the line where data are collected and used in the most rigorous manner possible given feasibility and the mission of the research.

Architectural Representations as Examples of Forensic Architecture in Fact-Finding

By Bradley Samuels[*]

Introduction

Whether captured by citizen videos, orbiting satellites, or international monitoring agencies, violations of human rights are increasingly documented in visual and spatial registers. Consequently, architectural representations—plans, physical and digital models, geospatial maps, and remote sensing—are finding an increasing role as evidence in tribunals and international courts. Todays' forums, be they diplomatic assemblies, fact-finding missions, or human rights reports, are beginning to incorporate spatial analysis as a robust component of humanitarian work. Space necessarily emerges here as a legal construct at the intersection of archive, analysis, and artifice—a condition that makes artists and designers uniquely equipped to engage the spatial nuances of cases that previously were the exclusive territory of lawyers, activists, and policymakers. From territorial disputes through acts of genocide, my remarks will explore the role of designers within contemporary legal and political forums through the application of tools and methodologies in an effort to posit new strategies for documenting, mapping, modeling, and visualizing spatial components of international humanitarian law and advocacy.

As part of an investigation into emerging methodologies, a model of synthetic practice is explored here that presents the mining of disparate sources of data into coherent spatial narratives. Strategies are thus explored for combining data types across platforms and sources to leverage a wide range of digital tools to enable workflows between varied softwares—from parametric and geospatial to remote sensing and more. In addition to the tools themselves, representational and rhetorical frameworks specific to both evidentiary and advocacy contexts also are assessed in relation to the aforementioned instruments and methodologies.

The remainder of my remarks will focus on two specific recent applications of spatial analysis in the field. These case studies, while focused on specific topics, should also provide concrete examples of the ways in which emerging geospatial and architectural technology can be leveraged in human rights fact finding and reporting.

Case Study I: Air-Burst White Phosphorus[1]

Among the variety of white phosphorus munitions that exist, this study focuses on the M825A1 delivery method. This munition, typically fired from a 155mm howitzer, sends a single shell up to thousands of meters to its target destination. As it approaches its destination, at a height of 100–200 meters above its target, a charge at the front of the shell is activated, and the shell opens in two parts, releasing 116 white phosphorus-soaked felt wedges contained inside. Once released, the wedges fall from the sky and land in an elliptical pattern. As soon as the wedges are exposed to oxygen, they begin to burn.

[*] Goldsmith's Centre for Research Architecture, Project on Forensic Architecture. The work in these remarks was undertaken within the scope of this European Research Council-funded project.

[1] This case study was drafted for attorneys Michael Sfard and Emily Schaeffer, who are organizing a petition calling for the prohibition of air-burst white phosphorus munitions in urban environments.

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Ultimately, the diffuse nature of this munition makes it impossible to distinguish between legitimate military targets and civilian populations. Many have pointed to international law, specifically the laws that address the use of incendiary weapons outlined in Protocol III of the Convention on Certain Conventional Weapons (CCW). The CCW was written to address weapons that are ''Excessively Injurious or to Have Indiscriminate Effects.'' CCW clearly prohibits the use of incendiary weapons in areas in which they are likely to cause high levels of civilian casualties; however, the M825A1 is arguably not covered. While M825A1 munitions have undeniable incendiary effects, their use is not clearly prohibited by this convention because they are not ''primarily designed'' as incendiary weapons. To address this loophole, a strategy was adopted for this report that focuses on the visualization and quantification of the effects of the munition when deployed in dense urban environments.

This effects-based-analysis draws upon available white phosphorus photographic and video documentation as well as military munitions manuals to reconstruct the behavior of an air burst round in a densely populated urban environment. This analysis is developed as a parametric model that drives an iterative series of visualizations that present the ejection of these wedges in a variety of trajectories and urban environments. The point of this work is not to reconstruct a specific event, but rather to model the behavior of the M825A1 generically with the goal of addressing the behavior of this munition and quantifying its effects.

Case Study II: Non-Assistance at Sea[2]

Among the many migrant vessels that attempted the journey to southern Italy during the 2011 crisis in Libya, one particular case that was covered extensively in the international press involved the journey of 72 sub-Saharans fleeing Tripoli by boat on the early morning of March 27, 2011. After traveling about halfway to the Italian island of Lampedusa during their first day at sea, the vessel ran out of fuel and subsequently drifted for the following 14 days without food or water until landing back on the Libyan coast. Only seven of the migrants ultimately survived. In interviews following the event the survivors recounted a series of interactions they had with other actors while at sea. This included a military aircraft that flew over them, a distress call they placed via satellite telephone, two encounters with a military helicopter, and an encounter with a military ship. The survivors' testimonies clearly pointed to violations of international maritime law which obligates all parties encountering a vessel in distress to render assistance.[3]

In an effort to understand the events that led to this tragedy and to shed light on others like it, a report was undertaken aimed at a spatio-temporal reconstruction of the 15-day period between March 27, 2011, when the vessel left Tripoli, and April 10, 2011, when it washed ashore in Zliten. A comprehensive textual analysis was undertaken in concert with the production of a series of visualizations, diagrams, and figures. This work was an exercise in culling disparate data (geospatial, meteorological, testimonial, military, and other) that was ultimately recombined in an effort to assemble a coherent spatial narrative of the chain of events. The diversity of sources and types of data required the report to draw upon the methodologies and expertise of a variety of disciplines, among them remote sensing, cinematography, architecture, and oceanography. The result is a synthetic spatial product that leverages increasing technological interoperability and cross-disciplinary collaboration to help address what was certainly a humanitarian failure and ultimately also a legal question:

[2] This case study was undertaken in collaboration with Charles Heller and Lorenzo Pezzani.

[3] United Nations Convention on the Law of the Sea art. 98.

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Who was responsible for these 65 deaths? The ultimate destination of this report is a legal case being mounted against France for non-assistance of people in distress at sea. The goal of this work is both to hold accountable those individuals, states, and organizations that failed to assist persons clearly in distress, as well as to draw greater attention to the systemic and longstanding issue of migrant deaths at sea in the Mediterranean.

The Political Dimension of International Human Rights Fact-Finding

By Steven R. Ratner[*]

As the previous panelists have discussed, the backlash against human rights fact-finding is significant. Much of it can and should be addressed by the fact-finding bodies themselves through rigorous methodologies and a careful statement and application of the standard of proof. But the real aversion to and source of complaints about fact-finding bodies is fundamentally political—an aversion by states and some nonstate actors to accountability itself. So how can fact-finding bodies or those who create them respond to this political problem?

The creation of a fact-finding body or special rapporteur is a political act itself. It will have its supporters and detractors, and the constellation of these groups will influence its mode of creation, mandate, membership, budget, working methods, and ultimately, its impact. In this context, it is particularly important to consider the attitude of the state or group that would be examined by a panel or commission. If that target supports the work of the panel and consents to its creation, then the UN Secretary-General, as both a political and legal matter, can create the commission on his own; an example here would be the fact-finding panel that investigated the assassination of Benazir Bhutto, following the request of the Pakistani government. With this consent, a panel can get access to the state and cooperation from key actors, including intelligence and expertise. That consent can itself be the product of politics: Cambodia's 1998 request to the Secretary-General to create the Group of Experts for Cambodia on which I served followed intense diplomacy by his Special Representative vis-à-vis Cambodia's prime ministers.

If, on the other hand, the state opposes the idea of a fact-finding body from the beginning, the options to create such a panel are more limited. The typical response of supporters of such bodies in this situation is to galvanize other states and get the Human Rights Council or the Security Council to create, or authorize the Secretary-General to create, a commission anyway—a method used with Darfur, Gaza, Libya, and Syria. The result of this process is significant outside support for the fact-finding body from UN member states, which can translate into access to their intelligence as well as budgetary support. But those advantages compete with the disadvantages of lack of access to the territory of the state that is the target of the inquiry, so that the fact-finding body often cannot see the sites of atrocities or speak to key witnesses. This limitation can also lead to accusations by the target state that the panel is taking testimony from only one side of a conflict.

What, then, can the United Nations do if both the directly affected state and other key states oppose the creation of a fact-finding body, so that we have neither consent nor authorization through a political organ? Such a scenario could arise through the prospect of a veto in the Security Council or the lack of a majority in the General Assembly or the

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