

Ethical Decision Making and The War in Ukraine

Socio-Technical Synthesis
Presented to the Faculty of the
School of Engineering and Applied Science
University of Virginia

By

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

ADVISOR

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My technical work and my STS research both analyze the impacts of leaders' decision making. Understanding how the decisions that leaders make can impact their spheres of influence is an integral aspect to both my technical work and my STS research. However, the two works differ substantially in how they approach this analysis. My technical work explores the idea that the decisions made by those in power have broad impacts, often well beyond the medium they were initially made in. Whereas my STS research explores the ethical responsibility that leaders must understand is placed upon them when making such decisions.

My technical work analyses the impact that the ongoing war in Ukraine has on the global food supply chain, and it applies this analysis to potential conflict in Taiwan and its possible effects on the semiconductor industry. Specifically, my team explored the policy decisions made during the conflict by Russia, Ukraine, and other nations and how their impacts extended beyond the battlefield. Most notably, after Russian and Ukrainian grain exports – which accounted for a large portion of global supply – stopped after the onset of the war, other exporters which the food supply chain now relied on more, banned exports to ensure their own populations remained fed. These decisions by policy leaders placed an enormous strain on the global food supply and impacted people far beyond the borders of the countries they lead. It is crucial to analyze this concept of direct and indirect effects so that other leaders understand the utility of a complete analysis of their decision-making options.

My STS research focuses on the ethical responsibility that leaders have when making decisions. This was accomplished by analyzing the decisions that were made by the leadership of a wildland firefighting hotshot crew that tragically perished while operating at a wildfire in Arizona in 2013. In this work I used a virtue ethics framework based on established wildland firefighting safety principles to argue that the leadership of the hotshot crew failed to possess

certain virtues necessary to be labeled good and virtuous wildland firefighting leaders. This research was conducted with the goal of stimulating conversation about the responsibility that leaders have to adhere to industry safety standards while balancing their own personal analyses of complex and dangerous situations.

Developing these projects simultaneously, contributed to a more thorough and nuanced understanding of the impacts that leaders can have and the responsibility that is placed on them to make ethical decisions. By working on these projects in tandem and using them to influence one another, I was able to glean the following critical insight: leaders in any industry must fully comprehend and analyze the direct and indirect impacts that actions they are considering could have on their spheres of influence in order to lead effectively and ethically. Completing these two projects, which focused on different aspects of leadership, allowed me to build a strong, cross-disciplined understanding of what it takes to exercise proper leadership.

Table of Contents

File 1: Socio Technical Synthesis

Ethical Decision Making and The War in Ukraine

File 2: Technical Report

Ukraine Food Crisis: Understanding the Impacts of War on the Global Supply Chain and Applying to Future Events

File 3: STS Research Paper

An Ethical Analysis of the Decision Making of the Granite Mountain Interagency Hotshot Crew's Leadership During the Yarnell Hill Fire

File 4: Thesis Prospectus

Using the Russia-Ukraine Conflict as a Predictor for Future Food Supply and Distribution Interruptions

The Politics Behind Food Crises: A Case Study of the 1980's Ethiopian Famine