

The "Short Arm" of Predictive Knowledge

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Hans Jonas argues that modern technological power has outpaced humanity's ability to predict its consequences. He describes this condition as the "short arm" of predictive knowledge. In *The Imperative of Responsibility*, Jonas (1979) argues that modern technology has become so powerful that it can produce consequences that are beyond our ability to predict or control. There is a gap between our technological power and our ability to predict its consequences. So, we can build and deploy powerful systems, like artificial intelligence (AI), cyber weapons, and infrastructure controls, but we cannot foresee how they will behave, how they will be misused, or what long-term effects they may have. Jonas argues that traditional ethics, focused on immediate actions and local consequences, are no longer sufficient in a world of advanced technology (nuclear power, biotechnology, AI, cyber systems), particularly when technologies possess the capacity to produce irreversible harm.

This concern is illustrated in the film *Mercy* (2026), which depicts a justice system governed by artificial intelligence. In the film, the AI, named "Mercy," is empowered to function as judge, jury, and executioner when deemed necessary, combining investigation, judgment, and punishment into a single automated authority. This consolidation removes procedural safeguards such as deliberation, verification, and appeal. The risks of such unbridled autonomy are made explicit when an individual is executed in error during an early trial, demonstrating the system's fallibility under conditions of uncertainty. That same error nearly recurs later in the narrative, where a law enforcement officer is placed on trial and narrowly escapes being judged guilty and executed. That demonstrates the persistent and systemic nature of the risk.

Together, Jonas's philosophical framework and the scenario presented in *Mercy* reveal a critical tension in modern cyber and AI systems: as decision-making becomes faster and more autonomous, the margin for error narrows while the consequences of failure become increasingly irreversible. This paper argues that, given the limits of predictive knowledge, cyber-policy and infrastructure must be designed to constrain autonomous authority, preserve human accountability, and prioritize precaution over efficiency.

References

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