The impact of Artificial Intelligence on the Military Decision-Making Process (MDMP) and Mission Command (MC): A Comprehensive Approach

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The views contained in this article are the authors' alone and do not represent the views of the Swiss Armed Forces or ETH Zurich.

Abstract:

The gradual integration of artificial intelligence (AI) into military operations is reshaping military command, leadership, and management. Western militaries face the challenge of adapting their command and control structures while harnessing the capabilities of these innovations. They often focus on doctrinal and organisational implications. However, they tend to neglect the impact on leadership philosophies such as Mission Command (MC), considered the gold standard in Western militaries. MC is based on decentralised decision-making, mutual trust across the hierarchy and subordinate initiative. To be effective, such a philosophy must be embedded in military decision-making processes (MDMP) across all levels, as well as in doctrine (tactics).

This paper analyses how the integration of AI affects the procedural, doctrinal, and cultural aspects of military command as reflected in MDMP, tactics, and MC. While AI offers opportunities to increase efficiency, speed, and precision in MDMP, it also allows military units to either decentralise or centralise decision-making. This can either increase or decrease the autonomy and initiative of subordinate commanders, and change the speed and intensity of interaction, potentially undermining mutual trust or delegating it to AI. As AI tools become more sophisticated, the traditional hierarchical flow of command, control and information may evolve into a more networked approach, challenging established doctrines. Taking a holistic approach, this paper seeks to develop approaches to demonstrate the impact of AI on doctrine, culture and organisation, and the interdependencies between them, to enable technological advances to enhance rather than hinder operational effectiveness.

Bottom-line-up-front:

The integration of artificial intelligence in the armed forces not only affects structures (such as C2I), processes (such as military decision-making) and doctrine, but also the less tangible aspects of leadership, such as Mission Command as a philosophy of Western militaries. Only a simultaneous consideration of these areas allows the integration of AI to be thought of holistically and the necessary adjustments to be made in all areas.

Problem statement: How does the integration of Artificial Intelligence (AI) affect the Military Decision-Making Process (MDMP) and Mission Command (MC), and what impact does this have on achieving a balance between structured decision-making and decentralized execution in the Western Militaries?

So what?:

The results should help any commander to adapt not only processes and doctrine, but also the way they shape leadership culture as they integrate AI.

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