Called to “Ankle Alley”: Tactical Infrastructure, Migrant Injuries, and Emergency Medical Services on the US–Mexico Border

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ABSTRACT In southern Arizona, emergency responders rescue and transport unauthorized migrants who get hurt crossing the border, either when scaling the steel fence in urban areas or taking remote and dangerous routes through the desert. Using data collected during ethnographic research between 2015 and 2017 with firefighters trained as EMTs or paramedics, the article shows how Border Patrol’s tactical infrastructure produces specific patterns of traumatic injury that are not only routine but also deliberate, allowing us to trace government’s responsibility for what it presents as the unintentional consequence of security buildup on the US–Mexico border. [migration, emergency, infrastructure, border, accident]

RESUMEN En el sur de Arizona, primeros respondientes rescatan y transportan migrantes no autorizados que se hacen daño cruzando la frontera ya sea escalando el cerco de hierro en áreas urbanas o tomando rutas remotas y peligrosas a través del desierto. Usando datos recolectados durante la investigación etnográfica entre 2015 y 2017 con bomberos entrenados como técnicos de emergencia o paramédicos, el artículo muestra cómo la infraestructura táctica de la patrulla fronteriza produce patrones específicos de lesión traumática que no son sólo rutinarios sino deliberados, permitiéndonos trazar la responsabilidad del gobierno por lo que se presenta como una consecuencia no intencional del aumento de seguridad en la frontera Estados Unidos-México. [migración, emergencia, infraestructura, frontera, accidente]

“The border es una herida abierta [is an open wound] where the Third World grates against the First and bleeds. And before a scab forms it hemorrhages again, the lifeblood of two worlds merging to form a third country—a border culture.”
– Gloria Anzaldúa (1987)

May 2015, Nogales, Arizona. The ambulance had just finished a run to the Border Patrol station—a seventeen-year-old Mexican boy the agents detained crossing through the desert earlier in the morning had a fever of 102 degrees Fahrenheit—and was returning to the firehouse, when, at 11:07 a.m., the tones went off again. The Border Patrol requested assistance with a thirty-year-old female who fell off the fence near the corral west of town. She must have been traveling together with our patient. Fernández pointed to a ditch a few dozen feet north of the wall. “She is down there,” he said.

We descended a steep, stony slope overgrown with shrub and found Lupita sitting on the bottom of the ditch on her bent right leg. She had an inch-and-a-half laceration on her forehead, and her forehead was swollen. She said she couldn’t get a grip on the fence when she climbed up and met us near the parking lot where semi tractor-trailers were picking up livestock. Agent Fernández wasn’t sure whether the ambulance could get any closer to the scene. Neither did we. It was a steep dip, but Frank, who was driving, made it through. Once the ambulance parked alongside the fence, we noticed a man with a foot injury sitting in the bed of a Border Patrol truck. He must have been traveling together with our patient. Fernández pointed to a ditch a few dozen feet north of the wall. “She is down there,” he said.

We descended a steep, stony slope overgrown with shrub and found Lupita sitting on the bottom of the ditch on her bent right leg. She had an inch-and-a-half laceration on her forehead, and her forehead was swollen. She said she couldn’t get a grip on the fence when she climbed up and...
fear, headfirst. She complained of lower-back pain. She spoke in Spanish, so Scott, a paramedic, asked Agent Fernández to translate for him. Through Fernández, Scott asked Lupita what day of the week it was, where she came from, and whether she knew where she was. She was from Guerrero, she said. She was “at the border, in Nogales, in Arizona, in the United States,” she knew. She was not so sure about the day of the week. Scott explained to the agent that these questions helped evaluate her neurologic functions. Then he climbed up the slope to retrieve the equipment and call for backup (Figure 1).

I stayed in the ditch with Lupita and Agent Fernández. The stench of cattle dung was strong; flies were everywhere. She asked for water, and I explained that, per protocol, we could not give her any because she may need surgery. I asked whether she had any tenderness in her leg—an agent had told us that she couldn’t stand on one of her feet and that she crawled all the way from the fence and down to the ditch to hide there. But Lupita denied it. She had no pain in her legs, she said. She also said she couldn’t remember whether she really landed headfirst or perhaps fell flat from the top—the details were blurry. It took about five minutes for the rest of the crew to arrive—Captain Lopez, Bojo, Alex, and Carlitos. Division Chief Castro also showed up. Scott was in charge of treatment; he started an IV, hooked it up to a bag of normal saline, and called for a dose of five mg of morphine. “You have to stay awake,” he commanded. “Frank, translate this to her,” Scott turned to his colleague, because he was one of only a few Anglos in the Nogales Fire Department who did not speak Spanish. “If you feel like you are falling asleep, you must let me know,” he instructed the patient.

They put a cervical collar around her neck to protect Lupita’s spine, but she started to gag, and Scott decided to take it off. Lupita closed her eyes and looked like she was dozing off, so the firefighters kept waking her up. They brought a Stokes basket (a litter used for rescue operations on difficult terrain) and discussed the best route to carry her to the ambulance. The slope that we descended was too steep and unstable, with falling rocks and sand; on the other side, there was a fence surrounding the lot with tractor-trailers. The rescuers decided it was best to reach the end of the ditch, where they could climb up the slope more easily and lift the patient across a barbed-wire fence. Six firefighters carried Lupita to the ambulance, their feet sliding on the rocks as they clambered up the slope. Once secured to the long spinal board and put onto the gurney, Lupita was transported by ambulance to a helipad, where the crew of LifeLine 3 was already waiting for her. The mechanism of injury—falling from the height of more than twenty feet—and the possibility of a traumatic brain injury meant that she had to be flown to the Level I Trauma Center at the University Medical Center in Tucson.

Back at the fire station, Captain Lopez left the record of the call in the red logbook: “1107 M2 E2 B2 Dead End Freeport–Jumper/Head Injury.”

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This incident is one of several similar episodes recorded in my field journal. Along the US southern fringe, border-related trauma is so common that it has become normalized. In Douglas, Arizona, about two hours east of Nogales, fire department personnel are dispatched to care for patients with orthopedic injuries—they call them “fence jumpers”—so frequently that they now refer to the cement ledge abutting the international wall as “ankle alley.” “We help everyone. It’s human nature to want a better chance of life,” said Chief Mario Novoa when he invited me for a ride along “ankle alley” in 2015. “We all have the same red blood.” On my first day at the firehouse in Nogales, another firefighter told me what others later often repeated: “We are not in the business of law enforcement or immigration enforcement. We are in the business of helping people.” Yet, despite their ethical commitment to saving lives and political neutrality, municipal fire departments in southern Arizona have been thrust into the mill of policies that target the US–Mexico border as a source of threats. Firefighters trained as emergency medical technicians or paramedics rescue injured migrants who fall off the fence as well as those who are hurt in the desert, fight wildland fires started by border crossers in distress as well as those used as diversion by smugglers, and go to the overcrowded Nogales Border Patrol station to take undocumented minors with seizures, fever, or heat illness to the local hospital.1 Dispatched to correct the deleterious consequences of US federal drug and immigration policies, they witness and experience the most palpable effects of border securitization and militarization.

This article is based on my ethnographic research with firefighters in southern Arizona and northern Sonora. I have been working in the region since early 2015 with the goal of
examining the violent entanglement between statecraft, law, and topography. To trace the harmful effects of the security assemblage on those who inhabit and trespass this militarized landscape, I take the vantage point of emergency responders. Firefighters are uniquely attuned to the characteristics of space, and their training provides them with tactical advantage over the most challenging of environments and structural failures. Yet, along the Arizona–Sonora border, they must also navigate the complex political and legal landscapes sliced by a symbolically charged international boundary. In this article, I focus on the material and aesthetic qualities of security—that is, how its discursive and affective dimensions are anchored in urban and desert terrains. The concept of “tactical infrastructure,” which the US government uses to describe the assemblage of structures and technologies that enhance security, draws attention to the depoliticized and legal methods of deploying state violence against unauthorized migrants. This security assemblage is made up of parts that are scattered across the landscape and includes elements of both natural and human-made environments—the totality that Jason de León (2015) calls “a hybrid collectif.” In the Sonoran Desert, the four states of matter—earth, water, air, and fire—play key roles in producing “accidents” that injure and kill the unarmed. The border wall, in particular, is designed to perform what Achille Mbembe (2003, 21) calls “dem iurgic surgery,” severing the limbs of those who try to scale it. Using Eyal Weizman’s (2014) concept of “architectural forensis,” which regards the built environment as capable of structuring human action and conditioning incidents and events, I propose reading these injuries as state effects. Critical anthropological analysis of the patterns of physical trauma on the US–Mexico border allows us to trace the responsibility of the government for what it successfully presents as the unintentional consequences of security processes.

Neither part of the US security apparatus (like the National Guard or the Border Patrol) nor part of the humanitarian establishment (like the Red Cross, church-run shelters, or volunteer aid groups such as “No More Deaths”), municipal emergency responders occupy a unique structural niche in the contemporary state. They are uniformed representatives of the local government mandated to rescue people hurt in the federal government’s “wars” on drugs, on terror, and on unauthorized migrants. Firefighters work at the splintered space of what Pierre Bourdieu called the “bureaucratic field,” where “the left hand” of the state is remediating the negative effects resulting from the actions of “the right hand” (2014, 20). In the borderlands, tensions and informal compromises between official doctrines and vernacular cultural forms—what Michael Herzfeld (1997) refers to as “disemic” processes—have always been acutely present (see, for example, Heyman 2002). But after September 11, 2001, as fire and emergency medical services became more tightly integrated into the national preparedness and homeland security apparatuses (Fosher 2009; Lakoff 2007) and invested with political and symbolic functions of state authority (Donahue 2011; Rothenbuhler 2005), their professional and ethical mandates have been put further at odds. Today, emergency responders find themselves caught between the imperative of the counterterror state (Masco 2014), or “security logic,” and their continuing obligations of rescue and medicine, or “humanitarian reason” (Fassin 2012). I argue that on the front lines, where they operate at the point of friction between law enforcement and social-humanitarian policies, making choices between order and compassion, firefighters and paramedics simultaneously enact and reproduce this duality of the state, laying bare the violent impulses at its foundation. Their predicament reveals the process through which border-related injuries are depoliticized by being treated as accidents.

I begin this article by providing an overview of research on the risks and dangers that unauthorized migrants face when they try to cross the border from Mexico to the United States. The hazards have intensified as a direct consequence of new security infrastructures and surveillance technologies put into place along the international boundary since the 1990s. The article then moves on to examine the peculiar position of emergency responders as frontline state actors. As government employees, they form an integral part of the federal emergency management system and represent the post-9/11 national security state, but they are also local border residents and professionals bound by humanitarian ethics mandating they rescue and provide medical aid to anyone in need, regardless of their legal status in the country. Using data collected during ethnographic research in nine fire departments along the Arizona–Sonora border from 2015 to 2017, I will discuss the links between Border Patrol’s tactical infrastructure and types of migrant injuries that emergency responders often treat. I finish the article by returning to the question about the accidental versus intentional character of border-related trauma and show why it matters for an anthropological analysis of the state.

**TACTICAL INFRASTRUCTURE**

Many life-threatening injuries in the US–Mexico border space are not accidents. Rather, they result from structural conditions created by the escalation of violence and security enforcement. Criminalization of immigration, which took off in the 1990s, further radicalized by concerns with terrorism in the aftermath of September 11, 2001, led the US government to designate its southwestern border with Mexico as a threat to homeland security, thereby justifying amassing law-enforcement resources to protect it and waging in the borderlands what has been likened to low-intensity warfare (Dunn 1996). To deter unauthorized entry, the government has employed a combination of personnel, technology, and infrastructure, which has made crossing the border considerably more difficult and dangerous.

Fences and gates, roads and bridges, drainage structures and gates, observation zones, boat ramps, lighting and ancillary power systems, and remote video surveillance are part of the US Customs and Border Protection’s “tactical
installed on the front lines of the March 2018
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frontier—gang violence, kidnapping, extortion, rape, and

rural areas, the USBP testified that it has a tactical advantage
over border crossers because they must travel longer dis-
ances before reaching populated areas” (Haddal, Kim, and
2009). Containing such terms as “operational” and
deployed along urban areas. . . . In

Nogales falls within the jurisdiction of Border Patrol’s
Tucson Sector, which covers 262 miles from the Yuma
County line in the west to the Arizona/New Mexico state
line in the east.4 The area continues to be a major route
for northbound migrants and drug and human smugglers.
Border Patrol apprehended 63,397 unauthorized border
crossers there in 2015.5 These numbers don’t say much
about anything. There’s no hard formula to plug them in
and calculate how many people and drugs get across. Yet
this did not stop the federal agency from using them to justify
projects that have converted southern Arizona into the testing
ground for state-of-the-art security infrastructures and
surveillance technologies. It began in the mid-1990s with the
new national strategy to secure the US southern border with
Mexico. Operation Safeguard in Arizona was a replica of Op-
eration Blockade/Hold the Line between El Paso, Texas, and
Ciudad Juárez, Chihuahua, and Operation Gatekeeper on the
San Diego/Tijuana border. It put into practice the 1994
Border Patrol’s Strategic Plan, which assumed that “those at-
tempting to illegally enter the United States in large numbers
do so in part because of the weak controls we have exer-
cised over the southwest land border in the recent past.”6
The centerpiece of the plan was the “prevention through
deterrence” program, which called for “bringing a decisive
number of enforcement resources to bear in each major
city entry corridor.” These resources—an increased number
of agents on the line, aided by the use of tactical infrastruc-
ture (such as landing-mat fencing and stadium-style lighting)
and technology (including night-vision scopes and ground
sensors)—had to raise the risk of apprehension to the point
where many would “consider it futile to attempt illegal en-
try.” The plan predicted that, as the direct consequence of
border security buildup in urban areas, “illegal traffic will
be deterred, or forced over more hostile terrain, less suited
for crossing and more suited for enforcement.” So it was
that in the 1990s the chain-link fence that divided Nogales
(Arizona) and Nogales (Sonora) for most of the last century
was replaced by twelve-foot-high steel panels.

“The threat and terrain dictates the strategy and equip-
ment. . . . There is not one single piece of equipment
or technology or infrastructure that is a panacea to border
security,” explained Manuel Padilla, the former chief of the
US Border Patrol’s Tucson Sector (Trevizo 2015b). An-
nounced in 2011, and expected to be fully operational by
2020, the Arizona Border Surveillance Technology Plan is
the most recent attempt to secure the border. It consists of a
combination of integrated fixed towers, ground sensors that
can detect a single person, and long-range night-vision scopes
mounted on mobile surveillance trucks (Trevizo 2015c). The
program will give Border Patrol “ninety percent situational
awareness.” The defense company that won the govern-
ment’s bid—Israel’s giant private military manufacturer,
Elbit Systems—has promised to bring to southern Arizona
the same security technologies used in Gaza and the West
Bank (Miller and Schivone 2015). Integrated fixed towers
will be equipped with cameras that provide agents with high-
resolution video at a range of five and seven-and-a-half miles
during the day and at night, allowing them to see whether
someone is carrying a backpack or a long-arm weapon. Seven
such towers are already perched on the rolling hills surround-
ing Nogales, Arizona. Thirty-one others will be constructed
in Douglas, Sonora, Ajo, and Casa Grande.

INHUMANE CONSEQUENCES
The trend of border militarization that began in the 1990s and
escalated after 9/11—including the adoption of “prevention
through deterrence” as the primary immigration enforce-
ment strategy, the increase in the numbers of Border Patrol
agents, the parallel multiplication of the Mexican military
after President Felipe Calderón assumed power and declared
war on organized crime (narco guerra), and the blurring of
lines between human smugglers and drug traffickers—has
added to the escalation of violence and resulted in a border-
crossing experience that is extremely dangerous (Cornelius
2001; Doty 2011; Infante et al. 2012; Rubio-Goldsmith
et al. 2006; Slack and Campbell 2016; Slack and Whiteford
2011). Like other urban areas that had traditionally been
popular crossing corridors for unauthorized migrants,
Nogales has been increasingly fortified (McGuire 2013;
Nevins 2010). In addition to the obstacles presented by the
fence, border crossers were subjected to “the thickening
of delinquency” (Rosas 2012) that thrives on the neoliberal
frontier—gang violence, kidnapping, extortion, rape, and
other illegalities. As the Border Patrol’s plan predicted, “ille-
gal traffic” was “forced over more hostile terrain, less suited
for crossing and more suited for enforcement.” Unable to
enter through towns, unauthorized migrants were funneled
to less-policed passages through the Sonoran Desert.

Such stringent security policies are directly linked to the
routinization of migrant deaths. A report prepared by the
American Civil Liberties Union (ACLU) claims that deaths
of an estimated 5,607 unauthorized migrants between 1994
and 2009 were a predictable and inhumane outcome of
border security policies (Jimenez 2009, 7–8). Since 2001,
the Pima County Medical Examiner’s Office counted more
than 2,500 human remains in the Tucson Sector alone. As
migrants who are trying to cross into the United States are being pushed into geographically and environmentally difficult desert and mountain areas in southern Arizona, they have come to rely on guides linked to drug cartels, leading to robberies, kidnapping, physical abuse, and rape. Some get lost or are abandoned by smugglers, especially when they are injured or in distress. Most deaths occur due to environmental factors, primarily from exposure to extreme heat or cold (temperatures can reach more than 120 degrees Fahrenheit during summer days and drop below freezing during winter nights) and dehydration, as people typically never carry enough water to sustain themselves on multiday crossings (De León 2012). Researchers and activists who work with recovering, identifying, and repatriating migrant remains note that, besides exacerbating existing diseases, other common causes of death while crossing the border include blunt-force injuries, train and motor-vehicle accidents, gunshot wounds, natural disasters (such as fire), and drowning in rivers and irrigation canals (Jimenez 2009). Referring to these deaths as a result of “natural causes” or “unintended effects” of “prevention through deterrence” deflects official responsibility.

There are specific patterns of suffering that can be traced back to border securitization and militarization, and that reveal border crossing to be a well-structured violent social process. Drawing on ethnographic and archaeological data from the Undocumented Migration Project in the Sonoran Desert, Jason de León (2012, 2015) has shown how “use-wear” of objects that migrants take with them to avoid being caught by border enforcement agents—black plastic water jugs, cheap sneakers, darkly colored clothes—act on people’s bodies, causing particular types of injuries. All migrants are made vulnerable through encounters with the Border Patrol, coyotes, bandits, and traffickers, but women, children, and monolingual indigenous people face the greatest risk (Slack and Whiteford 2011). Those traveling from Honduras, El Salvador, or other countries south of Mexico may get mutilated if they fall off the freight trains colloquially known as “The Beast” (La Bestia), which they take to reach the US border. Wendy Vogt (2013) has shown how the bodies of Central American migrants have become commodities in the economies of violence and humanitarian aid. These occurrences are not accidents—they must be understood as the result of structural, state, and local economies of violence and inequality (Figure 2).

Despite the risks, many migrants make it across the border alive, but because of severe injuries caused by the journey, they need emergency medical care. The close relationship between securitization of the border and the increased number of trauma patients is illustrated by the following detail: Nogales International reported that in 2011, when the government doubled the height of the border fence in the city, the number of times fire department ambulances transported someone from the border spiked (Prendergast 2013). In 2015 and 2016, the Mexican Consulate registered 125 Mexican nationals hospitalized in Tucson, most of them for fractures caused by falling off the border wall (muro fronterizo), while other reasons for hospitalization included dehydration, injuries to the feet (blisters, cuts), and drinking contaminated water. The consulate also registered bites by poisonous animals, spontaneous abortions due to severe dehydration, people swept away by the arroyo during the rains, sexual abuse by human traffickers, and ingestion of cactus. The numbers may seem low, but that is because the consulate only learns about a patient when either the Border Patrol or the hospital lets them know. On the other side of the border, Juan Bosco migrant shelter in Nogales, Sonora, accepted thirty injured people in June 2015 alone (Echavarri 2015).

To reduce the number of deaths, the Border Patrol created a special Search, Trauma, and Rescue Unit (BORSTAR). Yet the role of BORSTAR is rather controversial because sometimes border enforcement agents are the ones responsible for injuring migrants (Isacson, Meyer, and Davis 2013; Martínez, Slack, and Heyman 2013). To mitigate the deadly effects of security policies, humanitarian organizations such as Humane Borders, Tucson Samaritans, and No More Deaths, among others, took on the task of rescuing unauthorized migrants and providing them with first aid (Magaña 2008). Volunteers build water stations stocked with food, clothing, and first-aid kits, and set up medical camps. They also patrol the desert on foot and in vehicles in search of migrants who need help. In situations where their condition is critical—for example, when border crossers have altered mental status, difficulty breathing, or snakebites—volunteers try to persuade migrants to allow them to call 9-1-1 and transfer them to local medical facilities. CBP officers at Arizona’s ports of entry also have prosecutorial discretion, which enables them to consider the person’s condition and use humanitarian parole to temporarily admit immigrants for health reasons, even when the patients do not have a passport and a visa.

But the Border Patrol agents, immigration officers at the ports of entry, and humanitarian aid volunteers don’t have the indiscriminate provision of prehospital medical services as the official mandate of their jobs. In southern Arizona, this task belongs to local emergency responders. An ethical framework that underlies the principles of health care distinguishes emergency responders from Border Patrol agents, who, even when trained in first aid, are primarily concerned with enforcing the law. Their affiliation with local city or county governments also sets them apart from humanitarian volunteers who are not accountable to state agencies. How do these public service employees negotiate their seemingly contradictory functions of being part of the state apparatus while at the same time being mandated to rescue those injured by government policies?

**FIREFIGHTERS AS STATE ACTORS**

Emergency responders have a pragmatic, hazard-oriented disposition towards the border region, which has been sensationalized and politicized in national public discourses.
The labor of structure and wildland firefighting hinges on competence: practical types of knowledge, the know-how of the city or the country, acquired through repeated encounters with the dangers of the local topography (Desmond 2007). Previously called “smoke eaters” and associated with untamed bravery, firefighters have evolved into a highly trained, all-hazards response task force, dispatched to vehicle collisions, confined-space rescue operations, floods, and other incidents. In the 1970s, fire departments across the United States started providing prehospital medical services to the critically ill and injured in their communities. Firefighters are now routinely certified as emergency medical technicians (EMTs) and increasingly choose to obtain paramedic licenses. In southern Arizona, even small fire departments operate advanced life support (ALS) ambulances, equipped with cardiac monitors and medications, and they get more calls for health emergencies than for other types of incidents. Today, fire and rescue squads are the embodiment of what historian Mark Tebeau described as “the melding of men and technology into an efficient, lifesaving machine” (2003, 287).

Fire departments have also changed their traditionally local orientation and adjusted to the demands placed on first responders by the national political milieu. As municipal service providers, fire departments and firefighter unions have historically played an important role in local city governance, supporting candidates in mayoral and city council elections. Their significance didn’t reach much further than the boundaries of the neighborhood where they served and where they knew the residents. Yet now firefighters have been placed on the front lines of the federal state and its security mission. Their role in responding to the 9/11 attacks, when 343 firefighters died in the collapsing towers in New York City, has solidified their symbolic status as national heroes in the “war on terror” and justified their co-optation into national preparedness and homeland security structures.

Politically and administratively, fire and rescue services across the United States have been incorporated into the system of federal emergency management, which falls under the purview of the Department of Homeland Security. As their mandate expanded to include incidents involving “all threats and hazards,” firefighters have been trained to effectively respond to an open-ended list of emergencies, from industrial hazardous-waste spills to terror attacks involving biological, chemical, radiological, and other weapons of mass destruction, to epidemic infectious disease. They regularly participate in exercises and drills that prepare them to deal with these and other emergent threats to national and global security (see Fosher 2009; Collier and Lakoff 2008; Lakoff 2007; Masco 2014). Yet the routine work of firefighters rarely calls for such large-scale mobilization. Daily, they respond to 9-1-1 calls within their local jurisdictions, helping people in the most vulnerable situations, where their everyday practices are nonetheless interlaced with security politics. Emergency responders work under conditions of increased anxieties in their communities and amidst residents’ concerns that locally financed fire and rescue services are being diverted to address the consequences of federal security enforcement (Lovett 2012; Prendergast 2013). Nowhere is this more visible than on the US–Mexico border. Here, an already difficult physical terrain—the desert, with steep crevices, abandoned mine shafts, extreme temperature changes, toxic plants and animals—is made even more threatening by security tactics aimed at curbing undocumented migration and drug trafficking. Many of the emergencies local firefighters and paramedics respond to are the result of the life-threatening combination of the legal grid imposed on the region’s physical topography.

While unauthorized migrants who work in the United States may try to avoid interacting with health-care providers out of fear of being detained and deported (Holmes 2013; Horton 2016), this is usually not an option when they get critically ill or injured while crossing the border. The burden of ethical and legal action then falls on emergency responders, who, like other street-level bureaucrats, such as police officers and social workers, wield considerable discretion over the day-to-day implementation of public programs (Lipsky 1980). The Emergency Medical Treatment and Active Labor Act, known as EMTALA, requires health-care providers to treat anyone who needs emergency medical care, regardless of income or immigration status. Fire departments follow medical protocols that outline what mechanisms of injury and what signs and symptoms warrant transporting patients...
by air to the nearest trauma center in Tucson. A patient’s legal status in the country has no place in medical-decision charts. Yet, as research in different social settings has shown, relationships between laws, policies, and medical ethics are often incongruous, making the interactions between frontline health-care personnel and their “illegal” patients fraught with tension (e.g., Castañeda 2011; Chavez 2012; Heyman, Núñez-Mchiri, and Talavera 2009; Marrow 2012; Rosenthal 2007; Willen 2007).

Firefighters who rescue unauthorized migrants in southern Arizona experience conflicts between state policies, on the one hand, and professional, moral, and ethical obligations, on the other, which place them in an ambiguous position with respect to the law and to the state as political authority. In recent years, the major issue has become the conflation between prehospital medical care and immigration enforcement. Due to a lack of federal mechanisms to compensate taxpayer-funded fire departments for providing treatment and transport to unauthorized migrants, they have been reporting these patients to the Border Patrol. Once unauthorized migrants are in the custody of the Border Patrol, the federal government assumes at least partial responsibility for the costs of medications and other supplies that emergency service providers use to rescue, treat, and transport patients to the hospital. Several fire chiefs I interviewed in southern Arizona said that this is never the full price—the reimbursement can be as low as 20 percent.

While chiefs are officials accountable to local administrations, which explains their concerns about operational costs and their department’s budget, many rank-and-file firefighters don’t want their work to be limited by financial or political calculations. “The guys, from the captain down, wanna help people. That’s our goal,” said Billy Bob, a thirty-year veteran of the Nogales Fire Department. A female paramedic in Arivaca, who did not hide her position against unauthorized migration, said: “I can’t discriminate and I wouldn’t discriminate against anybody. If you need help, I’m gonna help you. I don’t care if you are from another country. It doesn’t matter.” Though she is ready to assist anyone, regardless of the patient’s legal status in the country or their criminal background, this paramedic always reports unauthorized migrants she treats to the Border Patrol. But there is no consensus regarding this matter among emergency responders I interviewed, and while some are grateful to the federal agency for funds and manpower, others are critical of their involvement in emergency care. Captain Byerle summed up this predicament: “We are not Border Patrol. Since he’s on this side of the fence, wherever it is, we had been told to treat that patient. With that issue [referring the patient to the Border Patrol], you are making the EMS people become involved with immigration enforcement.” In the end, humanitarian logic triumphs over policy. Captain Byerle said that sometimes they had to circumvent the rules and make a “moral decision”: “We’ve gone out to places where people were in extremely bad shape and taken medical custody of them, knowing that I should have called the Border Patrol before. Like we say here, ‘If I’m gonna mess up, I’m gonna mess up to the good side.’ When that patient is walking home or something and they say: ‘How come you didn’t call the Border Patrol?’ I’ll say: ‘Well, you know what? Sue me.’”

Unauthorized migrants can have it worse. The border zone has been called the “Constitution-free zone,” where the area’s very proximity to the international boundary breeds concerns over security, which in turn justify the bending of the laws (Dorsey and Díaz-Barriga 2015). More often, local fire departments are not even contacted to provide emergency medical services to injured border crossers. In 2015, the ACLU criticized southern Arizona’s Santa Cruz and Pima counties, where Nogales and Arivaca are located, for violating the Equal Protection Clause of the Fourteenth Amendment when they found that the sheriffs’ departments “selectively referred” 9-1-1 calls from migrants in distress directly to the Border Patrol, bypassing local first responders (Trevizo 2015a).

THE FENCE: AMPUTATIONS AND FRACTURES

“When it used to be the old fence, people would cross, go in and out. Not a big thing.” Having worked for the Nogales Fire Department since 1985, Assistant Chief William Sanchez said that until the 1990s unauthorized crossing was very common. He, like many of those who work in the fire service, is a local of the town, where more than 90 percent of the population is Hispanic and where the common language in all but government business is Spanish. Most of the residents in Nogales have family on both sides of the border and call the sister cities of Nogales, Arizona, and Nogales, Sonora, “Ambos Nogales.” Founded in the 1890s, the Nogales Fire Department employs forty-two shift workers, of which at least three began their careers as volunteer firefighters on the other side of the border, in Mexico. Over the years, they experienced changes to border infrastructure first as residents of these towns and only later as emergency responders. “When we were kids, we used to cut through the fence and go buy bread and stuff over there [in Mexico] and then come back,” one captain told me. Another firefighter reminisced about a man on a bicycle who would bring lemons and cheese from Nogales, Sonora, to sell them at the fire station in Nogales, Arizona. The fence was there, but it didn’t mean much to anybody.

It was not until the mid-1990s when a metal wall was erected to divide Ambos Nogales. This new barrier was made from surplus steel planks that the US military used as portable pads for landing Hercules cargo planes and Huey helicopters during the Vietnam War. Even the US Army Corps of Engineers, who designed the M8A1-style solid corrugated-steel panels, acknowledged the flaws in their construction: the landing pads had rough edges that frequently ripped the tires of heavy aircraft (Hattam 2016). By the end of the war, the military had replaced them with aluminum mats, relegating M8A1s for taxiways and parking lots. After Vietnam, landing mats were easily repurposed for other ends. Measuring twelve feet long, twenty inches wide,
a quarter-inch thick, and weighing 147 pounds, the panels became “army surplus.” They were taken for free and redeployed to the US southwest border. Each mile of fence required 3,080 metal sheets. By 2006, they were used to build more than sixty miles of border fence in California, Arizona, and Texas. In Nogales, the new rusty steel barrier extended 2.8 miles; depending on the location, it was eight to twelve feet high and had an anti-climb guard (McGuire 2013, 472).

When the landing-mat wall was erected in Nogales, emergency responders were regularly called to help unauthorized border crossers who were injured while trying to scale the barrier separating them from the jobs at construction sites or agricultural fields in the north. The same sharp edges that damaged the tires of the military fleet in Vietnam caused large gashes, limb amputations, and degloving injuries to these migrants. Alex Flores, who has worked for the Nogales Fire Department since the mid-1990s, recalls:

When [border crossers] were climbing down, they would slip and the hands would get stuck up here, so they would get their fingers cut off . . . everything would get caught up here because it was sharp. [Authorities] say they weren’t, but I think they were made intentionally like that to deter people from coming over. So people would get their fingers cut off, and they would land on this side, and the finger parts would land on the other side, usually, or they would get lost between the plates, so we never could get them out. [In] some places they used to have cuts on the bottom [of the fence] for the water to go through with grates on it. You could still see across and you could see the fingers . . . on the other side of the border, and the people were over here. Sometimes we would reach over and grab the body part, bring it over and put it on ice. It used to happen a lot.

In 2011, the aesthetically displeasing landing-mat wall was replaced by a sturdier and taller bollard-style barrier. Constructed of interconnected steel tubes extending up to twenty feet above the ground and ten feet below the surface, this fence was designed to act as a more effective deterrent against people climbing over or digging under them (Stephenson 2011). The new design of the barrier produced different types of injuries. While the earlier version, made of corrugated sheet metal, caused gashes and amputations, the present border wall is difficult to hold on to and migrants often fall down. A surgeon at the trauma center in Tucson, who has treated many injured border crossers, explained in an interview in 2015: “In certain areas the fence is up to twenty to thirty feet high. A fall from that height can be pretty serious. Very frequently we see patients with orthopedic injuries. Ankle fractures are very common, tib-fib—or lower extremity—fractures, and spinal fractures.” He listed the most common damages to the body caused by the border fence. “It’s a pattern of injury,” he said. “When someone falls and lands on their feet, the energy is transferred from the feet all the way to the spine” (see Figure 3 and Figure 4).

Some stretches of the present wall are more perilous than others. There is an offset landing with cement and rocks where most dramatic injuries occur (see Figure 4). “That’s probably about a four to five feet area, like a sidewalk, but with rocks sticking out from it,” a paramedic in Nogales once described it to me. “What other reason are these there for?” another firefighter rhetorically asked. “They are there to injure people so that they couldn’t run from the Border Patrol.” These firefighters knew it from experience, having responded to help numerous patients with orthopedic, spinal, and head trauma on that small piece of land right next to the CBP parking lot. “We had people that landed on their head and died,” one of them said. In February 2012, a forty-four-year-old man from Oaxaca, Mexico, died on the west side of town when he sustained head and neck injuries (Pineda 2016). Two years later, in March 2014, a forty-one-year-old man from El Salvador died from head trauma after falling from the border fence near the end of Short Street (ibid.). In 2016, the Nogales Police Department was investigating the death of a thirty-two-year-old woman from Juchitepec, in the State of Mexico, whose body was found near the border fence in the east of Nogales. She, too, had fatal injuries after possibly falling off the fence, reported the police. Security buildup on the border was largely based on weaponizing the already difficult physical terrain. To emergency responders, the cause was obvious; they did not hesitate to implicate

![FIGURE 3. The Mexican side of the border fence between Nogales, Sonora, and Nogales, Arizona. October 2016. (Photograph by author)]

![FIGURE 4. The US side of the border fence between Nogales, Arizona, and Nogales, Sonora. October 2016. (Photograph by author)]
THE ROAD: HIGH-SPEED CHASES AND ROLLOVERS

Those deterred by the fence and who choose to cross the border through what the Border Patrol Strategic Plan refers to as “the hostile terrain” are subject to other mechanisms of injury. Although emergency responders from Nogales are also dispatched to rescues in the hills and canyons outside of town, it is the rural fire departments that carry the heaviest burden of treating and transporting unauthorized migrants who get hurt in the desert. In 2015, I conducted fieldwork with firefighters in Arivaca, an unincorporated community of about seven hundred residents located eleven miles north of the border. It is on a popular transit route through the desert between Nogales and Sasabe, used by undocumented migrants and drug smugglers alike. Arivaca Volunteer Fire Department, which was founded in 1986 and became a district in 2009, has two emergency medical responders per shift covering a territory of 612 square miles. In 2015, the department responded to 192 calls for EMS, fire, welfare, and other situations; twenty-four of those runs involved a patient in the custody of the Border Patrol.¹

Tangye Beckham—firefighter, paramedic, and the district’s interim fire chief, who has lived in Arivaca for most of her life—said: “They are traveling at night and if you don’t know the terrain, I wouldn’t walk out here at night, but they do. Because they figure they are undetected. They fall off cliffs or they trip over rocks. The terrain is very rough.” Emergency responders are routinely called to rescue migrants who fall into abandoned mine shafts, twist their ankles on the rocks, or lose a lot of fluids during prolonged exposure to extreme heat. Most of them need treatment for dehydration, which, after days of heat exposure, can be severe and cause permanent damage to the kidneys. Border Patrol agents often find injured migrants in locations that are remote and difficult to access, miles off the paved road, so it can take an hour or more until emergency responders reach them and begin treatment. Once the patient is in the ambulance, the drive to the closest hospital in Tucson takes another hour. When the life of the patient is in danger, emergency responders call rescue helicopters, which can cover the same distance in less than twenty minutes (Figure 5).

Before the checkpoints were permanently installed on both roads connecting Arivaca to the rest of the country—one at the entrance of I-19 in Amado, the other on State Road 286 north of Sasabe—the Arivaca Fire Department frequently responded to vehicle rollovers. An EMT I interviewed in 2015 told me about the “car-wreck phase” in the late 1990s and early 2000s, when the Border Patrol chased vehicles carrying unauthorized migrants “packed like sardines.” Once, he was the first responder to arrive on scene with seventeen patients. He recalled the scene:

There’s been people apneic and pulseless, and, assessing the patients, I knew there was no helping them. There were some people that had broken bones, but it wasn’t life threatening, so I would go on to the next patient. . . . There were people who had problems with breathing or were bleeding really bad and I would attempt to stop the bleeding and make sure they have a clear airway and make sure . . . that somebody was holding C-spine. . . . I’ve splinted broken femurs, I’ve splinted arms using a stick. We used what we had. Duct tape. Cardboard.

Roadside crosses, marking the sites where deadly accidents took place, dot the highways of southern Arizona. Emergency responders in Tubac, Sonoita, and Nogales Suburban fire districts told me similar stories. Throughout the years, local firefighters responded to multiple vehicle rollovers, often involving pickup trucks and vans sometimes carrying dozens of unauthorized migrants, and they consistently told me that many of these deadly accidents happened as a result of the pursuit on roads that have dangerous curves, often at night. Carmen Hernandez, who at the time worked as an EMT in Tubac, recalled an incident on June 6, 2009, when a Ford Excursion carrying twenty-four people rolled over on State Route 82 east of Sonoita, and eleven unauthorized migrants were killed:

I was brand new. I remember getting off the ambulance and it was like a war zone. Bodies everywhere. . . . The first patient I remember seeing was a fourteen-year-old. . . . Then, as you start walking, there were head injuries, there was brain matter on the ground. One of the patients, he was a DOA [dead on arrival], was under the Border Patrol jeep.

Despite rollovers being a topic regularly covered in the local press, often under sensationalized headlines (“13 from ‘Deep in Mexico’ Hurt in Arivaca Rollover,” Tucson Citizen, February 22, 2003; “1 Dead, 7 Critical in Entrants’ Crash,” Arizona Daily Star, January 11, 2005), this incident attracted unprecedented media attention. Even though one of the survivors, a Mexican national, said a Border Patrol vehicle
had been following the SUV, which accelerated and, due
to the oversized load, blew a rear tire and rolled multiple
times, causing most of the passengers to be ejected, officials
denied that the truck was being pursued. The investigation,
led by the Arizona Department of Public Safety, focused
on identifying the driver, who could have faced charges for
multiple homicides (Ceasar 2009). But because the driver
turned out to be among the dead, the US Attorney’s Office
convicted four other men for their part in the migrant-
smuggling operation based out of Cananea, Sonora. One
of them, thirty-seven-year-old Oscar Garay-Mariscal, who
received $500 for his role as a “trail scout” and spent nine
days in a coma after the accident, was sentenced to sixty-
five months in federal prison (Nogales International 2011).
Indexical links that hinted at larger forces and institutional
responsibilities behind this and other tragic events have not
been pursued.

**CONCLUSION: INTENTIONAL ACCIDENTS**

Descriptions of injuries that firefighters share with each other
are often graphic and gory—fingers amputated by the rusted
metal fence, brain matter scattered on the asphalt after a ve-
hicle crash—but these details are salient. In the depoliticized
space of the firehouse, recounting accidents is the vernacu-
lar through which they engage in social critique. Emergency
responders usually stay away from discussing national pol-
itics or particularly polarizing issues. They have to rely on
each other; in emergency situations, their lives are literally
in the hands of their peers. Hence, by the unwritten rules
of the firehouse, any topic that could splinter this broth-
erhood is taboo. When emergency responders tell stories
about trauma and rescue, they don’t assign blame, but these
narratives form a record that can be used to reconstruct
the chain of events leading to the accident and assign guilt.
Sometimes the stories point to individual responsibility, and
at other times they hint at policy failures. Where political
discourse is limited, their narrow focus on the injured body
is the only acceptable means that firefighters and paramedics
have to express disagreement with government actions. In
this article, the patterns of injuries they observed became
ethnographic and analytic cues—forensic traces—of state
violence directed at unauthorized migrants.

In September 1966, the National Academy of Sciences
published a document, *Accidental Death and Disability: The
Neglected Disease of Modern Society*, which laid the foundation
for emergency medical services in the United States. The
report emphasized the “accidental” nature of trauma-related
injuries and deaths and lamented that “the human suffering
and financial loss from preventable accidental death consti-
tute a public health problem second only to the ravages
of ancient plagues or world wars.” To this day, the mandate
of prehospital trauma management in Nogales, Arivaca, and
other fire departments across the United States stems from
this document. But what constitutes an accident? According
to the definition, an “accident” is an unfortunate eventuality,
an incident that happens unexpectedly and unintentionally,
resulting in damage. In Aristotelian thought, it signifies a
property or quality that is not essential to a substance or
object. However, as Paul Virilio noted: “WHAT CROPS
UP (accident) is a sort of analysis, a technoanalysis of WHAT
IS BENEATH (substate) any knowledge” (2011, 10). To in-
vent the ship is to invent the shipwreck; to invent the train
is to invent the derailment; to invent the automobile is to
produce the pile-up on the highway. In his critique of new
technologies and scientific progress, Virilio revisits Aristo-
tle’s ideas and writes, “the accident reveals the substance.”
Accidents are programmed into the products of modernity.
We can see this in forensic accident investigations, which
challenge the fortuitous nature of vehicle collisions and air-
plane crashes; scientific discovery of the incident’s chain
of causation allows moral and legal responsibility to be as-
signed, and “the accident as such ceases to be” (Siegel 2014,
20).

Migrant injuries on the US–Mexico border have never
been accidental—they are not chance occurrences or con-
tingencies. But unlike shipwrecks or automobile pile-ups,
which happen without an intended cause, border trauma is
deliberate. It is calculated and produced by those who deploy
the security apparatus as the means of enacting the policy of
“prevention through deterrence.” The Border Patrol explicit-
ly calls the fence part of its “tactical infrastructure,” with the
operational goal to give them an advantage over those who
disregard the blunt message: no trespassing. A broken ankle
or an amputated finger becomes proof of illegal entry—a
civil offense. But crossing the border without authorization,
through a clandestine passage, is a rather mild violation of
the law, which precedes and substitutes for a possibly serious
one: suspected drug trafficking, a criminal offense. When
an accident is treated as a potential crime, the state assumes
the right to exercise force against the victim-criminal. In
her analysis of car accidents in post-apartheid South Africa,
Rosalind Morris argues that “the state opens a space to exer-
cise force,” not by making crimes look like mere accidents
but by representing the accident as a possible crime (2010,
612). The injured migrant is always already implicated as a
criminal. She stands in for the drug traffickers and the “mur-
derers and rapists” that conjure up fear in national political
rhetoric.

This line of argument is important, but it is limited
to discourse. In this article, I urge us to consider the
infrastructure itself—the design and textures that result
in specific patterns of trauma—as a form of state violence
and an inherent crime. Architecture theorist Eyal Weizman
describes built environments as “composite assemblies of
structures, spaces, infrastructure, services, and technologies
with the capacity to act and interact with their surroundings
and shape events around them. They structure and condition
rather than simply frame human action, they actively—
sometimes violently—shape incidents and events” (2014,
16). They can thus be used to reveal how states and private
corporations commit crimes in the routine of governing
their subjects while at the same time erasing the visible
traces of their transgressions. This approach “turns space into evidence, but also into the medium in which different types of evidence come together and into relation with each other” (19). Road accidents and traumatic falls are programmed into the built environment. Firefighters follow the cracks in urban infrastructures that threaten life and rescue those who trip and fall in predictable—because intentional, therefore preventable—patterns. Rescue is a quintessentially spatial task, unfolding on landscapes that cripple trespassing bodies in ways that may hinder their survival—deplete them of oxygen, puncture their blood vessels, cut their spinal cords. Emergency responders study the relationship between spatial forms—physical terrain, logistical landscapes, buildings—and the types of incidents and injuries they produce. They practice using hydraulic tools to extricate bodies from mangled vehicles on the highway and secure patients with potential back and neck injuries to the backboard before lifting them into the ambulance.

In Nogales, Arivaca, and other fire departments across southern Arizona, emergency responders are dispatched to incidents caused by deliberate modifications of the environment in the name of security. Not only is emergency routine on the border, but accidents are purposeful. They are not due to an error or the malfunctioning of the security apparatus. Migrant injuries are its intended outcomes. Critical anthropological analysis of Border Patrol’s tactical infrastructure provides us with tools to examine the political implications of topographical forms and textures. The patterns of migrant injuries signal the role of the state as the quintessential spatial task, unfolding on landscapes that guide through revisions. This article is a testament to the hard work of emergency responders on the US–Mexico border, and it is to them that I am most indebted for sharing their lives and their stories.

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NOTES

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1. In southern Arizona, many municipal and county fire departments also provide public ambulance services. In Nogales, up to 90 percent of the calls firefighters respond to each year are for medical emergencies. Considering this trend, all firefighters are required to be certified as emergency medical technicians or paramedics. The situation is similar in neighboring jurisdictions.

2. For Bourdieu, “the left hand” of the state consists of spending or social ministries, in charge of public education, health, housing, and welfare, whereas “the right hand” refers primarily to financial ministries. Loïc Wacquant later expanded this to include the police, the courts, and the prison as the core constituents of the “right hand” of the penal state. Here, I use “the right hand” in reference to government institutions responsible for enforcing the economic discipline and social order.


4. While 212 miles have some form of fencing, including Normandy-style anti-vehicle barriers, the remaining fifty miles have natural barriers: mountains and deserts.


8. Information obtained from the Arivaca Fire District through a public records request, May 9, 2017.


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