

Design and Development of Slotted Blades to Increase Efficiency of Wind Turbines
(Technical Report)

**The Dematerialization of Violence Through “Less-Than-Lethal” Weapons Deployment
Since 2000**
(STS Research Paper)

An Undergraduate Thesis Portfolio

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Prospectus

“Less-lethal” weapons have become an ambiguous category in contemporary American life. The images depicting their use and form do little to conjoin the sectors of violence and authoritarianism. In this way, only by tracing the development of these weapons alongside their deployment can a larger picture begin to coalesce. The technical portion of my thesis produced a lineage of investment and development goals around Kinetic Impact Projectiles (KIPs), a class of “less-lethal” weapons commonly used for crowd control. Meanwhile, in my STS research, the scope was broadened to include all “less-lethal” weapons. Additionally, the meaning behind this aforementioned development in the scope of state control and public dissent came to the forefront. These findings were brought alongside the work of theorists whose work seeks to understand the interplay between the state and violence. By peering inside of the state apparatus which supports their use, “less-lethal” weapons were analyzed through Normalization Process Theory (NPT) to produce an inquiry on the normativity of violence within this structure. Through and by the conclusion that the implementation of these weapons alters norms around and actively degrades the idea of violence, a reflexive look at NPT allowed the construction of recommendations. Focusing on the differing roles of the individual and the institution, an onus is set upon the institution to become self-critical as pressured by the citizens who control it.

Much of the work in my STS project seeks to center the large-scale sociopolitical ramifications of technology’s use by the state. While representing a kind of praxis for myself, the idea to question “less-lethal” weapons came directly after my own encounter with the Philadelphia police department on June 1st, 2020. In the wake of the murders of George Floyd and Breonna Taylor by police, events which are neither isolated nor singular, the show of love, pain, and strife in the form of protest and riot took over much of the United States. One such protest, of many, took place in Philadelphia, PA. It was there that I witnessed a peaceful crowd of people, who had

just taken the time to give remarks and sing, be attacked by a driver who, without resistance, ignored signals by police and drove directly into the crowd (Figure 1). While that may have been enough, the police then turned to block the remaining protestors in as I fled for my life. I still remember getting back to the place I was staying, only to see the same people who had just witnessed grave harm be targeted with chemical and kinetic weapons.

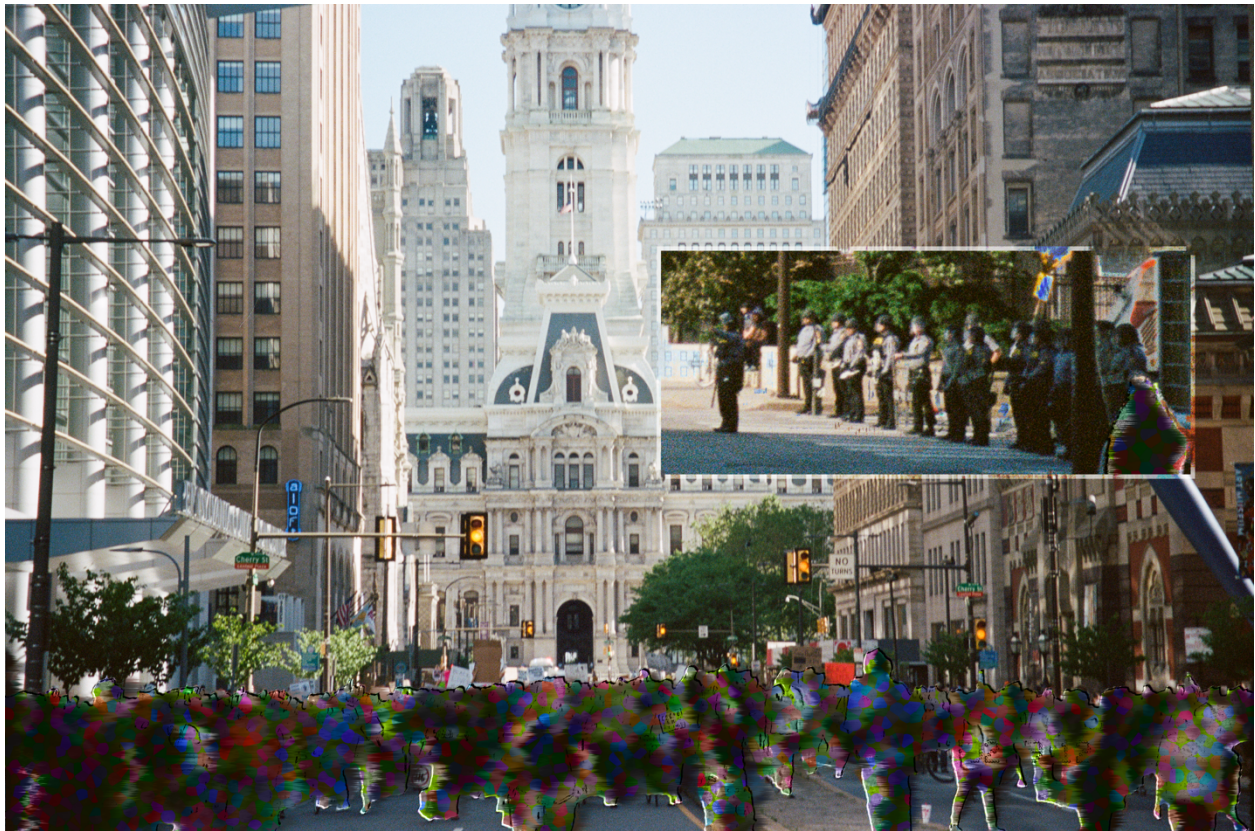


Figure 1. An image taken and edited by me of the protestors a few minutes before the car came. Faces and bodies have been edited out in order to ensure the safety of community members. (Raecke, 2020).

I saw images on social media filled with blood and terror, only to be challenged by individuals on the matter of lethality. As a justification of this level of direct assault on citizens and the rights of all people, I sought to challenge the premise of “less-lethal” weapons and reframe

the explanatory nature with which people tend to justify their use. Over the course of this inquiry, I learned a selection of the vocabulary and syntax with which to defend the rights of people. Complemented by the exposure of myself to current work on the philosophy of violence, I began to understand the method by which the institution of policing has come to be. While still not taking an inherently abolitionist stance in the work, although it may be inferred, the power of the institution was revealed to replicate the opinions of a given set of leaders. Here there is a clue on how methods of organizing, more broadly, can contribute to second-order effects on the structure of the project in question. While still operating within the system at hand, I do believe this critical lens allows for a greater degree of intellectual freedom, while producing the promise of future physical freedom. I do believe that my work encourages these forms of liberty and so too informs individuals on the nature of these weapons.