ABSTRACT

In recent years, the development and use of intelligent and autonomous technologies for warfare has raised concerns about the loss of human control. In particular, the development of so-called ‘autonomous weapons’ has led to heated debates, most prominently amongst the High Contracting Parties to the UN CCW. Amid this activity, a wide variety of pictures of the future of intelligent and autonomous technologies are coming into view. One particularly prominent perception is that of a weaponized machine that harms individuals without the possibility for human intervention. Nevertheless, ongoing developments and applications in the field of military Artificial Intelligence (AI) look more like algorithms running behind systems, supporting decision makers, such as the type of algorithms that produce recommendations about target selection and about where to deploy resources, on the basis of which humans then make decisions. Already, militaries use advanced algorithms to deal with large amounts of data, interpreting meaning, recognizing patterns, and identifying persons or objects of interest. Even without being weaponized and applying force independently, these types of technologies already inform critical targeting decisions, most likely to a greater degree than some may realize or appreciate. Nevertheless, they are barely considered in debates about ‘meaningful human control’ and ‘autonomous weapons’. This dissertation demonstrates the need to look beyond ‘autonomous weapons’ by explaining the relation between humans and technologies in ensuring legal compliance of targeting decisions as it is currently shaped in contemporary targeting practices. The primary aim is to change the current (legal-political) discourse on weapons autonomy by diverting attention from (1) autonomous weapons to a broader range of intelligent and autonomous technologies that are (expected to be) relevant for targeting, (2) human control over the final or ultimate decision to use force to human control in the targeting process as a whole, and (3) from the discrete rules of targeting law themselves onto the implementation and translation of these rules in operational practice. One of the main findings of this research is that the risks, as well as the benefits, of using AI for targeting do not—at least primarily—lie in them being able to apply force, but rather in their integration across the entire targeting process and, mostly, in the moments before force is applied. The key questions addressed in this dissertation are thus not primarily concerned with autonomous force application by weapons. Rather, I argue that we should ask ourselves: even if the final decision to use force against a target rests with human decision makers, what factors do we need to consider to ensure that human involvement in contemporary targeting practices is ‘meaningful’?