"AI in the Line of Fire: Rethinking Ethics in the Face of Tactical Nuclear Threats"

(working title)

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Abstract: Targeting decision-making, including considerations for scenarios involving the hypothetical tactical use of nuclear weapons by adversaries, requires a multilayered approach. Moral responsibility for Western forces, in addition to mission requirements, must be at the core of the entirety of the process before being applied to any AI-model-based decision-making. The integration of AI into such high-stakes scenarios exemplifies the need for ethics by design, ensuring transparency and accountability without allowing religious or personal influences to dominate the decision-making process. To establish AI-supported decision-making, the targeting cycle must be extended to question the notion of universal values, particularly when addressing scenarios of adversarial tactical nuclear weapon use.

Bottom-line-up-front: Relying solely on 'universal values' in AI-supported decision-making misses critical factors, particularly in scenarios involving the hypothetical use of tactical nuclear weapons by enemy forces, which can alter mission outcomes and strategic priorities.

Problem statement: Decision-making and moral decision-making in the Age of AI—The case for reevaluating the moral paradox in targeting, with specific consideration of adversarial tactical nuclear weapon use.

So what?: When considering the future of AI-supported targeting, a greater emphasis on improving the targeting cycle at the tactical, operational, and strategic levels is necessary. This is especially true in scenarios where adversarial tactical nuclear weapon use challenges existing ethical and operational frameworks.

Main Text:

The integration of artificial intelligence (AI) into military targeting processes necessitates a reevaluation of decision-making frameworks to align ethical accountability with operational effectiveness. Hypothetical scenarios involving the tactical use of nuclear weapons by adversaries underscore the complexity of embedding moral responsibility into targeting cycles while maintaining operational readiness.

Traditional targeting models, relying on universal values and rules of engagement, must evolve to address AI's reliance on data-driven algorithms and its susceptibility to bias. These limitations are particularly evident in scenarios where adversarial nuclear weapon use creates unprecedented ethical and operational challenges. Static universal values often fail to account for the nuanced judgments required in such contexts.

Ethics by design, which integrates ethical considerations into AI systems from inception, must safeguard against religious or personal influences dominating decision-making in ways inconsistent with transparency and mission-critical processes. This approach is essential for maintaining trust and accountability in high-stakes scenarios.

To address these challenges, the targeting cycle must be extended to incorporate new layers of ethical and operational analysis. These extensions emphasize transparency in value application and adaptability to diverse contexts. By embedding a dynamic framework for ethical prioritization, the targeting process can align with international humanitarian law, military doctrine, and contemporary operational realities. Scenarios involving adversarial tactical nuclear weapons offer actionable insights into reconciling AI-supported targeting with the moral and strategic imperatives required for effective military operations.

Publication bibliography

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