# f/1 FRACTION LABS

Document Title: AI Impact on Warfare and Defence

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#### Introduction

AI is transforming modern warfare by improving intelligence, surveillance, reconnaissance, and decision-making. It automates tasks, enhances efficiency, and creates new military capabilities in areas like autonomous weapons, cybersecurity, logistics, and surveillance. While AI offers strategic advantages, it also raises ethical, security, and national defense concerns.

#### **Problem Statement**

Warfare is undergoing a dramatic shift: AI-powered systems are rapidly taking over tasks that used to rely on human decision-making and intuition. The rise of hyperwar and autonomous platforms threatens to minimize human oversight in critical decisions, raising concerns about military ethics, deterrence frameworks, and the future definition of military strength.

### **Impact**

- 1. **Operational Transformations**: AI enables faster, smarter decisions by processing massive datasets almost instantaneously.
- 2. **Force Multiplication**: Autonomous systems can amplify military effectiveness, making it hard for adversaries to respond effectively—this is described as the multiplier force effect.
- 3. **Strategic Risks**: AI challenges traditional ideas of deterrence and could lower the barrier to warfare, potentially destabilizing global military balance.

#### **Solution**

While the paper does not prescribe specific technological or policy solutions, the broader discourse in the field includes ideas such as:

- Reassessing the concept of deterrence in an AI-driven landscape.
- Promoting transparency and caution in deploying fully autonomous systems. arXiv
- Further integrating human oversight and ethical frameworks into AI-enabled defense systems.

#### **Conclusion**

AI is fundamentally changing the nature of warfare—from how decisions are made to how wars are executed. The emergence of hyperwar signals a future where autonomous systems handle the majority of battlefield functions, with humans playing diminished roles. This transformation is forcing a redefinition of military power, national security strategies, and the global balance of power.