a very large number of them. Most important, the need to know does not justify dubious data creation just so that we have something to learn from. The statistical literature on proliferation is particularly problematic in that respect. The universe of cases is not large enough and the quality of the data is not good enough to apply statistical methods in any meaningful way, but this is done anyway. For persuasive critiques, see Vipin Narang, "The Use and Abuse of Large-n Methods in Nuclear Studies," *Forum H-Diplo/ISSF 2*(2014). Available **Error! Main Document Only**.at <http://issforum.org/ISSF/PDF/ISSF-Forum-2.pdf>. Accessed on May 16, 2016.

<sup>7</sup> Benoit Pelopidas, "The sources of overconfidence in the controllability of nuclear weapons. Lessons from the experience and memorialization of the Cuban Missile Crisis in France." Unpublished manuscript. I make this point more broadly about the danger of the illusion of a unanimous interpretation of the "Cuban Missile Crisis" in "Remembering the Cuban Missile Crisis, with Humility," *European Leadership Network*, 11 November 2014, available at [http://www.europeanleadershipnetwork.org/remembering-the-cuban-missile-crisis-with-humility\\_2118.html](http://www.europeanleadershipnetwork.org/remembering-the-cuban-missile-crisis-with-humility_2118.html). Last accessed May 4, 2016.

event, was the closest we ever came to nuclear war hides the relevant part of the diagnosis. For the first category of French analysts, getting "close enough" was necessary to the peaceful ending of the crisis, as it triggered the deterrent effect. For them, the closeness to disaster is not synonymous with the level of danger. For the second category of French analysts, the crisis was simply not dangerous, so accepting that it was the most dangerous of all means that we can do crisis management. So, we have to learn from non-events, but in this process one should neither assume that the presence of nuclear weapons will induce a unanimous learning from fear nor equate the assessment of proximity to disaster with the degree of danger of a given episode. Getting to know how close we came to disaster is only the beginning of the investigation.

3. The previous cautionary note could be read as a warning against the illusion of the *unanimity* of learning from nuclear crises.<sup>8</sup> This leads me to my third cautionary note about overconfidence in the *existence* and *sufficiency* of learning from those crises. Sometimes, learning does not happen, and the relevant people do not think that it should have.

For example, on January 25, 1995 at 7h24min48s local time, a four stage, Black Brant XII, Canadian-made rocket was launched from the Andøya rocket range in Norway. The purpose of this launch, in close cooperation with NASA, was to look at the Northern lights in daytime over Svalbard. This was the first four-stage rocket launched from Andøya since the first activities of the rocket range on August 18, 1962. The flight lasted less than twenty-three minutes. When the range director Kolbjørn Adolfsen left his post, he was confident that everything had happened according to plan. The day after, Russian President Boris Yeltsin claimed that he had been presented with an open football because of this rocket launch and had to make a decision about nuclear retaliation.

Twenty years after the event, inertia and overconfidence in the existence and sufficiency of learning reigns, as was documented by the oral history workshop and a series of interviews I conducted in 2015. This overconfidence shapes two narratives: an alarmist one and an untroubled one, both of which are problematic, and the proponents of each seem to be indifferent to the existence of the other or to ignore it. If some claims of the alarmist narrative are demonstrably false, those of the untroubled one are only partial, irrelevant, and missing core dangers of nuclear false alarms: they miss pathways to disaster. Both attitudes are grounded in a dangerous sense that we know enough about the issue and that whatever had to be learned from the event has indeed been learned. If by learning, one means policy change, then learning happened in Norway only. It was suggested by the Norwegian Press as early as March 31, 1995: the routine for rocket launches was going to be changed. As a matter of fact, the launch of a second Black Brant XII rocket on January

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<sup>8</sup> On that aspect, the first oral history of the 1995 Black Brant event, which I organized in 2015, suggests that in spite of the scholarship about a given event, the diversity of experiences of those events is crucial, and should not be underestimated because it leads to equally diverse and competing memorializations. On Black Brant, Benoit Pelopidas, "Overconfidence and learning from nuclear false alarm. Lessons on the Black Brant XII event from an oral history workshop after twenty years." Unpublished manuscript.

21, 1999 did reflect learning on the Norwegian side. However, no similar learning happened in the United States or Russia, where the event is largely not remembered. The sense of a need to learn more from this event was largely absent from my interviews. It illustrates a sense of overconfidence in the existence of learning about this case and the sufficiency of what we now know. Given that it took more than three decades to hear about the most dangerous aspects of the Cuban Missile Crisis – right decisions taken out of incomplete or false information, limits of safety of the weapons and limits of the leaders’ control over them – such overconfidence seems unwarranted and dangerous.<sup>9</sup>

4. Debak Das distinguished between nuclear learning and nuclear wisdom in his presentation. In the nuclear world and the security policy community, taking a distinction seriously *in theory* while not implementing it *in practice* is frequent. In other words, policymakers will claim to understand the distinction between learning and wisdom, and they might indeed understand it, but in practice that will not make a difference. My paper for the November 2015 workshop for this project on the implication and legacy of Thomas Schelling’s work shows how he claims to take uncertainty seriously in theory, but writes and makes recommendations as if it could be reduced to boundable and quantifiable risk.<sup>10</sup> Similarly, Patrick Porter shows that both the 2010 and 2015 British *Strategic Defence and Security Review* recognize the uncertainty and unpredictability of the future, but then proceed to predict anyway.<sup>11</sup>
5. This touches on a deeper ethical and political problem in the quest for learning. A lot of the discussion about learning is implicitly conservative: it is grounded in strategic stability, arms control, and deterrence thinking. In other words, it is premised on the possibility and sufficiency of an epistemological fix to the political problem of the time. If only we could learn fast, well, and enough, that would be good. In other words, knowledge could be sufficient to make nuclear eternity acceptable. The conditions of this acceptability need to be problematized ethically and politically. We need to beware of those limitations when we engage in a discussion about learning. It is not learning about the cases of unprecedented change for the better which were deemed impossible until they happened. It is about learning for the sake of stability with nuclear weapons. Awareness of those limitations is

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<sup>9</sup> Dominic Johnson links overconfidence to the breakout of war in *Overconfidence and War. The Havoc and Glory of Positive Illusions*. Cambridge, MA: Harvard University Press, 2004. In the realm of computer safety, Donald McKenzie showed that: “The safer a system is believed to be, the more catastrophic the accidents to which it is subject.” Donald Mackenzie, “Computer-related accidental death: an empirical exploration,” *Science and Public Policy* 24:1 (1994), p. 246. This notion has been applied to nuclear weapons by Eric Schlosser in *Command and Control*, New York: Allen Lane, 2013, p. 313.

<sup>10</sup> Benoit Pelopidas, “The theorist who leaves nothing to chance. How Thomas Schelling and his legacy normalized the practice of nuclear deterrence.” Unpublished manuscript.

<sup>11</sup> Patrick Porter, “Taking Uncertainty Seriously. Classical Realism and National Security,” *European Journal of International Security*, forthcoming 2016.

crucial for a meaningful reformulation of the responsibility of scholars writing about nuclear weapons too.<sup>12</sup>

I would like to conclude, as promised, with a very modest epistemological suggestion that, in a way, summarizes my previous comments. I would like to call for epistemic prudence on the issue of learning and nuclear knowledge. Given the precariousness of the information we have, the amount of secrecy that remains, the amount of lying that goes on in the nuclear world, and our stubborn cognitive and bureaucratic inclinations to reduce the role of luck to good management, I would suggest practicing prudence in response to this condition of epistemic vulnerability. In other words, I recommend including an epistemic component in our understanding of our condition of nuclear vulnerability. We are most often aware of the fact that we live in a world in which there is no effective protection against a nuclear attack, but the gap between what we know about our nuclear-armed world as opposed to our confidence in the sufficiency of this knowledge is a crucial component of our condition. We should treat this epistemic vulnerability as a component of nuclear vulnerability, and give it due prominence in our analyses.

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<sup>12</sup> This is elaborated in Pelopidas, “Nuclear weapons scholarship as a case of self-censorship in security studies” (fn 4).