



# Weak Seed and a Poisoned Land

## Slow Violence and the Toxic Infrastructures of War in South Lebanon

VASILIKI TOUHOLIOTIS

*Independent Researcher, USA*

**Abstract** Six years after the cease-fire that halted the 2006 war between Lebanon and Israel, southern Lebanese indicted the remains of Israel's weapons for contaminating their lands, stunting their crops, and making them sick. Against local and international discourses claiming inconclusive evidence and uncertainty about the toxic effects of the war, my southern Lebanese interlocutors insisted on causally linking Israel's weapons to the perceived surge in cancer, infertility, and environmental degradation since 2006. Their insistence that war was causing this ongoing bodily and environmental malaise exposes the slow violence of war and challenges the liberal idea of war as a temporary event and paroxysm of violence. Taking southern Lebanese accounts seriously reveals how the liberal idea of war keeps Israeli weapons, toxic environments, and embodied pathologies causally separate and restricts what gets counted as a casualty of war. Based on a year of ethnographic fieldwork, this article approaches the confirmed and suspected toxic remnants of war as toxic infrastructures that sediment and distribute war's lethal potential, years after the last bomb was dropped. Building on local accounts of the 2006 war that emphasize enduring environmental toxicity and its gendered effects, this article argues that southerners deployed their embodied knowledge of toxic infrastructures to contest the uncertainty about Israel's weapons and to produce new truths about the war. Southerners thus disputed liberal assumptions about the end of the war, challenged normative understandings of war casualties, and enacted new ethical frameworks for recognizing the belated injuries of the 2006 war.

**Keywords** war, slow violence, environmental racism, infrastructure, toxicity, Lebanon

Six years after the cease-fire that officially halted the 2006 “July War” between Israel and the Hizbullah-led “Lebanese Resistance,” the southern Lebanese who lived in the war's battlefields spoke insistently about their dying bodies, infertile land, and stunted crops.<sup>1</sup> Although scientific evidence of war-induced illness was elusive, and

1. Following southern Lebanese, I refer to the 2006 war as the “July War” and to Israel's military opponents in Lebanon as “the resistance.”

there was a paucity of proof that Israel's weapons had polluted South Lebanon, conversations about the 2006 war during ethnographic fieldwork in South Lebanon in 2012 emphasized the palpability of environmental contamination and the certainty of disease: farmers complained vociferously that their tobacco plants and their citrus and olive trees no longer yielded as they had before the war. Inhabitants of villages somberly described cancer as suddenly everywhere. Humanitarian aid workers remained bewildered by bodies being mysteriously eaten alive after having touched the remains of Israeli weapons, and agricultural engineers lamented orchards of trees that were slowly dying from shrapnel wounds to their bark.

This article investigates the competing truths about the July War's toxic effects, the unequal power to produce these truths, and the insistent claims by southern Lebanese that Israel's weapons were slowly killing them. Building on feminist environmental historian Michelle Murphy's work on "chemical infrastructures," I treat the confirmed and suspected toxic remnants of war in South Lebanon as infrastructures that promote, alter, or disallow certain forms of life.<sup>2</sup> Scholarship on war that focuses on logistics, roads, military bases, and weapons laboratories exposes the importance of infrastructure to war's killing and its production of killable lives.<sup>3</sup> Infrastructures are not, however, just physical things. Murphy's treatment of the "spatial and temporal distributions of industrially produced chemicals" as chemical infrastructures reveals the infrastructural quality of exploded bombs and of the toxic remnants and pollutant clouds they leave in their wake.<sup>4</sup> Following Murphy, my use of the term *toxic infrastructure* aims at exposing weapons-related environmental contamination as a constitutive part of such infrastructure's productive power to shape who lives and dies in South Lebanon and *how* they do so.<sup>5</sup> This brings environmental contamination into relief as an important source of war's slow violence and turns the long aftermath of war into a critical time for death and injury. By showing how toxic infrastructures temporally disperse war's capacity to kill, this article thus refutes the liberal idea of war as a temporally bounded event and furthers understandings of war by feminist and postcolonial studies scholars as an ongoing technology of rule.<sup>6</sup>

My interlocutors were certain that the toxic infrastructures of war in post-2006 South Lebanon had filled the air and soil with poisons and infiltrated their cells and

2. Murphy, "Distributed Reproduction, Chemical Violence," n.p. For historian Gabrielle Hecht, toxic infrastructures are produced by structural racism and state mismanagement, a paradigmatic example being the contaminated water in Flint, Michigan. While structural racism is an important condition for the toxic infrastructures I address, my concern is not with state-managed physical infrastructures. See Hecht, "Toxic Infrastructures."

3. Cowen, *Deadly Life*; Graham, "Demodernizing"; Khalili, "Roads to Power"; Lutz, *Homefront*; Masco, *Nuclear Borderlands*.

4. Murphy, "Distributed Reproduction, Chemical Violence," n.p.

5. Puar, *Terrorist Assemblages*, xii.

6. Asad, *On Suicide Bombing*; Butler, *Frames of War*; Butler, *Precarious Life*; Enloe, *Maneuvers*; Gregory, "In Another Time-Zone"; Jabri, *War*; Mbembe, "Necropolitics"; Puar, *Terrorist Assemblages*; Stoler, *Duress*; Wilcox, *Bodies of Violence*.

sperm, even though there was little scientific evidence of these conditions. While I do recognize the toxic landscapes that my interlocutors insisted they inhabited, my aim is neither to prove nor to dismiss their claim that environmental contamination constituted a deliberate Israeli strategy to kill them. Rather, given the political field in which truths about the 2006 war's toxic effects were produced, I argue that southerners deployed their embodied knowledge of toxic infrastructures to contest the uncertainty about Israel's weapons and to produce new truths about the war. Through the evidence they marshaled of their diseased bodies and lands, southerners made claims about a causal link between Israel's toxic weapons, the pollution of their environment, new forms of gendered embodiment, their slow deaths, and even their gradual extinction. These claims, I argue, dispute liberal assumptions about the end of the war and challenge normative understandings of war casualties. The claims also enact new ethical and epistemological frameworks for recognizing injuries of the July War that are slow, belated, and potential.

In this article, I first examine the debates about the weapons used by Israel in South Lebanon during the 2006 war. I show how actors ranging from the United Nations Environment Programme to the Lebanese government participated in what historian of science Robert Proctor calls "agnogenesis," the production of uncertainty, about Israel's weapons and their effects.<sup>7</sup> Countering this uncertainty, international weapons watchdog groups, independent scientists, and Lebanese environmentalists produced their own evidence of Israel's weapons. I then explore the mechanisms through which international human rights organizations and important local actors, such as Lebanese state officials and Hezbollah's social welfare agencies, keep Israeli weapons, toxic environments, and embodied pathologies causally separate and concealed beneath what architect Eyal Weizman calls a "threshold of detectability."<sup>8</sup> Finally, I turn to accounts of cancer and infertility by two southern Lebanese men whose livelihood in agriculture was severely disrupted by the July War bombing. Both emphasize the toxic infrastructures of the July War to challenge the war's assumed end and expand its causality. Their accounts make belated injuries of the war detectable by highlighting environmental violence, gendered forms of embodiment, and the reconfiguring of concepts of masculinity and femininity by the slow violence of war.

### **Research Context and Methods**

The July War, whose slow violence is the subject of this article, is assumed to have begun with Hezbollah's capture of two Israeli soldiers on July 12, 2006, at Lebanon's southern border and to have ended with a cease-fire on August 14.<sup>9</sup> While the capture

7. Proctor, "Agnology," 11.

8. Weizman, "Violence at the Threshold," n.p.

9. McGreal, "Capture of Soldiers," n.p.

of the soldiers spurred Israel's bombing, there is a longer history of war and occupation in South Lebanon that belies any neat narrative of the war's beginning and end. Since the late 1960s, South Lebanon has been a key battlefield for military resistance to Israel's Zionist state and to its occupation of Palestinian and Lebanese lands and a prime target of Israel's military campaigns and scorched-earth policies.<sup>10</sup> In 2006, six years after the Hizbullah-led "liberation" of South Lebanon from Israeli occupation, Israel returned to bomb Lebanon's civilian infrastructure, Hizbullah's military positions, and what Israel claimed were 160 Shiite villages in South Lebanon that had been turned into Hizbullah bases.<sup>11</sup> The bombing destroyed entire villages in the South and neighborhoods in the southern suburbs of Beirut. It caused the largest oil spill in the Mediterranean and left behind two to four million unexploded cluster bombs. And it killed twelve hundred civilians and displaced nearly one million.<sup>12</sup>

My intervention into a dominant understanding of the temporality of the 2006 war and truths about its wounding builds on the narratives and experiences of those who inhabit its battlefields and embody its slow violence. I use ethnographic methods to document accounts of slow violence, to show how uncertainty about the toxic infrastructures of the 2006 war was both made and contested, and to situate these toxic infrastructures in a broader geography of bombed places that includes Iraq, Vietnam, and Palestine. Ethnography is a particularly germane method for studying the production and contestation of truths because it allows me to situate truth and uncertainty in a broader political field, to seriously engage with the claims and marginalized knowledge articulated by southerners, and to consider the embodied experiences that shore up a different understanding of the temporality of war's violence. This attentiveness to claim making, disqualified knowledge, and embodiment are cornerstones of ethnography, but they also represent a feminist approach to studying war. While a feminist ethnography of war does not manifest here as a writing of women's worlds of war, my engagement with the accounts of southern Lebanese men about the embodied effects of the 2006 war extends feminist insights about war's production of bodies and hierarchies of human lives.<sup>13</sup>

It was an intense interest in the layered histories of bombing and the multiple temporalities of war's violence that led me to choose South Lebanon as the field site for my doctoral dissertation research. Much of the data that I present in this article was collected

10. Khalidi, *Under Siege*; Suwayd, *al-Janub al-Lubnani*.

11. London, "Dahiya Strategy." For a critical perspective, see Gregory, "In Another Time-Zone."

12. Amnesty International, "Deliberate Destruction or 'Collateral Damage'? Israeli Attacks on Civilian Infrastructure," August 22, 2006, [www.amnesty.org/en/documents/MDE18/007/2006/en](http://www.amnesty.org/en/documents/MDE18/007/2006/en); "Fatal Strikes: Israel's Indiscriminate Attacks against Civilians in Lebanon," Human Rights Watch, August 2006, [www.hrw.org/reports/2006/lebanon0806](http://www.hrw.org/reports/2006/lebanon0806); UNEP, "Lebanon."

13. Cohn, "Sex and Death"; Butler, *Frames of War*; Butler, *Prekarious Life*; Enloe, *Maneuvers*; Wilcox, *Bodies of Violence*.

during a year of fieldwork in 2012 through observations, informal conversations, and semistructured interviews.<sup>14</sup> My interlocutors were doctors who treated people wounded by explosive remnants of war, farmers whose lands had been bombed, local representatives of the Lebanese state who sought to leverage state resources to help the war beleaguered, high-ranking officials of social welfare agencies belonging to South Lebanon's two most important political parties, and humanitarian workers and agricultural engineers who ran postwar economic rehabilitation programs. All of the interlocutors whose statements I draw on here are men, since it was men who dominated the agricultural sector, electoral politics, and the administration of nongovernmental social welfare agencies.<sup>15</sup> However, while it is the voices of men that feature in this article, the men's wives were in fact present during the interviews, though they were often busy preparing food or coffee to serve us or taking care of children.

Being a Westerner and a woman researcher in the active battlefield of South Lebanon meant that I was often met with suspicion and was forced to rely heavily on the dominant political parties and established nongovernmental organizations for access to my interlocutors. At the same time, my interest in war as an ongoing political project resonated with a range of southerners who saw me as a conduit for telling a story of the July War that aligned with their understanding and experience of it. Moreover, as a foreigner and an academic who nonetheless lacked a recognizable class position, it was possible for me to be alone with men and to spend time with both women and men from a range of socioeconomic classes without transgressing social norms. I undoubtedly benefited from my gender and the assumption that, as a woman, I was innocent and in need of protection. Embodiment is therefore not only an explicit concern of this article but in this case was the very condition of possibility for fieldwork amid the slow violence of war.

### **The Making of Toxic Uncertainty in South Lebanon**

In its compendious postconflict assessment report on the 2006 war, the United Nations Environment Programme (UNEP) finds evidence of Israel's use of white phosphorus in Lebanon and notes that many of the white phosphorus-packed artillery mortars failed to explode, thus delaying the release of the toxic and highly flammable compound that now endangered civilians.<sup>16</sup> The report also indicates evidence of carcinogenic heavy metal pollution caused by the metals released in exploded bombs.<sup>17</sup> Finally, the report

14. My research protocols were approved by The New School Institutional Review Board. All subjects were informed of plans for the use and protection of ethnographic materials gathered during the study and their consent was obtained.

15. Women were, however, a part of my larger research project and figured prominently in my research on humanitarian demining and social and medical care for the war-wounded in South Lebanon.

16. UNEP, "Lebanon," 152.

17. *Ibid.*, 154.

addresses the “reports and rumors” that Israel used weapons with depleted and enriched uranium, toxic substances though not explicitly banned by international law. After conducting its own investigation, UNEP concluded that Israel did not use weapons containing uranium.<sup>18</sup>

UNEP’s neat conclusion belies a slew of investigations by Lebanese scientists and environmentalists as well as international concerns about Israeli weapons. The debate around uranium weapons began shortly after the war, when Lebanese physicist Mohammed Ali Kobeissi tested soil samples in bomb craters in the South and found elevated levels of radioactivity, leading him to suggest that Israel had used depleted uranium.<sup>19</sup> Kobeissi’s findings, which were published by Green Line, a Lebanese environmental nongovernmental organization (NGO), could not be confirmed by the Dutch Laka Foundation, which found no evidence of uranium weapons.<sup>20</sup> But UNEP’s conclusion also elicited the attention of two British weapons researchers known for their incriminating publications on US uranium weapons in Iraq.<sup>21</sup> Chris Busby and Dai Williams tested bomb craters in the South and the air filter of an ambulance struck by an Israeli bomb and found levels of radioactivity that they argued indicated enriched uranium.<sup>22</sup>

The debate around uranium weapons continued in 2008, when a Lebanese newspaper published Kobeissi’s results from urine analyses conducted on a group of patients from the heavily bombed southern suburbs of Beirut who had symptoms of dizziness, nausea, and fatigue. Kobeissi found industrial and enriched uranium in their urine fourteen months after the war, leading him to conclude that Israel had used weapons with a particularly insolvent type of uranium.<sup>23</sup> A rebuttal by the Lebanese Minister of Health claimed that Kobeissi’s findings were not accurate and did not follow scientific methods.<sup>24</sup>

This 2008 exchange is the last trace of the debate around Israel’s use of uranium weapons in Lebanon. Rather than inciting more study, the debate ended with accusations of “unscientific” methods and controversial politics. Israel’s suspected use of dense inert-metal explosive (DIME) bombs followed a similar course. Evidence compiled by the watchdog group New Weapons Committee indicted Israel for using experimental weapons, including DIME bombs, in Lebanon in 2006.<sup>25</sup> A type of nonconventional “low collateral damage” weapon, DIME bombs are filled with microparticles of highly toxic

18. *Ibid.*, 151.

19. Kobeissi, “Study.”

20. Campaign against Depleted Uranium, “Laka Finds No Evidence of DU in Lebanon,” CADU, October 2006, [www.cadu.org.uk/news/24.htm](http://www.cadu.org.uk/news/24.htm).

21. Caputi, “Victims of Fallujah’s Health Crisis.”

22. Busby and Williams, “Evidence of Enriched Uranium”; Busby and Williams, “Further Evidence of Enriched Uranium.”

23. Ghusun, “Dirasa Jadida.”

24. Sim’an, “Khalifa.”

25. Manduca, “Evidences of New Weapons”; Manduca, “Report to the International Citizens Tribunal.”

metals, including tungsten.<sup>26</sup> Yet despite testimonies from Lebanese physicians collected by the New Weapons Committee that substantiated suspicions of the bombs' use, a persistent murkiness surrounds the issue. Allegations of the use of DIME bombs in Lebanon are only the subject of speculation, disguised in secondary clauses in newspaper articles, buried among other claims in human rights reports, or virulently dismissed on blogs as propaganda.<sup>27</sup>

My intent here is not to take a side in the debates about Israel's weapons in Lebanon. Rather, I contend that the inconclusiveness of the evidence along with the accusations of controversy and unscientific methods amount to what Proctor calls agnotogenesis, the manufacture of doubt and ignorance that keeps hazardous products in circulation and deflects responsibility for their lethal effects.<sup>28</sup> As in Lebanon, controversy initially mired scientific studies of the health effects of the herbicide Agent Orange and of depleted uranium weapons used by the United States in its wars in Vietnam and Iraq. Controversies silenced claims of injury, delayed and blocked treatment and compensation, and, in the case of depleted uranium, protected the weapons' legal status.<sup>29</sup>

Commenting on the contradictory findings of weapons investigations in Lebanon and the abrupt cessation of research, the Lebanese environmental organization Green Line writes: "It is worth noting that in the Balkans, experts of the UN needed about three years to determine the use of depleted uranium in the war. In Lebanon, the issue was closed only after a couple of months of work hinting to a political decision behind concluding the work that rapidly and without further in-depth investigation using more reliable methods."<sup>30</sup> Green Line's statement indicts politics in the making of toxic uncertainty in South Lebanon. It gestures to the tremendous legal, scientific, and political labor involved in obscuring toxic relations and to the uneven distribution of power to make authoritative claims about US and Israeli weapons.<sup>31</sup> Green Line's explicit reference to the prolonged temporality of uranium weapons detection also underscores the latent temporality of the toxic manifestations of war that science and law are often structurally incapable of recognizing.<sup>32</sup>

26. Defense Update, "Dense Inert Metal Explosive (DIME)," [defense-update.com/products/d/dime.htm](http://defense-update.com/products/d/dime.htm) (accessed January 7, 2018).

27. Halperin, "Are New Weapons Being Used?"; "The 'Hoax' That Wasn't": The July 23 Qana Ambulance Attack," Human Rights Watch, December 2006, [www.hrw.org/legacy/backgrounders/mena/qana1206](http://www.hrw.org/legacy/backgrounders/mena/qana1206); Plosker, "IDF 'Secret Weapons' Slur"; Wictor, "Lie That Israel Uses 'Banned Weapons.'"

28. Proctor, "Agnotology." See also Markowitz and Rosner, *Deceit and Denial*; and Oreskes and Conway, *Merchants of Doubt*.

29. Dewachi, "Toxicity of Everyday Survival"; Fox, "Chemical Politics"; Jones, "Toxic War."

30. Green Line, "Use of Banned Weapons by Israeli Military on Lebanon (July–August 2006)," [greenline.me.uk/environment-research/the-use-of-banned-weapons-by-israeli-military-on-lebanon-july-august-2006](http://greenline.me.uk/environment-research/the-use-of-banned-weapons-by-israeli-military-on-lebanon-july-august-2006) (accessed January 7, 2018).

31. Jones, "Toxic War"; Murphy, "Chemical Regimes"; Proctor, "Agnotology."

32. See, for example, Dewachi, "Toxicity of Everyday Survival"; Fox, "Chemical Politics"; Jain, *Injury*; and Markowitz and Rosner, *Deceit and Denial*.

The murkiness around DIME bombs, uranium weapons, and environmental toxicity in Lebanon can be situated in a longer history of war, empire, and environmental destruction. Formerly colonized places and their disposable populations have long been—and continue to be—turned into the laboratories of war and sites of inconclusive knowledge about its effects.<sup>33</sup> Uncertainty about weapons not only is politically produced and unevenly distributed but, as the work of anthropologists Michael Taussig and Ann Laura Stoler suggests, is itself a mechanism of a colonial order that delineates forms of life that are worthy of protection.<sup>34</sup> In South Lebanon, the uncertainty around Israeli weaponry restricts which injuries get counted and which lives get to be grieved as war casualties.<sup>35</sup>

Like uncertainty, the concept of war as a bounded event also places temporal limits on the recognition of war's casualties and causality. As feminist scholar Judith Butler's poignant question—"When is life grievable?"—affirms, there is a crucial temporal structure to the recognition of vulnerability.<sup>36</sup> This is exemplified in a 2007 Human Rights Watch report that stops counting civilian deaths from the 2006 war at the cease-fire declaration, despite the massive amounts of unexploded remnants of war.<sup>37</sup> In thus containing its investigations of civilian casualties to the internationally recognized time of war, Human Rights Watch limits the notion of casualty to official wartime. Those who die *after* the cease-fire are not only *not* casualties, the investigation suggests, but also remain causally separate from war.<sup>38</sup>

It is striking that there were not more voices in Lebanon like Green Line clamoring for more certainty on the toxic effects of Israel's weapons and intent on broadening the categories of casualty and causality. Interviews with important figures in South Lebanon who bore responsibility for the war wounded, either as their political representatives or as their caregivers, revealed that they were similarly invested in uncertainty about toxic contamination, a temporally restricted understanding of war, and a limited conception of war injury.

Hajj 'Abbas, of Hizbullah's al-Jarha Association for the War Wounded and Disabled, for example, dismisses my suggestion that talk of cancer and infertility in the

33. Dewachi, "Toxicity of Everyday Survival"; Johnston, "'More like Us than Mice'"; Khalidi, *Resurrecting Empire*; Nixon, *Slow Violence*; Stoler, "'Rot Remains'"; Vine, *Base Nation*.

34. Taussig, "Culture of Terror"; Stoler, *Archival Grain*.

35. Butler, *Frames of War*; Butler, *Precarious Life*.

36. Butler, *Frames of War*; emphasis added.

37. "Why They Died: Civilian Casualties in Lebanon during the 2006 War," Human Rights Watch, September 2007, [www.hrw.org/sites/default/files/reports/lebanon0907.pdf](http://www.hrw.org/sites/default/files/reports/lebanon0907.pdf) (hereafter "Why They Died"). For an extensive report on cluster bombs and their damages, see "Flooding South Lebanon: Israel's Use of Cluster Munitions in Lebanon in July and August 2006," Human Rights Watch, February 2008, [www.hrw.org/reports/2008/lebanon0208](http://www.hrw.org/reports/2008/lebanon0208).

38. While post-traumatic stress disorder (PTSD) may appear as an exception to this temporal template, Lamia M. Moghnie argues that, in Lebanon, PTSD is not a belated condition but a technology for legitimating certain forms of suffering. See "Humanitarian Psychology."

South might point to the less visible ways in which war impinges on daily life.<sup>39</sup> He is the public relations officer for Hizbullah's social welfare agency that provides assistance to the organization's veterans, fighters, and civilian victims of war. Hajj 'Abbas is reluctant to identify illness as a direct wound of war. Rather than exploit the opportunity to indict Israel with yet another crime, as I anticipated he would, he cited lack of evidence and the inability to prove causality. Dr. Musa Mallah, a medical doctor and the former mayor of one of South Lebanon's largest towns that was severely bombed during the 2006 war, is similarly insistent about the impossibility of proving Israel's bombs as the cause of cancer, though he acknowledges that cancer has been on the rise. He worries, moreover, that focusing on illness deflects from the real problem. "The issue," he says, "is not cancer but Israeli aggression." In his insistence that the two are not causally related, Dr. Mallah affirms an epistemology that recognizes only one cause for injury.

The refusal of Hajj 'Abbas and Dr. Mallah to engage with belated illness as a casualty of war reinforces death and injury tolls as the dominant lexicon for representing and ethically assessing war. These tolls, however, as evidenced in the Human Rights Watch report cited above, are unable to register latent injury, uncertainty about toxic weapons, and the murky links between the two. They are, in other words, incapable of representing what literary and postcolonial scholar Rob Nixon calls "slow violence." Nixon argues that slow violence—attritional, delayed, often invisible, and disproportionately impacting postcolonial geographies and disposable people—is shunned by modes of representation that privilege violence as spectacle. "Casualties of slow violence," Nixon writes, "become light-weight, disposable casualties, with dire consequences for the ways wars are remembered, which in turn has dire consequences for the projected casualties from future wars. We can observe this bias at work in the way wars, whose lethal repercussions spread across space and time, are tidily bookended in the historical record."<sup>40</sup>

While the "representational bias" against war's slow violence structures Western accounts of war and the reports of human rights organizations,<sup>41</sup> it was also reproduced by the very people who inhabited the slowness of war's violence and yet refused to broaden the temporal and epistemological parameters of war injuries lest they should have to take responsibility for them. In refuting a causal connection between cancer and war, Hajj 'Abbas expresses his commitment to a narrowly circumscribed category of injury and thus limits the forms of injury that Hizbullah—the self-proclaimed caretaker of the people of the South—should be responsible for. Dr. Mallah also fears the political consequences of acknowledging illness as a casualty of war. In the absence of scientific proof of Israel's weapons as the sole cause of the diseased bodies and land in South Lebanon, there is a risk that Lebanese politicians and their negligent management of the environment might be faulted. Echoing the logic of the Human Rights Watch report, these political actors insist that the war's violence be bookended by the

39. Names of people and places have been changed to protect the anonymity of my interlocutors.

40. Nixon, *Slow Violence*, 13.

41. *Ibid.*

official beginning and end of the 2006 war, severely restricting its causality and contributing to the ongoing agnogenesis about Israel's weapons and their toxic effects.

### **Cancer and the Gendered Metastases of War**

While the epistemic frames of death and injury tolls weigh profoundly on what is rendered legible as an effect of war, the remainder of this article seeks to understand war's casualties and causality beyond this frame. To do so, I turn now to examine the less legible spaces of war's belated violence. This is the space beneath what Weizman calls the "threshold of detectability," where the crimes of war are committed—precisely where the legally prescribed resolution of a satellite image, for example, makes it impossible to see what has been destroyed in a drone strike.<sup>42</sup> Thresholds of detectability are not, however, just techniques that obscure violence and its perpetrators. Rather, they are powerful material and epistemological devices that sever connections between toxic infrastructures of war, technologies of rule, and the futures they produce.<sup>43</sup> In what follows, I show how accounts of sick bodies and land challenge the uncertainty about the toxic infrastructures of war and disrupt the evidentiary regimes and generic conventions that maintain thresholds of detectability. By making claims, moreover, about gendered forms of embodiment and the reconfiguring of concepts of masculinity and femininity, these accounts insist that the toxic infrastructures of war produce killable life and life unworthy of reproduction as forms of slow violence.

While talk of cancer during my fieldwork typically took the form of succinct statements about skyrocketing rates of incidence, a former forager turned postwar development success story spoke about cancer beyond this epidemiological template. Abu Ja'far once lived off the wild thyme called *za'atar*.<sup>44</sup> Ubiquitous in Lebanese cuisine, *za'atar* is the main ingredient in an eponymous and revered mixture of spices. Deep green, with flecks of red from sumac and white from sesame seeds, the *za'atar* mixture is combined with olive oil and eaten with bread. For most of his life, Abu Ja'far foraged for *za'atar* in the time between the relenting of the winter cold and the onset of the summer heat. He describes waking up, sometimes at two o'clock in the morning, other times at five, setting out in the dark and fighting the urge to sleep in order to collect as much of the wild plant as possible. When he was not foraging, he worked with his wife and children to dry the *za'atar*, pound its leaves, and sell it at local markets. He claims that the *za'atar* of his village was famous, and sometimes he would sell all his stock in one week and live happily all year.

The massive assault of cluster bombs by Israel on Abu Ja'far's village made the areas where he once foraged for wild plants deadly. "Ninety-eight percent of the wild plants I used to collect," he says emphatically, "they became unavailable, prohibited."

42. Weizman, "Violence at the Threshold."

43. Stoler, "'Rot Remains.'"

44. Arabic words have been transliterated based on a simplified version of the system of the *International Journal of Middle East Studies*.

Figure 1. Za'atar grown in a greenhouse in South Lebanon, 2011. Image courtesy of kaveyeats.com.  
© Kavita Favelle



Banished by unexploded cluster bombs from the land that once provided his livelihood, Abu Ja'far began to cultivate za'atar on a plot of land adjacent to his home. Local and international development NGOs, including the United Nations Development Programme, Green Hand, and Land and People, which were distributing aid for postwar rehabilitation projects, eagerly funded and shaped Abu Ja'far's initiative. Placards of their support flank the entrance to his za'atar field: neat rows of uniform plants crisscrossed by a black irrigation hose (fig. 1).

Abu Ja'far insists that Israeli bombs and missiles have irreversibly poisoned the land: "In this village there are 100 people who have died since the war, and not a single case is not from cancer, cancer of lungs or the stomach. Where is this coming from? From food, from the earth, from the wheat, from the air, from water. This is because of the war and it won't end for a thousand years and even if the soil is cleared." Abu Ja'far refutes the possibility of an end of war and anticipates a long future of ongoing and not yet manifest war casualties.<sup>45</sup> From dying bodies, he turns abruptly to talk of the dying land and its diminished yields:

Every year there is a decline in tobacco and olives. Every year. And the amount of chemicals we used to use, we're increasing them. We have enough rain. It's the poison in the land. The soil is fertile but the poisonous material that came from the projectiles, it spread in the land. Millions of projectiles fell on us in the South with hundreds of kilos of TNT. Where did it go? . . . Where did it go?

Abu Ja'far's description draws out how the very ordinary activities that are supposed to reproduce life—eating, breathing, and cultivating the land—have become the sources of its attrition.<sup>46</sup> There is a poignant contrast between romantic images of the land in southern Lebanese narratives of resistance and Abu Ja'far's condemnation of an irreversibly poisoned land. Far from indexing the resilience of embattled forms of life, Abu Ja'far's land is rendered a repository of toxic chemicals and the scene of ongoing degradation.

45. On the future temporality of industrial pollution that this mirrors, see Fortun, "Ethnography in Late Industrialism," 450.

46. Berlant, "Slow Death."

For the third time in our conversation, Abu Ja'far says that 90 percent of the inhabitants of the South have cancer, as if by repeating this undoubtedly inflated statistic he can make up for the absence of epidemiological facts. The repetitions and hyperboles in Abu Ja'far's account contrast with the measured language of Human Rights Watch's forensic investigation into civilian casualties and documentation of the time, place, cause of death, and political affiliation of the victims.<sup>47</sup> In contrast, Abu Ja'far deploys repetition and exaggeration to upend the representational bias against slow violence and to portend a future in which an entire population lives in anticipation of more war and its latent effects.<sup>48</sup> The exaggerated rates of disease that Abu Ja'far so assuredly quotes expose the condition of still dying from war that is below the threshold of detectability and implore a future in which ordinary practices of life are not risky ventures: walking on craggy slopes to collect za'atar without the risk of stepping on a cluster bomb; rebuilding the wall of a home without the risk that it will be demolished again by another missile; breathing the air without risk of inhaling carcinogenic particles of heavy metals.

Abu Ja'far continues, stressing the gendered quality of the truncation of life: "The woman in the South is dead by sixty-five. Fifty, fifty-five, sixty years old and they die. They go to the hospital and die three days later. The lungs burned or the stomach burned. From air and food. And the missiles. . . . You go to Beirut and they don't die at this age. The woman in Beirut is still a girl." Abu Ja'far genders the body ravaged by war as a woman's body—specifically from the South—and thereby invokes the paradigmatic figure of innocence in military discourses and the laws of war to make a claim about the toxic infrastructure of war and its uneven distribution of harm.<sup>49</sup> According to the Geneva Conventions of 1949, categories of protected people are those persons assumed to be incapable of fighting and therefore innocent. Yet as feminist political theorist Helen Kinsella argues, it is "reproductive capability and sexual vulnerability that places women outside the fighting."<sup>50</sup> Women are therefore unlike the other protected persons insofar as their innocence is considered to be innate. This is the very discourse that Abu Ja'far replicates when he genders the wounded and vulnerable body of war.

Israel's indiscriminate bombing of South Lebanon, as geographer Derek Gregory maintains, rendered it a "zone of indistinction" that lethally blurred civilians and combatants<sup>51</sup>—blurring the assumed masculine practice of war and the feminine, civilian space of peace outside politics and fighting.<sup>52</sup> Against Israel's blurring of this distinction,

47. "Why They Died."

48. Jain, "Living in Prognosis."

49. Enloe, "Womenandchildren." On the gendered and racialized quality of innocence, see Ticktin, "What's Wrong with Innocence."

50. Kinsella, *Image before Weapon*, 123.

51. Gregory, "In Another Time-Zone."

52. Enloe, *Maneuvers*; Kinsella, *Image before Weapon*.

Abu Ja'far's insistence on the dying body as female recuperates the distinction between feminine civilians and masculine combatants. Deprived by Israeli bombs and the toxic infrastructures of war from the possibility of being a civilian, Abu Ja'far latches on to the female body and, like international law and military discourse, uses her to claim the civilian status of southerners and to make their wounds detectable.<sup>53</sup> We are not terrorists or combatants, Abu Ja'far implies in his appeal to the dying female body, but innocent, injured civilians.

Abu Ja'far's narrative is mournful and withholds redemption: he grieves and refuses cures and clearance. Despite the success of his cultivated za'atar that others in the village are jealously emulating, his words do not inspire hope, and they do not conjure the figure of the survivor of war. "I miss her," Abu Ja'far confesses, using the feminine object pronoun of the Arabic word for "wilderness," *al-barriyya*. On days when he is out of sorts, Abu Ja'far makes coffee and sits at the edge of the wilderness that cluster bombs forbid him from entering. He gazes at her from afar, listening to the wind and the birds.

At Beirut's weekly organic farmers market, which has received development funding from US and European governments, Abu Ja'far's za'atar is sold alongside other wild medicinal plants that he now cultivates. While his narrative of a poisoned land and sick bodies makes the slow violence of war visible, his packaged organic za'atar participates in producing the end of war and obscuring its killable lives. As Abu Ja'far's za'atar leaves the bombed fields of his village and enters a market designed for Lebanon's tourists and cosmopolitan class, it acquires a new value as a healthy and authentic commodity, abstracted from the killable labor that produced it, the toxic soil in which it grew, and the slow violence that made it necessary. Not only does circulation in a different regime of value efface za'atar's toxicity, it also transforms its dangerous potential for latent illness and slow violence into a redemptive agent of postwar development. Indeed, Abu Ja'far's za'atar cultivates an ersatz copy of a plant and way of life that war continues to destroy beneath a threshold of detectability, concealing the postwar as the lag time of war's slow violence.

### **Infertility and the Reproduction of War**

Abu Ja'far's za'atar was, of course, not the only organic product from South Lebanon to be produced in soils laden with the toxic remains of war. After the 2006 war, it became possible to buy traditional organic soaps from women's collectives and to consume organic olive oil. Nor were Abu Ja'far and other foragers of za'atar alone in having to change their agricultural practices. Indeed, most farmers were forced by the war to change what and how they farmed. This was particularly evident in the agricultural

53. Kinsella notes that "even if the discourses of gender produce the distinction between combatant and civilian, the civilian as constructed is not worthy of much protection at all" (*Image before Weapon*, 123).

lands surrounding the coastal city of Sour, where avocado, banana, and Maltese plum trees were planted to replace citrus orchards destroyed by Israel's bombing. However, these changes to agriculture did not garner international aid funds and were not made legible as practices of postwar development and recovery. In the orchards where citrus was replaced with more profitable cash crops, war could still be recognized as a violently disruptive force.

It was in these orchards, just past the cinder-block homes of the al-Rashidiyya Palestinian refugee camp and the stench of Sour's ad hoc landfill, that I met a farmer and greengrocer named Sulayman. Sulayman is a land "guarantor" of his village's fruit orchards: he leases fruit trees from a landowner, hires laborers to pick the fruit, and sells it. Like many southern Lebanese who cannot survive on income from just one job, Sulayman also rents a dour storefront in the village, where he and his wife run a greengrocery. Sulayman's wife stirs coffee on a portable gas burner in the shop as he unloads Styrofoam crates of shiny black eggplants from his van outside. A little boy disobediently crawls in between the precariously stacked vegetables while a bulky television blasts a dubbed American cartoon. When the coffee comes to a boil, Sulayman's wife serves it to us in small plastic cups, and they both inquire about my research.

Sulayman is loquacious, and, like Abu Ja'far, his narrative about war alternates between the July War's destruction of an agricultural environment and new forms of embodiment. Prior to 2006, he says, the village's orchards were mostly citrus. He remembers fertilizing orange trees the morning the bombing commenced and then returning to the land after the war to remove the carcasses of the citrus trees and to plant more profitable banana trees in their place. Like the Israeli tanks in Gaza whose paths Weizman reconstructs by tracing the trampled vegetation they leave in their wake,<sup>54</sup> Israeli bombs in South Lebanon left their marks in the mangled bark of trees (see fig. 2), in fields emptied of dead trees, and in newly planted fruit trees. Sulayman's description of uprooted trees now obscured by the dense, deep green banana foliage attests to the violence of war as gradual and out of sight. In his account, trees are not only the object of war's violence but generative figures through which to counter the representational bias against slow violence. By narrating war through trees, as the loss of one agricultural world and the emergence of another, Sulayman exposes the belated temporality and expansive causality of war operating beyond the narrow category of destruction.

From the replanted fruit trees he tends in beleaguered soils, Sulayman's narrative turns, unhesitatingly, to his sperm. He declares that since the war he suffers from *badhr da'if*, a colloquial expression, literally meaning "weak seed," that he uses instead of the word for "infertility." Because of his weak seed, Sulayman and his wife were unable to have children. Sulayman speaks candidly and without prompting about their fertility problems and about regular trips to a Beirut laboratory where their son was eventually

54. Weizman, "FORENSiS."

Figure 2. Wounded orange tree in South Lebanon, 2012.  
Photograph by the author



conceived. Sulayman points enthusiastically to his son and tells me repeatedly, with a tinge of awe, that the child is a “test tube baby” made of his weak sperm and his wife’s egg.

In his unabashed assertion of his weak seed as the cause of their failure to conceive, Sulayman affirms war as a technique that interrupts bodily reproduction and the assumptions about naturalness that attach to it.<sup>55</sup> Indeed, Sulayman displaces reproduction from the realm of the body and the natural and highlights how toxic infrastructures of war alter bodies and transform the reproduction of southern Lebanese.<sup>56</sup> Significantly, moreover, in his emphasis on men, masculinity, and the failure to reproduce naturally, Sulayman interrupts the entrenched coupling of war, masculinity, and virility. Unlike Abu Ja‘far, who grounded his account of the 2006 war in the feminized body of the dying civilian, Sulayman draws attention to an emasculated male body. While toxic infrastructures of war, as Abu Ja‘far insists, efface the distinction between civilians and combatants, they also, as embodied by Sulayman, provoke crises in heterosexual reproduction and in normative conceptions of gender. Yet, as anthropologist Charis Thompson notes, the profound destabilization of culturally entrenched gender roles posed by infertility and assisted reproductive technologies also provides new occasions for hegemonic gender performances.<sup>57</sup> Thus while Sulayman is emasculated by war, his insistent showing of his son, miraculously made from his defective sperm, also performs his paternity and attempts to restore his virility.

55. Rapp and Ginsburg, introduction.

56. Murphy, “Distributed Reproduction, Chemical Violence.”

57. Thompson, *Making Parents*.

While much of our conversation revolves around his weak seed, Sulayman clarifies that this is not an individual condition. “There are at least twenty men in the village who can’t bring children after the war,” he says, expressing his conviction that there is an emerging population whose gender and biology have been altered by the toxic infrastructures of war. Sulayman stresses that most of these men are much younger. Weak seed, he thus insinuates, is not a normal condition of aging but a structural condition of war. There is a generative slippage between Sulayman’s identification of his weak seed as an individual casualty of war and his insistence on what Murphy calls the “macrological” registers, where the lives unworthy of reproduction that do not get counted as war casualties are produced.<sup>58</sup> Through his productive coupling of war, the stunted fertility of the land, the belated inability to reproduce, and the production of lives unworthy of being born, Sulayman incites us to think about the failure of reproduction beyond individual bodies and an interlocked crisis of masculinity, heterosexual reproduction, and material reproduction.

Although Sulayman initially maintained a vague connection between the July War and weak seed, he theorizes a temporal and political relationship between war and infertility that renders the latter detectable as a casualty of war. “The Israelis don’t want us having children,” he asserts, explaining that Israel used poisonous weapons that would prevent southern Lebanese from reproducing. “We used to have big families with seven, eight, nine kids, but now we can’t bring more than a few kids,” Sulayman says, in resignation. Despite the reigning uncertainty about the effects of the war and of Israel’s weapons on fertility, he is certain of an epidemic of infertility as a strategy of war.

In Sulayman’s account of war, Israel renders the reproduction of its enemy population a battlefield, obligates certain forms of reproduction and forecloses others, and fundamentally transforms southern Lebanese families as a tactic of warfare. The weak seed and small families that Sulayman bemoans resonate with the miscarriages and premature births caused by Israeli weapons and checkpoints in occupied Palestine.<sup>59</sup> As anthropologists Roda Ann Kanaaneh and Susan Martha Kahn have shown, the Zionist project to settle and colonize Palestine has historically employed demography, encouraging the reproduction of Jews through child allowances and free in-vitro fertilization treatments while discouraging the reproduction of Palestinians.<sup>60</sup> This, Kanaaneh argues, has turned reproduction into a Palestinian tool of resistance.<sup>61</sup>

Although Israel has not sought to establish a settler colony in Lebanon, its repeated wars, invasions, and twenty-year occupation of South Lebanon are part of a historic Zionist quest to turn South Lebanon into a security zone emptied of its

58. Murphy, “Distributed Reproduction,” 24.

59. al-Sharif, “Mother in Gaza”; “Pregnant Palestinians Give Birth at Israeli Checkpoints,” IRIN, Electronic Intifada, October 6, 2006, [electronicintifada.net/content/pregnant-palestinians-give-birth-israeli-checkpoints/2835](http://electronicintifada.net/content/pregnant-palestinians-give-birth-israeli-checkpoints/2835).

60. See Kanaaneh, *Birth of the Nation*; and Kahn, *Reproducing Jews*.

61. Kanaaneh, *Birth of the Nation*, 58.

inhabitants.<sup>62</sup> In this context, it becomes possible to read Sulayman's claim that toxic infrastructures of war have disrupted reproduction as a claim about war's violence as population management. Rather than a struggle over sovereignty, Sulayman suggests that the very survival of southern Lebanese is at stake in the war. In his weak seed and the life he can no longer reproduce without technical intervention, Sulayman sees the loss of South Lebanon's characteristically large families and the loss of a powerful weapon in a biopolitical war of existence.<sup>63</sup>

### Conclusion

I have argued that southern Lebanese sought to upend the agnogenesis about the July War's toxic infrastructures by making claims about environmental pollution and gendered forms of embodiment to produce new truths about the war and the temporality of its wounding. In their accounts of war, Abu Ja'far and Sulayman link toxic infrastructures to the production of their killable lives and of lives unworthy of reproduction. They thereby refute the liberal assumption that war is a bounded event and undermine established thresholds of detectability. Grounded in the new forms of toxic embodiment that the July War has created, Abu Ja'far and Sulayman critique a dominant concept of war and the frames for recognizing its casualties and causality. Through their insistence on the multiple temporal registers of war's violence and the centrality to it of polluting weapons, they reveal causal links between war and its belated injuring and re-configure epistemologies for recognizing its casualties.

My ethnographic exploration of toxic uncertainty and killable lives in South Lebanon builds on a body of scholarship concerned with the attenuation of life and the slowness of violence under regimes of capitalism, colonialism, late industrialism, and liberalism. While war, weapons, and militarization are parts of the emergent relations this scholarship tracks, much of it explicitly eschews the war zone as if its violence is incommensurate with the temporality of other forms of violence that are more readily recognized as structural or biopolitical.<sup>64</sup> This omission suggests that war remains the paradigmatic example of spectacular violence, an assumption that works to obscure and render uncertain the kinds of slow and environmental violence I have documented here that were so clear to my interlocutors. Against this entrenched assumption about the temporality of war's violence, my intent is to have revealed war—lived and understood by southern Lebanese through its slow violence, its environmental poisoning,

62. Early Zionist visions of their future state included much of South Lebanon and led to significant land purchases in the 1930s. The writings of Israeli military and political leaders David Ben-Gurion and Moshe Dayan in the 1940s and 1950s testify to sustained territorial ambitions in South Lebanon and to plans for turning Lebanon into an allied state under Christian rule with parts of the South annexed to Israel. See Chomsky, *Fateful Triangle*; Jabir, *al-Sharit al-Lubnani*; and Traboulsi, *History of Modern Lebanon*.

63. Foucault, *History of Sexuality*, 137.

64. Nixon's *Slow Violence* is an exception, as it treats war as a paradigmatic form of slow violence.

and its toxic futures—as a powerful political technology that shapes the global distribution and durability of violence.

VASILIKI TOUHOULIOTIS received her PhD in anthropology from The New School for Social Research and is currently a postdoctoral fellow for the Mellon Sawyer Seminar “Grounding the Eco-critical” in the Department of Jewish, Islamic, and Near Eastern Languages and Cultures at Washington University in St. Louis. Her research, which has been funded by the Wenner-Gren Foundation, the National Science Foundation, and the Charlotte W. Newcombe Foundation, is concerned with the temporality of war, the forms and effects of its wounding, and its toxic contaminations.

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