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Colonial pyrotechniques in Palestine: Arboricide and fiery dispossessions

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Abstract

In this article, we examine how fire—a triangle of heat, fuel and oxygen—functions as a settler colonial tool of destruction closely linked to techniques of elimination and replacement. In Palestine, we conceptualise fire as part of a broader set of pyrotechniques—elemental practices that devastate more than bodies and infrastructures by targeting and eroding the environmental conditions that sustain Palestinian lifeworlds. Drawing on ideas from elemental politics and world-making, we show how settler fire attacks materially and physically transform landscapes into desolate spaces, rendering them legible and available for colonisation. Fire is deployed not only by civilian settlers shielded by the Israeli state but also by the state itself through practices of 'pyroterror'. Palestinians—'People of the Olive Tree'—are simultaneously dispossessed by fire and framed as 'pyroterrorists', revealing the racialised asymmetries embedded in colonial logics of security and dispossession. Finally, we examine the contradictions of afforestation and other landscape-engineering techniques through which settler colonialism grounds its presence and expands by overwriting Indigenous ecologies and ways of living. We argue that fire—both in its destructive and transformative capacities—is central to the ongoing expansion and maintenance of settler colonial frontiers in Palestine.

Keywords

Fire, pyropolitics, Palestine, settler colonialism, trees

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"Architecture must burn for the site to be exorcised"

(Weizman, 2005)

"By the fig and the olive of Jerusalem"

(*Surah At-Tin* ["The Fig"], Qur'an)

Introduction

In February 2024, OCHA—the United Nations Office for the Coordination of Humanitarian Affairs, responsible for crises and humanitarian emergencies—reported what has become a regular occurrence on the settler-colonial frontier of the West Bank: the systematic destruction of around 10,000 Palestinian olive trees in 2023 by settlers, primarily through burning. Since 2010, such attacks have destroyed 101,988 olive trees (AA, 2020), causing significant economic losses, environmental damage, harm to local ways of life, and human and non-human casualties. Israeli settlers, operating with impunity—supported by the army and armed by the state (Taylor-Sheinman and Gee, 2025; Ziv, 2024)—have long been a key 'elastic' force of settler colonial frontier expansion in Palestine (Ghantous and Joronen, 2022; Hammami, 2016; Weizman, 2007). Utilising arson alongside other methods, such as 'price tagging', 'swarming' and various less spectacular techniques (Ghantous, 2023; Sabbagh, 2022), settlers and settler groups have terrorised Palestinian communities to push and force people to leave. The use of fire, however, stands out, as it not only terrifies and destroys, but also materially transforms colonised landscapes into what Povinelli (2016) calls the "desert"—a desolate symptom and a colonial figure that clears the ground for the seeding of land and life anew, now made hospitable for settler colonisers (see also Molavi, 2024). As one settler participating in an anti-Palestinian march—accompanied by chants such as "Let's burn the Arab villages" and "Death to Arabs"—explained: "I don't say let's burn their [Palestinian] villages, I just say they should get out and we [Israelis] take over their lands". Smirking, he added "[that's] exactly what we do in the Old City [Occupied East Jerusalem]" (Baroud, 2021). Indeed, the violent and racist chant "Let's burn their villages", which is regularly shouted, sprayed on walls, and printed on t-shirts, is not only a call to destroy and burn down things; it is ultimately a call to expel, appropriate and replace—to transform the colonised lands.

Fire, we show in this article, is not only symbolic or rhetoric incitement to violence, but a crucial technique for what might be described as 'elemental devastation'. Here the elements, broadly conceived as the primary conditions that enable and sustain life, are deliberately weaponised against it. This specific mode of violence operates not only at the level of bodies, infrastructures or environment, but also at the level of world-making itself, targeting the land in which life might endure or regenerate. As Heidegger (1968: 29) famously explained: "Devastation" [*Verwüstung*] is more than destruction [*Vernichtung*]… Destruction only sweeps aside all that has grown up or been built up so far; but devastation blocks all future growth and prevents all building." Devastation attacks the future of Indigenous life-worlds, but in settler colonial contexts—defined by the "logic of elimination" (Wolfe, 2006; see also Salamanca, 2016; Velednitsky et al., 2020)—it also aims at their replacement with settler worlds. Fire, as we hence understand it, is an element of world-making that underpins the use of settler pyrotechniques and the pyrocolonisation they incite. It functions as an assault on the very fabric of life in Palestine—including its futures—materially accelerating the eliminatory replacement at the core of Israel's settler colonial project in Palestine.

In this article, we are particularly interested in understanding the workings and logics of fire at the colonial frontiers in Palestine, including its use, regulation, control and proliferation as what we

call ‘pyrotechniques’. We use the term pyrotechniques to refer not only to the direct, active use of fire as a weapon of terror and dispossession, but also to the slow, structural production of flammable ‘tinderbox landscapes’ through historical land politics. Pyrotechniques, in other words, are not just instruments of immediate colonial power but are entangled with the elemental dynamics of fire itself—the dynamic triangle of heat, fuel and oxygen. In this sense, we argue, pyrotechniques extend beyond the act of ignition to include the slow, structural production of flammable landscapes, through monocultures and land-use practices that constitute the very conditions of wildfire. Viewing fire as an ongoing condition, rather than a single event, politicises the underlying materialities of combustion. Fire, we hence show, has been historically central to settler-colonial regimes (in Palestine and elsewhere), in which the land itself acts as a dynamic agent in the colonial encounter—both as a site of extraction and oppression, and as an active ‘participant’ in the doing and undoing of settler colonialism (see Ayyash, 2018; Coulthard, 2010; Joronen, 2021; Povinelli, 2016; Razek, 2024). And yet, while fire consumes lands, objects and surfaces, it also reacts with and pollutes the air; it is an atmospheric element as much as it is tied to earthly solids (Ingold and Simonetti, 2021; see also Griffiths, 2022; Hawkins, 2023; Nieuwenhuis, 2016A). Fire thus functions as a chemical reaction and material element, but also as a political and ontological force—shaping and contesting the relationships between land, air, and those already inhabiting (and growing in) them (Nieuwenhuis, forthcoming). In this comprehensive constellation, pyrotechniques act as a mobile medium through which the elastic borders of settler colonisation are advanced and redrawn through flexible interactions between elemental forces, the settler state and the civilian settlers (Amir, 2023; Ghantous and Joronen, 2022; Hammami, 2016). This is starkly exemplified by the leaflets left by settlers on scorched Palestinian olive groves in the West Bank: “You have reached the border! Entry is forbidden and dangerous, and anyone who approaches will see burning trees” (Pedrazzi, 2023: np). Fire expands as much as borders, materialises as much as terrorises.

The state, however, is not only orchestrating settlers as its elastic tool of frontier expansion. The state’s ‘pyroterror’—a compound term that reveals the incendiary underpinning of the fiery elements of affective atmospheres—has found one of its most intense forms in contemporary infrastructural annihilation and genocidal elimination of Gaza (Dader and Joronen, 2025; Salamanca et al., 2014). This is exemplified by the amount of destructive ammunition and firepower used to level the entrapped death-spaces into ash-charred landscapes, contaminated spaces and piles of rubble. The methods of destruction have included ‘walls of fire’ generated by massive explosions and the carpet bombings of entire neighbourhoods (Abu Saif, 2023), as well as ruthless attacks on civilians in places such as the Rafah refugee camp, where people seeking temporary shelter have been burned alive in their tents set ablaze by Israeli missiles (Reuters, 2024). Along with the use of white phosphorous—which, through burning, can cause egregious harm to civilians (HRW, 2023)—pyroterror exemplifies how states directly mobilise fire to terrorise, attack and kill civilian populations while devastating their worlds.

The twin term ‘pyroterrorism’, coined by ‘anti-terrorist’ experts (Baird, 2005), is burdened by different vocabularies that must be situated within longer histories of colonial and orientalist imaginaries—contexts in which non-white bodies have long been associated with malevolent uses of fire (e.g., Mbembe, 2017). This racialised elemental politics continues to haunt and shape both official national security reports and the narrow academic security discourses that sustain them. Within such frameworks, ‘pyroterrorism’ is typically linked to state-security narratives, where the term broadly refers to “arson attacks” intended to “terrorise the civilian population and coerce the government to advance political or social objectives” (Baird, 2005: np; Asaka, 2021; Baird, 2006; Bendle, 2008; Deshpande, 2009; Fighel, 2009). The case studies within this body of literature overwhelmingly attribute pyroterrorism to non-Western non-white actors—guerilla forces, resistance movements, anti-colonial militias etc.—thereby racialising political violence while centring fire

as their defining weapon (see Besenyő, 2019; Deshpande, 2009). Rather than exploring fire, as is common in critical terrorism studies, as a contextual and political modus operandi entangled with colonial histories, Western imperialism, state paranoia and racial logics of power (e.g., Jackson, 2007; Machold and Charrett, 2021; McQuade, 2020), this literature reinforces securitised narratives that obscure the structural conditions shaping political realities and resistance. In the most inverted narratives, it is the colonisers and imperialist states who are cast as victims (Griffiths, 2023; Perugini and Gordon, 2015), while anticolonial and anti-imperial struggles are branded as "(pyro)terrorism"—often by invoking common racist phrases, such as the figure of the 'Arab terrorist', to delegitimise resistance and police dissent (Machold, 2024; Marei et al., 2018; Miller and Bhungalia, 2022).

Departing from these conceptualisations, and using primarily secondary sources (e.g., news reports), archival data and fieldwork materials[1], we aim to examine the use, control and the constitutive role of fire—its pyrotechniques—as an elemental politics of world-un/making within the eliminatory drives of settler colonialism in Palestine. We show, first, how pyrotechniques, as expressions of a specific colonial relation to fire, are central not only to state power but also to how settler force is mobilised to expand colonial frontiers. In this context, we examine the historical and contemporary roles that fire has played in various colonial contexts, especially in Palestine, focusing in particular on how 'settler arson paranoia' has been used to portray, prosecute, and vilify Palestinians as 'pyroterrorists'. Second, we examine the landscape transformation in Palestine through colonial afforestation—projects that not only devastate Indigenous ecologies and lifeways but also carry within them an inherent flammability. At the same time, we show how fire is employed as a technique within state-settler nexuses of terror, elimination, dispossession and replacement, creating the 'replacive inferno' through which colonial worlds are forged. In doing so, we contribute to existing literature by centring attention on the transformative role of fire in constituting violent settler colonisation, examining particularly the historically dynamic role of pyrotechniques in making the colonial frontiers in Palestine.

Pyropolitics: Fire, settler colonialism, and the politics of fear

Fire is central to biological life and the socio-spatial organisations that follow from its use (Cary, 2023). As arguably humanity's first technology—*tekhne*, the prosthetic capacity to 'bring into being' what did not emerge by itself (Heidegger, 2001; Joronen, 2012; Stiegler, 1998)—fire served as the productive ability of hominins to manufacture. Yet, as technology, fire is not reducible to a mere political instrument grounded on "the power of mortals"; rather, fire also reveals their powerlessness, particularly by escaping from their hands, by showing "it is not their property" (Stiegler, 1998: 194). Moreover, as Stephen Pyne (2012: 14), the preeminent historian of fire highlights, fire itself serves a more-than-human foundation for life's elemental embeddedness: "life sustains fire and life has progressively absorbed fire within its ecological webs." Fire, therefore, should not be understood as existing independently of nature, technology, or politics, but as our discussion in this paper shows, as fundamentally entangled with them. As Marder (2015: xv) elaborates in his book *Pyropolitics,* fire "precedes all binary oppositions, including the institution and the disruption of an order." Indeed, it is hard to "imagine a 'biopolitics' that was not first and foremost a 'pyropolitics'"—life centred on the regulation, manipulation, and enhancement of fire—as pyrogeographer Nigel Clark (2011: 164) adds. Fire provides heat and light, making possible cooking, brickmaking, land clearing, warfare and travel. As a source of thermal energy, it also underpins the generation of electricity central to modern life. Fire not only enabled modernity but, through the burning of fossil fuels, has also altered "the very chemical makeup of the planet" (Mameni, 2023: 15). In other words, "pyropolitics", as Marder (2015: 10, original emphasis) observes, "is

so ubiquitous that it permeates all periods of human history… It is coextensive with the concept *and* the event of the political."

As much as fire is a part of a beginning, transforming land and atmosphere some 400 million years ago in a process of terraforming, it also is an active participant in the ending of things. Pyne's (2021) latest book *The Pyrocene* captures how human activity, in the form of large-scale use of fire in agriculture, industry, and fossil fuel combustion, has influenced Earth's ecosystems and climate to an extent comparable to the ice ages of the Pleistocene. "We have created a Pyrocene. Now we have to live in it" (Pyne, 2021: 6). As Serres (2018: 85) further remarks on the elemental significance of fire, particularly its embeddedness in rapid energy circulations of global(ising) modernity: "we eat only fire. Our time is traced on the duration of the flames. Their vertical propagation and their blazing extinction." These ends of world(s), it must be said, are not as universally experienced as the common "we" suggest. Although fire burns indiscriminately, we should be cautious framing the present condition as a universal one. It is not only true that some bodies are positioned closer to harmful fire than others—for instance, as exemplified by the disproportionate effects of wildfires on Indigenous Peoples in northern Canada (Nieuwenhuis, forthcoming)—but we argue that the very act of igniting and crafting fire, and even the political-legal right to do so, cannot be understood independently from historical relations of power and difference; namely, from the politics of fire.

Pyrotechniques, understood as a spectrum that includes both deliberate strategies of fire use and the longer-term outcomes of land management and ecological disruption, operate as instruments of empire making and state repression (e.g., Crosby, 2002). Writing on war technologies in medieval China, the military historian Turnbull (2001) describes a history of incendiary devices that goes back almost two thousand years, consisting of incendiary bombs made of petroleum-based substances, fire balls, fire arrows, fire spears, fiery pomegranate arrows and, of course, gun powder (see also Kelly, 2004). Gun powder in particular facilitated an acceleration of conventional combustion to near-instantaneous speeds, not only fundamentally changing the quantitative and qualitative experience of warfare, but constituting an altogether new relationship to fire (Clark, 2018). Famously, 'Greek fire', containing distilled petroleum-based substances resembling contemporary napalm, inspired fear and wild rumour in Byzantine times for its ability to burn ships in water (Partington, 1999). Equally, so-called 'scorched earth' methods—a state-led practice of violence that targets and weaponises land as a strategy of war—have persisted in various forms in premodern and modern conflicts and wars. Interactive maps provided by Sudan Witness (2023), an effort led by the independent Centre for Information Resilience, for instance, show the extent of the use of fire to burn village, destroy and ethnically cleanse populations. War historian Emmanuel Kreike (2021: 3) describes scorched earth practices as being characteristic of "total war" because they turn "human societies and their environmental infrastructures… at once the object, the subject, and the instrument of war." The biochemical transformation of land into fiery landscape, exploiting the enemy's biosocial habitus in and dependency on the environment for physical as much as psychological harm, troubles and blurs historical, conceptual and legal distinctions between genocide and ecocide, which means, as Crook and Short (2014) explain in a context of contemporary climate change, that it is necessary to understand these two crimes as intertwined. Indeed, nature, technology and politics are inextricably tied to historical relations of power and the structural forms and techniques of violence they produce. Environmental destruction, Kreike (2021: 8) writes, is only "one degree removed from the destruction of the group".

One of the characteristics of weaponising fire is that its immediate target is rarely an individual or even a group of individuals; instead, pyrotechniques are often aimed at destabilising and altering the broader material surroundings with environmental, social, economic, as well as embodied (affective, sensory, and respiratory) intent (Joronen, 2023; Nieuwenhuis, 2016B). Like atmoterrorism which, as Sloterdijk (2009) and others have written (Nieuwenhuis, 2018), explicates and transforms

the air and aerial surroundings into a dangerous and lethal medium of war, the state's weaponisation of pyrotechniques harnesses and transforms the environment into an operational platform. Fire, under such conditions, is the medium through which the colonisers enact their geographic imagination. An example of this is the burning of olive groves, agricultural, and pastoral lands by Zionist settlers throughout the history of colonising Palestine. Similar practices can be observed recently in Southern Lebanon, where vast areas of wild forests and farmlands have been burned due to the Israeli Defence Forces' (IDF) systematic use of white phosphorus munitions, artillery shells, and incendiary weapons, including flare bombs (AlJoud, 2024; see also Khayyat, 2022).

Pyrotechniques, however, are not always clearly discernible or immediate deliberate acts. They are rather constitutive of a specific instrumental environmental relation which, for instance, in the case of the planting of flammable monoculture landscapes, sometimes can have unplanned, delayed and unforeseen consequences. Colonial pyrotechniques, in either their deliberate use or unintentional impact, are aimed at altering the broader elemental conditions of life in the colonies. With fire comes smoke, the suffocation, the heat, the melting, the scorched earth, the burned terrain, the charred soil, the contaminated land, and eventually, the ones claiming the scarred land as their own. Here, fire destroys and decomposes before it regenerates and reassembles landscapes in a cyclical manner described by the Greek Stoics as 'ekpyrosis'. Settler colonial pyrotechniques constitute a weaponisation of swirling earthly and fluid atmospheric materialities—soil and air, terra and *meteōra*, the in-between media that constitute landscape (Serres, 2018)—desecrating and rendering the land hostile, alien and foreign to its original Indigenous inhabitants. This elemental devastation works to assert settler ownership by clearing, sanitising, and reconfiguring the land as vacant—ready to be possessed, renamed, and made productive within the colonial order (Joronen, 2025). Atmoterrorism, in short, becomes a modality of colonial pyroterrorism.

The combination of terrorism, as the practice of invoking fear, and the chemical process of combustion may appear logical at first thought. Linking the phenomenological qualities of fire to discourses of terrorism—as conventional discourses of so-called "pyroterrorism" do—is neither unproblematic nor particularly novel. Rather, it expresses specific power relations in which state-sanctioned pyropolitics is either deemed entirely legitimate or, as illustrated in the case of Gaza's genocide/ecocide (Ahmed et al., 2024), reduced to legal ambiguity and contestation. Resistance to state violence, by contrast, is criminalised as an act of 'terror' and treated with and responded to in a grammar of exceptional politics—enabling and legitimising intensive violence. As McQuade (2020) demonstrates, British colonialism—particularly in India—codified these sentiments into law through emergency statutes and terrorism regulations aimed precisely at suppressing anti-colonial movements. A brief study of the historical use of fire reveals the monopoly the state enjoys in igniting fire: the burning of Boer farms; the deployment of napalm and Agent Orange to destroy forests and agricultural land in Vietnam; the use of white phosphorus bombs in Iraq, Gaza, Lebanon and Syria; barrel bombs in Sudan; thermobaric bombing in Chechnya and Afghanistan; the firebombing of Hamburg, Dresden and Tokyo; the burning of the Black Wall Street district in Tulsa by white mobs; Kristallnacht; and the scorched-earth destruction of Indigenous lands—these are among a few examples of state and state-sponsored acts of pyroterrorism against Othered, racialised, colonised and marginalised populations. Fire, in other words, has historically emerged as the sovereign's preferred elemental medium for 'making live and letting die'. It is not beyond politics—as if existing in a separate 'natural' domain—but channels a force of sovereignty that harnesses and exploits its cyclical process of creation and destruction.

This is not to say that pyrotechniques are not used as a form of resistance against state violence. From the fourth-century BC figure of Herostratus, who burned down the Temple of Artemis at Ephesus, to the Chicago Haymarket Martyrs, Marinus van der Lubbe—the Dutch communist accused of setting fire to the Nazi Reichstag, the arsonists of America's Long Hot Summer of 1967, the IRA, and the Mau May resistance fighters, history is littered with the names and acts

of notorious arsonists, many of whom used this “icon of resistance” (Hinds-Aldrich, 2009) as a political technique to disrupt, sabotage and empower (see also Austin and McKinnie, 2022). In these acts and situations, however, the state historically has responded with disproportionately greater repressive violence. Arson—famously described by Scott (1985) as a “weapon of the weak”—has long been a target of state legal prosecution. As far back as the eighteenth century BC, Hammurabi’s Code of Laws, arguably the earliest extant legal text, codified the use of unsanctioned fire as an exceptional crime. In nearly every historical legal system, arson has been condemned as a prosecutable offense and was punishable by death in Britain and the U.S. until the mid-nineteenth century. In the context of Europe’s early emerging modern states during the sixteenth century, Dillinger (2006: 1) writes that fears of arson attacks were so pervasive and widespread that arson came to be “regarded as the most dangerous political crime of the early modern period.” Presumed arsonists [*Mordbrenner*] were othered and victimised as part of the state’s “arsonist paranoia” (Pfister, 2017) in ways similar to Witches, Muslims and Jews. They were treated as foreign conspirators who threatened the well-being of the population and the stability of the early Westphalian state. Fears over rather than actual organised political arson attacks led officials to formulate laws and impose authority to prosecute and police suspicious vagrants, beggars, and vagabonds, who, often male, itinerant and impoverished, were perceived as and treated as political criminals with their names “printed and sold as news sheets” (ibid.: 14). The evolution of a liberal property rights regime in the 18th and 19th centuries further reinforced the view that arsonists are categorically culpable and thus must receive ‘proportionate’ punishment.

Fire in conditions of European colonial subjugation mirrored and amplified these pyropolitical relations of power and resistance. “Without question,” as a doctoral dissertation on the use of fire as an anticolonial tool in colonial New England documents, “arson was a weapon of choice in the arsenal of tools used to resist enslavement” (Lewis, 2014: vii). Fire was feared among settlers not only as a threat to themselves, or their belongings, but to the very structures of the colonial system, particularly capitalist property relations. In fact, the fear of arson, often accompanied by imaginations of insurrection, had a greater impact than the act of incineration itself. Colonial pyrophobia, which assumed levels of hysteria, was of such intensity that settler governments frequently declared a state of exception, resulting in the formulation of dedicated arson laws; increased policing, including fire watchmen, military watches and strictly enforced racial curfews; banishment and death sentences for presumed arsonists (Lewis, 2014). In a recent book on the colonial world, shaped and sustained by white fear of slave rebellion, Sharples (2020) writes about the traveling geography of “conspiracy scares,” which involved elaborate plots of arsonists operating across multiple locations. Sharples explains that white fear of incendiary retribution and retaliation by enslaved Black bodies served as a constant reminder of the injustice of colonial violence. Fear of fire, in other words, was a structural component of colonialism and the effective management of its effects and affects was considered a political priority. Later in this paper, we explore parallels with contemporary arson paranoia in settler colonial Israel.

“Fire suppression” also was a common pyrotechnique used across the colonial world to domesticate landscapes (Cary, 2023). White European settlers banned pre-colonial fire practices in contemporary Canada as early as 1610, not only breaking up age-ancient Indigenous land stewardship, but thereby also permanently disrupting ecological cycles and transforming landscapes (Cahir et al., 2021; Eriksen, 2007; Nieuwenhuis, forthcoming; Zahara, 2020). Understanding colonialism through the prism of pyrotechniques brings into clearer vision the blurred lines between genocide and ecocide. It not only reveals the central role of fire in the colonial oppression of alternative pyro-ontologies and -epistemologies but also provides insights into how colonial pyrotechniques transform the totality of the landscape. Today, amid growing awareness of the historicity of climate change and the prevalence of rampant wildfires, the scale of the

consequences wrought by colonial pyropolitics has become apparent more than ever (e.g., Mariani et al., 2022).

Pyropolitics in Palestine

We argue that, in a similar vein, pyrotechniques have played a significant role in advancing colonising and transforming the landscape in Palestine. A key factor in this was the British colonial afforestation strategy—especially as enacted by the Jewish National Fund (JNF), established in 1901—which drove massive landscape changes through the planting of highly flammable, non-native Aleppo pines [*Pinus halepensis*]. The British colonial policies promoted afforestation as a civilising and modernising mission, framing—and often cloaking under the guise of conservation—native land-use practices as environmentally degrading. The JNF's afforestation practices were shaped not only by the legal and administrative framework established by the British regime—within which it operated and from which it adopted elements of the colonial narrative—but also by a desire to materialise landscapes reflecting European aesthetics and a sense of belonging (Järvi, 2019; Leshem, 2017). Pine forests were particularly favoured by the JNF: fast-growing and visually transformative, they symbolically aligned with European landscapes and enabled quick assertion of Zionist presence, while simultaneously corresponding with imaginaries of green and forested biblical terrains (Long, 2009; Mitchell, 2002). While both sides contributed to a massive landscape transformation—what Tal (2013: X) describes as "an abrupt departure from the previous two thousand years,"—there were also differences in emphasis. The British colonial regime focused on soil conservation and erosion, and identified "the distasteful problem of the goat" (Tal, 2013: 175) as the main threat to its 'modernising' aims, whereas the JNF emphasised the planting of monocultural pine forests, portraying them as botanical wonders that could "adapt to different climates" and "not discriminate according to soil type" (Braverman, 2023: 150). Both colonial approaches to landscape, however, blamed the Indigenous practices for what their colonial gaze perceived as harmful environmental degradation, thereby reshaping the local landscapes to fit their own notion of progress and entitlement.

Crucially, these planted pine forest monocultures were inherently more flammable and thus significantly more prone to forest fires. The Palestine Department of Forests (1939: 11), which was held responsible for Britain's strategic interest in forestry in Palestine, stated that "fire protection must form an integral part of the managements of the forests". The report further describes how the "origin of the fire is often doubtful, but the usual causes have been sabotage, … personal ill will, … carelessness…, and negligence" (ibid.). Instead of acknowledging the problems caused by massive landscape modification, British Mandatory officials acted on their suspicions of Palestinian arsonists—a practice which, as we will come to show, is well alive and well today (Breiner and Hasson, 2025)—often collectively punishing Palestinian villages for allegedly setting fires "maliciously" during the summer months (Hughes, 2009: 325). The association of fire with the colonised is not incidental but reflects, as we discussed earlier, a historical and structural 'paranoia' that systematically accuses colonised populations of mobilising hostile pyropolitics (see McQuade, 2020). Importantly, this underscores how colonial regimes—particularly settler colonialism, which involves settling colonised lands rather than merely extracting resources and labour—are structured in opposition to colonised peoples. This structure is rooted in the original acts of elimination and replacement—of native populations, their ways of life and their environments—that underpin the settler presence. The 'settler arson paranoia', in other words, manifests 'settler fragility' and uncertainty, fixated on constructing and justifying settler belonging and hostile entrenchment in the colonised lands. Here, the land is appropriated and reshaped to mirror the settler world, driven by representations and materialisations that demand and crave the existence of violent natives (see Fields, 2010; Joronen and Ghantous, 2024).

With the settler arson paranoia came also the settler pyroterror, and the mobilisation of deliberate pyrotechniques. By supporting the Zionist project of settling Palestine early on—formally since the 1917 Balfour Declaration—the British colonial mandate created conditions that intensified the proliferation of violence, particularly among underground Zionist settler militias such as *Irgun* (or *Irgun Zvai Leumi*), *Lehi* (the 'Stern Gang') and the *Haganah* ('The Hebrew Defence Organisation in Palestine') (Thompson, 2019). While many Zionist ideologues harboured violent fantasies and plans for the ethnic cleansing and removal of the Indigenous population from Palestine early on (Agha et al., 2024; Joronen and Ghantous, 2024; Sabbagh-Khoury, 2023; Wallach, 2023), it was through these organisations that ideas began to materialise in practice. *Haganah*, for instance, played a crucial role in the 1938 British-led formation of the notorious Special Night Squads (SNS) (Bauer, 1966), which were described as "government gangs." The squads used ruthless and indiscriminate counterinsurgency methods to collectively punish, burn down houses and barns, and torture, kill and terrorise the Palestinian population during the 1936–1939 Arab Uprising against the colonisers (Anglim, 2007; Knight, 2011). Charles Wingate, the infamous British army official who established the SNS, was clear about its rationale: "We are creating here the foundations for the Jewish Army in Zion" (in Sharim, 2016: 136). Similar methods were later used by other Zionist terrorist groups, most prominently *Lehi* and *Irgun*, which during the Uprising carried out several dozen attacks on Palestinian people and the British Army, primarily against the former.

After the British signalled a shift in policy with the infamous 1939 White Paper—indicating a withdrawal of their earlier support for Zionist colonisation of Palestine—these groups turned their violence towards the British regime, carrying out numerous attacks including bombings, shootings, arson, and hangings, particularly between 1944 and 1947. By the time the *Nakba* and the ethnic cleansing it unleashed began to unfold, pyrotechniques had already become a normalised and recurrent tactic of terror—petrol bombs burned sleeping people to death, incinerated fields and granaries, and instilled fear by leaving behind "half-charred remains of those they killed" (Abdel Jawad, 2007: 103; Pappé, 2006). At times, perpetrators executed and burned victims in front of remaining villagers, carrying out orders "'to kill every… Arab encountered' and to set ablaze with firebombs 'all objectives that can be set alight'" (Abdel Jawad, 2007: 107). During the infamous 1948 Deir Yassin massacre, where Irgun and Lehi massacred 254 Palestinian villagers near Jerusalem without any prior provocation, homes were set ablaze, and people were reportedly tied to trees and burned alive alongside them (Aderet, 2017; Ottewell, 2001). Testimonies describe a horrifying scene, which a Mossad intelligence officer, arriving shortly afterward described:

> "We witnessed a most horrible and dreadful scene…. [Irgun] men were throwing Arab corpses into a house from the roof, while a huge fire was burning. It was really like a crematorium. Besides that horror, I saw many wood fires along the path on which corpses were burning. The stench in the air was unbearable" (in Finkelstein, 2003: 224).

During the *Nakba,* Zionist groups also developed new pyrotechniques. With the close support of David Ben-Gurion, Sasha Goldberg—a professor of chemistry—developed 'flame-throwers', first in a laboratory in London and later at what is now the Weizmann Institute, south of Tel Aviv (Pappé, 2006; see also Ben-Gurion, 1948). The development of flame-throwers formed part of a broader effort by Zionist militias to create methods of biological and incendiary warfare. They were used not only to clear buildings and bunkers but also to ignite fields, homes and entire villages with devastating effects on people, property and the environment (Pappé, 2006: 73–74). During the *Nakba*, other pyrotechniques were also devised and deployed. In Haifa, for instance, Irgun and Haganah exploited the topographical advantage of settler neighbourhoods by rolling explosive-laden barrels downhill toward Arab residential areas. They also poured

oil and fuel mixtures, which were then ignited to create 'rivers of fire', to shoot those attempting to extinguish the flames (Pappé, 2006: 58, 93). These pyrotechniques, designed not merely to kill but to terrorise, sowed chaos and fear among the Palestinian civilian population. They functioned as part of a systematic campaign—including Operation 'Cleansing the Leaven' in Haifa and the 'Plan Dalet' more broadly—to destroy villages and expel Palestinians from their homes and lands (see Khalidi, 1988; Pappé, 2006).

Despite the change in settler colonial frontiers, pyrotechniques deployed today in Palestine should be understood as a continuation of the methods and meanings historically associated with fire under European colonialism. The burning of Palestinian olive groves—which, before the ongoing genocide, constituted up to 80 percent of orchards in Gaza and the West Bank—and of grazing lands in the rural West Bank (particularly in areas earmarked for settler expansion); along with settler-led arson attacks and pogroms in West Bank towns, the recurrent blaming of the colonised for acts of arson, and the annihilation of Gaza with "walls of fire" are, as discussed below, but some examples of continuities in settler pyropolitics. And yet, we argue, the pyropolitical landscapes of settler colonialism are not solely defined by destruction, revealing only scorched landscapes consumed by fire. They also transform and create—resembling what we call, by following Povinelli (2016), the figure of "desert": a process of devastating desolation that makes the land hospitable to the emergence of settler life. Settlers and the settler state come not only to burn, eliminate and devastate, but also to plant, seed and make the 'desert bloom' (Braverman, 2009; Joronen, 2025; Molavi, 2024).

Arson paranoia, arboricide and fiery dispossessions

Scapegoating Palestinians for wildfires has long been an important instrument in Israel's rhetoric. As early as the 1988 forest fires, which consumed more than 25,000 acres, former Prime Minister Yitzhak Shamir called arson "worse than fundamentalism" (NYT, 1988). Israel's Chief Ranger of the Galilee Region at the time claimed that "forests here are on the front line [of terrorism]" (Mastai in Baird, 2006: 418). In reality, however, some of the fires attributed to the alleged Palestinian arsonists had been started by children of both Jewish and Palestinian descent who, as police officials explained, lit them "for the fun of it". The structural causes—monoculture, ember storms and climate change—were deliberately ignored in favour of vilifying Palestinians (Hasson, 2025; Razek, 2024). In 2010, the JNF Chairman similarly blamed "Ecological Terrorism" (Yagna, 2010) for a deadly blaze later found to have been caused by the government's own "operational failures" (Druckman, 2012). This pattern persisted: in 2016, Prime Minister, Benjamin Netanyahu, responding to the wildfires that plagued northern Israel and the West Bank settlements, warned that "every fire caused by arson, or by incitement to arson, is terrorism… Anyone who tries to burn parts of the State of Israel will be punished severely" (in Tobin, 2016). Palestinians, some of them Israeli citizens, were rounded up, falsely accused and later released as part of what rights groups have described as a "deliberate strategy of incitement" (Abunimah, 2016). Similar accusations resurfaced in Netanyahu's responses to forest fires in the 2020s (Hasson, 2025). Following the recent April 2025 fires—when Netanyahu falsely claimed that 18 Palestinians had been arrested—lawmakers began reassessing the punishment for arson under section 448 of the 1977 penal code. At the time of writing, a Likud-backed proposal seeks to add a new category of "nationalist arson" as a specific offence, embedding arson into Israel's counter-terrorism framework (Baruch, 2025; Revivo, 2025).

By ignoring the historical role of settler landscape modifications in creating the flammable conditions that heightened the risk and frequency of forest fires, Israel's arson paranoia—fueled by political rhetoric, manipulated maps, conspiracy scares and misinformation (Hillis, 2025)—reveals not only settler anxiety about arson, but also the deep entanglement of settler colonialism with the

material degradation and devastation of colonised environments. Following the April 2025 fire, for instance, a video went viral on social media showing a JNF employee planting an Israeli flag in the scorched earth of a Canadian forest with the caption: "On our Independence Day—where they burned, we will continue to plant and rebuild!" (Hasson, 2025). The spectacle exemplifies how wildfires fold into a politics of reclamation, erasing the colonial histories and environmental transformations that made the landscape more flammable in the first place. In the settler colonial imagination, arson-paranoia operates not merely as a fear of fire, but as an effective pyrotechnique that transforms self-inflicted environmental disaster into an opportunity for frontier expansion. Indeed, the close relationship between colonialism and the environment has long been debated, with numerous works highlighting how the settler colonial replacement of Indigenous life-worlds is inextricably linked to the transformation of colonised environments (Dajani, 2025; Jaber, 2019; Järvi, 2019). This includes resource extraction and new forms of primitive accumulation, accompanied by destructive practices such as pollution, waste, harmful conservation schemes and the suppression of Indigenous practices. It also involves the planting of new settler worlds with unsustainable landscapes engineered to fit and reflect the settler imaginaries of desirable living environments (see Khayyat, 2022; Liboiron, 2021; Yusoff, 2024).

Crucially, this manufacturing of landscapes—such as the replacement of resprouting sclerophyllous and fire-adapting phrygana ecosystems with monocultures of less fire-resistant non-indigenous species (notably Jerusalem pine)—has disrupted existing ecological cycles and undermined local cultivation and nomadic practices developed in response to these environmental conditions. Combined with the increasingly frequent climate change-induced heat waves, these landscape transformations have significantly altered the ways wildfires are embedded within local ecological cycles. This is well exemplified by a settler ecology that, by adopting the hostile sensibilities of British colonial forest authorities, juxtaposed the (protected and symbolically valued) pine tree with the (allegedly dangerous) Palestinian black goat [*Samaar*]. The earliest environmental legislation enacted by Israel was the 1950 Plant Protection Act—commonly known as the "Black Goat Act"—which aimed to exterminate the animal. As indigenous to Palestine, the goat—whose appetite for pine seedlings was viewed as a threat to the Zionist pine-planting project—has been shown to play a crucial role in managing forest fire risk (Tanous and Rabea, 2022; see Razek, 2024).

Forest fires in Palestine are thus closely entangled with the colonial history of altering landscapes. Large-scale global forestation campaigns—led by the Jewish National Fund, which claims to have planted more than 250 million trees—have created vast monocultures of flammable Jerusalem Pine forests (a species of predominantly Northern African origins, misleadingly called the Aleppo pine) (Braverman, 2009, 2023). Especially after the ethnic cleansing of Palestine in the 1948 *Nakba*, pine trees—long "an emblem of the Zionist project" (Braverman, 2009: 88)—were widely planted over the ruins of depopulated Palestinian villages. More than two-thirds of the forests and parks established by the JNF were located atop destroyed Palestinian villages. In the years following the *Nakba*, tree-planting served as a strategic tool to prevent the UN-backed return of displaced Palestinians to their places of origin (Järvi, 2019). JNF tree-planting has also been closely tied to the colonial idea of planting the 'empty lands'—a process that normalised settler landscapes through fast-growing pine forests. In the early years, these forests helped mostly Eastern European Ashkenazi Zionists feel more at home in the newly settled landscapes (Braverman, 2023), while also aligning with biblical imaginaries of a land covered with pine trees (Long, 2009; Mitchell, 2002).

Pine trees burn quickly, and their monocultural planting, often with trees of the same age and size, has turned the landscape into a fuel-rich store of combustible energy, making it highly flammable and prone to large forest fires. The risk of wildfires is further compounded by the widespread removal of more durable and fire-resistant, indigenous olive trees, which Israel has uprooted in large numbers since 1948. While the Ottomans and British used olive tree destruction as a

disciplinary tool, mostly as a disciplinary measure against disobedient Palestinian *fellaheen*, under the Israeli colonisation the olive tree—symbolic of Palestinian presence and resilience—has become a targeted emblem. Colloquially described as "the blessed tree, the tree of light, and the tree of the poor" (Amit, 2023), olive trees have been uprooted and burned to engender space for planting and materialising settler entitlement and a sense of home in the colonised lands—a landscape alteration that paradoxically creates less fire-resistant environments, turning the land itself into a site of resistance that speaks back. Fire, in other words, is never simply 'fire,' but the dynamic assemblage of heat, fuel and oxygen. Wildfires are far more likely to occur when this triangle is manipulated through settler-colonial regimes of land management. Conceptualising fire as a condition rather than a discrete event foregrounds how the structural preconditions of combustion itself are pyrotechnical. Colonial pyrotechniques not only refer to the isolated acts of ignition, which we will discuss shortly, but also include the slow, accumulative, long-term and devastating elemental processes through which settler colonialism transforms the land into combustible tinderbox worlds.

Settler pyrotechniques should not be reduced to solely the destructive and replacing impulses of the settler state, and the sense of superiority over nature and native with which it is entangled. Fire is also weaponised as a tool of colonisation through various non-state practices ranging from settler vandalism and sabotage to arson and arboricide. Today, these ways go hand in hand with state-led colonisation, and even in their less belligerent forms, must be understood as an essential part of the settler colonial aim to force the colonised population from the lands they inhabit. Indeed, as Shalhoub-Kevorkian (2015) shows, arson cases are not isolated incidents that Palestinians sporadically suffer from, but rather a systematic part of the cavalcade of tactics adopted by various settler groups and movements to push, under the auspices of the state, further colonisation of Palestine. In addition to racist graffiti, theft of property, stone-throwing and vandalism of graveyards (among others), the burning of property, fields, grazing lands, animal shelters and homes remain central to how settler groups aim to accelerate the expulsion of Palestinians by rendering their living conditions as unbearable as possible. Since the publication of Shalhoub-Kevorkian's book in 2015, these processes have only intensified. Even before the annihilation of Gaza began in October, 2023 was the bloodiest year for Palestinians since the Second Intifada in the early 2000s (OCHA, 2023). That grim record was surpassed in 2024, when the UN recorded the highest number of settler violence cases since it began 20 years of record-keeping, averaging four attacks per day across the West Bank and East Jerusalem (UN Secretary-General, 2024). Especially after Israel launched Operation Iron Wall in January 2025 in the West Bank (immediately after the inauguration of President Donald Trump), settler-monitoring NGOs have reported increasingly more systematic and planned escalations of settler violence, often coordinated with the military in ways that constantly blur the lines between settlers and soldiers (Peace Now and Kerem Navot, 2025; see also Rinat, 2025; Taylor-Sheinman and Gee, 2025).

As the frequency of cases has increased and the violence intensified, the uses of fire have taken on more belligerent forms. Settlers have increasingly set homes, vehicles, shops and agricultural buildings, and even entire villages and towns ablaze during raids, using sabotage to undermine the livelihoods of West Bank farming and herding communities living at the frontiers of settler expansion (The New Arab 2024a; Ziv, 2024). Fires, especially those deliberately started at night, have left behind charred landscapes that underscore fire as a spectacular technique of material dispossession. By instilling visible traces of violence and terror—flames, glow, smoke, charred remains—this tactic ultimately aims to displace Palestinians from their lands, homes and communities. Even smaller scale arson attacks can gravely impact vulnerable Palestinian communities already navigating various restrictions to movement and livelihood. Meanwhile, the continuous layered waves of sabotage, vandalism and arson, along with harassment, theft and physical violence

have created long-lasting atmospheres of uncertainty and terror that gradually increase pressure until Palestinian inhabitants are forced out.

Rural communities across the West Bank—from the South to the Jordan Valley, and from Ramallah to the North—now describe settler violence as a daily and increasingly brazen reality. Families have been beaten with sticks by settler groups, their children's schools attacked, sheep stolen and poisoned, grazing lands burned, roads blocked, vehicles and premises set on fire, and people forcibly removed from their homes by the military—only to witness, if ever allowed to return, their homes destroyed and burned without any possibility to rebuild due to the systematic denial of Israeli-issued building permits to Palestinians living on settler frontiers in West Bank Area C (Hauenstein 2025; Ziv, 2024). These recent trends are exemplified by herding communities such as Khirbet Samra, which, like many other Palestinian rural communities, now finds navigation and movement through hostile and fiery landscapes too dangerous. Herders explain that they "cannot herd our flock" while access to water has become "extremely difficult" (Taylor-Sheinman and Gee 2025). Leaving under such conditions is not a choice; it is forced displacement—whether through official state policy or the informal orchestration of elastic settler violence.

Crucially, pyrotechniques and their tactical uses vary by site. Fire can cripple the economy of individual families with repeated sabotage; herding communities may be targeted by the burning of grazing lands; rural communities can be forcibly displaced through continuous arson raids; and, at its most extreme, engulf entire towns in coordinated arson attacks, as exemplified by the 2023 pogrom in Huwara (POICA 2025; The New Arab 2024b; Ziv 2024). Pyrotechniques are used to attack the material conditions of living—infrastructure, property and environment—but also possess a political economy of their own. The sabotage and burning of grazing lands effectively disrupt and prevent Palestinian livelihoods and pastoral practices, while the incineration of lively town centres—already destructive to local businesses—has served as a pretext for accelerating plans for further colonisation. The latter was the case in Huwara, where the settler rampage expedited the construction of a bypass road, which in turn has further facilitated settlement expansion in the area. In light of the pulverisation and 'infrastructural elimination' of Gaza (Dader and Joronen, 2025)—where carpet bombings have created massive 'walls of fire'—and the U.S.-machinated relocation plan for Gazans, openly supported by several Israeli ministers and Knesset members (AP, 2025; Berman and Freiberg, 2025), the recent intensification of settler colonial drive to erase, expel and replace becomes increasingly evident. Palestine, quite literally, is being set ablaze.

Destructive power, however, is not the only defining feature of fire. Beyond its obstructive uses, fire can also be instrumentalised as a transformative tool for enabling new modes of inhabiting, building and planting. This is evident not only in the post-pogrom construction developments in Huwara and the uprooting of olive trees, but also in the current efforts by the Israeli government and large segments of society—supported by the U.S.—to create conditions for reinhabiting and rebuilding Gaza with minimal Gazan presence. Calling for Gazans to "voluntarily" leave, while simultaneously enacting their forced relocation through a 'hellscape' of mass destruction of infrastructure, environments and livelihood, constitutes a process of colonial transformation: a fiery mode of destruction aimed at enabling a new, (green) colonial inhabitation, cultivation, planting and rebuilding.

Fire is thus used to transform not only built environments but also natural ones—especially those dominated by olive trees, on which between 80,000 and 100,000 Palestinians depend for their livelihood. One striking example is the nearly three decades of transformative colonisation on Abu Ghneim mountain—once one of the green areas near Bethlehem in the West Bank, now appropriated for the Har Homa settlement. "It is forced uncaring", said one of the Palestinian landowners in his 80s during an early 2023 interview, describing the situation at Abu Ghneim and the broader devastation wrought by the Israeli Separation Wall and the bureaucratic regime regulating

Palestinian access to the land. “Since my nails were soft”, he continued, “we have taken, and are still taking care of the olive trees with our own hands. But the wall separates us now, we are let to visit the land only once a year to see the trees dying, terraces falling down, and weeds growing, as no one is properly taking care of the land”.

The Separation Wall, however, is not the only tool causing ecological devastation by preventing Palestinians from accessing their lands. The exclusion is often justified under the pretext of maintaining the colonisers’ sense of “security” against the “imminent threat” posed by native populations tending their own lands (Ghantous, 2023). To access the olive grove valley, landowners must navigate a Kafkaesque bureaucracy simply to open the gates, once a year, at the southern end of the valley. This process requires repeated meetings with the Bethlehem municipality, coordination with Israeli authorities via the Red Cross, and prolonged waiting—just to secure annual harvest permits. Access through the southern end adds a four-hour walk compared to the pre-Wall northern route. Even then, entry can be unpredictable. Soldiers may not show up on agreed dates, or may deny entry, citing lack of coordination. Permits can be arbitrarily revoked—for carrying items like a camera or a ladder. Those who are allowed to enter face further restrictions: no tools, workers, or proper means to transport olives across the steep terrain. As one interviewee explained, “We cannot go freely, cannot bring help, and there are no roads,” another adding: “it used to be a trip into nature, a beautiful day. Now it is all dead and sad. There is so much work to do, and you get disheartened seeing the land in such condition. We cannot really do much. We would need to work for several days, with several people, just to get anything done.” Such manufactured ecological uncaring leads not only to the neglect of traditional practices like pruning and terracing—accelerating erosion, terrace collapse, and olive tree decline, and damaging a landscape sustained through generations—but also to the buildup of flammable dry grasses and dead branches, increasing the intensity of wildfires and the fires deliberately set by settlers.

Despite the conditions, Palestinians continue to visit and tend to their lands—to hold picnics, spend time in nature, commemorate, harvest and repair what they can. “We go when we can, even if it is a hassle to get there”, one landowner explained, while adding, after a pause: “they are pushing us out, but we keep suffering and wait for the occupation to leave. We hope in the future to be able to take care of the land.” These annual visits, though far from being economically productive, should be seen as lived assertions and political claims of Palestinians’ right to their land. As such they are more than abstract claims; they are acts of remembrance, care and continuity. Landowners repeatedly said—often after lengthy elaborations of their ancestral ownership and presence—how the land itself is “the proof of our existence”. As one landowner elaborated: “I used to go to the land when I was 10 years old, and I am now 70—it has been closed for the last 20 years”. He shared childhood memories of sleeping in the land, cooking with the family, and using “donkeys to bring the olive harvest from the land”. Now, the interviewee explained, there is not much to harvest: “We go there to sit under the trees. We eat and we mourn”. As another farmer put it: “We used to go with the family and got good products. Now you only end up cutting some weed and pruning the dry olive trees. There is nothing left, this makes us sad.”

It is against such a living relationship with the land that the burning of olive trees takes on its most cruel and devastating meaning. Once lush and vibrant, these olive groves were the lifeblood of many Palestinian families, providing not only a source of income but also a deep connection to their heritage and way of life. The fires that have ravaged these fields when the gates have been closed, are not mere acts of deliberate environmental destruction; they are assaults on the very fabric of life in Palestine. The burning of olive trees, some hundreds of years old, marks the culmination of processes already set in motion by walls and the permit regime: colonial dispossession and the ecological destruction of legacies of living with the land. Video clips that landowners have taken on their phones when entering the charred lands capture their shock at the sight of burned olive trees. Palestinian farmers and landowners—many now forced to move to other

professions—call the charred landscape "a war zone", while counting in shock how many "sacks of olives" each burned tree "used to produce". These counts are not simply about lost sustenance but reflect a deeper relationship to the land and the ecology of living. The use of colonial pyrotechniques reveals the entwinement of ecocide with colonial dispossession and the elimination of native presence on their lands.

After the devastation of Gaza intensified in October 2023, landowners of Jabal Abu Ghneim have only been able to watch the smoke rising from their lands from afar. Entries have been denied or remain too dangerous for most to even consider. Fire keeps destroying environments, but also communities and ways of caring for the land. It destroys to replace—to clear the landscapes for new settler plantings. As a planting process, settler colonisation is not merely eliminatory, but a process of elemental devastation: it replaces indigenous vegetal worlds and ways of living tied to them with ones that lack ecological diversity and resilience against the very element settlers have mobilised as their instrument of colonisation: fire. Following the creation of pine tree monocultures—characterised by low biodiversity, high flammability, and poor adaptation to local ecosystems—Israel has suffered massive wildfires. Grotesquely, after growing criticism of these highly flammable "tinderbox" landscapes, in 2021 the native olive tree, which for decades had been uprooted and burned in the hundreds of thousands, and stigmatised as a symbol of Palestinian culture and presence, was voted "Israel's tree of the year" in a JNF public competition (Jerusalem Post, 2021). Similarly, the value of the previously criminalised black goat in reducing fire risk by grazing on flammable bushes and shrubs was acknowledged in the 2018 repeal of the 1950 Black Goat Act (Tabous and Eghbariah, 2022). The back goat, like the olive tree, deeply significant in Palestinian culture, history and connection to the land, is now effectively used to indigenise and normalise settler environmental narratives, while the annual uprooting and burning of thousands of Palestinian olive trees and violence against Palestinian herders and goats by the Israeli state and settlers continues relentlessly.

Conclusion

Fire constitutes a form of *tekhne*—a technology operating in relation to what we term settler colonial "pyrotechniques". Our use of the term pyrotechniques is not just about using fire as a weapon or a singular, detached event. It also, and importantly, refers to the historical land politics that produced the flammable 'tinderbox landscapes' now characteristic of Israel's settler colonial environment. Fire, we argue, is intrinsic to the settler colonial project. We have elaborated on the use of pyrotechniques by examining their role in Palestine through various forms related to colonial control, violence, regulation and the expansion of colonial frontiers: arson, terror, paranoia, landscape modification, arboricide, collective punishment, expulsion, technique of war and more. By analysing pyropolitics through its different uses and in its various forms, we have shown how fire operates to replace Indigenous ways of living with transformative materialisations of settler presence in the landscape. Crucial to this process, we showed, is the pyropolitical devastation—materialised in hellscapes of burning lands, homes, fields and natural habitats—but also the replacive acts of planting, which together reveal how pyrotechniques function in settler colonisation: as ontological forces of destruction and regeneration, ultimately making the colonial worlds – its landscapes, its atmospheres, its expanding frontiers and its modes of power/regulation. Indeed, fire consumes, levels and desolates, but also offers fertile soil to replant. Against this, the colonial imposition of monocultures of more flammable species introduces what could be called a "prosthetic pyropolitics": a fire severed from its entanglement with sclerophyllous and fire-adapted phrygana ecosystems. This colonial-anthropogenic reconfiguration disrupts the ecological reciprocity that once allowed fire to function as a renewing force within these landscapes. Such a colonial transition of landscape does not make 'the desert bloom' as the colonial myth suggests; rather, it enacts

a process of desertification—an engineered erasure designed to elementally devastate and replace Indigenous worlds, including native flora, ecologies and ways of living, with materialisations that serve the fragile settler aesthetics and narrow ideological projections.

Fire, hence, is an elemental and material force deeply enmeshed with political dynamics and onto-genetic processes of world-(un)making. As much as pyrotechniques are used by states to erase and control, and by settlers to terrorise and intimidate, they also take forms that use fire as a "weapon of the weak". One of the questions we could not do justice here, and hence in need of further discussion, is how fire has become embedded in various anti-colonial techniques of resistance (see Razek, 2024; Stefanini, 2021). Here, our discussion of fire as a condition can open important avenues for further thinking about such elemental politics, for instance, through the "generous" aspects of a solar politics that Timofeeva (2022) elaborates on as central to what could be described as a 'revolutionary fire'—a politics that does not merely reverse pyro-colonial machinations symmetrically but instead unlocks fire's transformative potentials. By further considering forms of atmoterror and the settler paranoia surrounding arson, our discussion can also illuminate how elemental politics—entangled with fiery interactions between earthly landscapes, embodied weathers and atmospheric materialities (Joronen, 2025; Nieuwenhuis, forthcoming)—can be understood in tandem with the formation of affective atmospheres (e.g., Fregonese et al., 2024). Finally, through our discussion of pyrotechniques, we aim to offer a critical elaboration of the nexuses of politics, power, materiality and elements as they are constituted, enabled, and constrained through various interactions with fire (cf. Hawkins, 2023). Such an elemental pyropolitics is not merely metaphoric; rather, it demonstrates the onto-genetic power of fire in multiple forms—in colonial politics of elimination and alteration of built, lived and natural environments, but also in modes that can transcend and resist these subjugating pyropolitics.

Yet fire cannot be reduced to a mere tool wielded by those who seek to govern, control or colonise—nor by those who resist or transcend such impositions (Stefanini, 2021). Rather, fire constitutes a sovereign energy that ultimately exposes the limits and vulnerabilities of attempts to tame it. Fire emerges as a double-edged "pharmakon"—both poison and remedy—embodying the tension between destruction and creation. While it may be deployed as a mechanism of violent colonisation—used to terrorise and displace the inhabitants of targeted lands—it also returns to haunt the colonial project. By reshaping landscapes into more brittle, less fire-resilient environments—what we might aptly call 'tinderbox ecologies'—colonial interventions inadvertently invite the very destruction they seek to contain. The "ambiguities of fire's biophysical character," its unpredictability and autonomy, to follow Kull's (2002) work on the political ecology of fire in Madagascar, create the conditions through which opportunities for resistance inevitably arise. Forest fires, in consuming altered tinderbox terrains, can lay bare the material traces of what was meant to be erased. As seen in Palestine, such fires have revealed the ruins of Palestinian villages long obscured by colonial afforestation initiatives, as if "nature [itself were] fighting back against the occupation" (Razek, 2024: 97; see also Salih and Corry, 2021). Fire reveals a landscape that lays bare deep-seated settler anxieties about a land they claim as theirs, yet which resists and repudiates their imposed and extractive presence. Here, we argue that a focus on fire and pyropolitics reveals not only the "more-than-human agency" of natural forces (Braverman, 2023), but also the elemental irreducibility and ungovernability of fire to political efforts of containment (see Ayyash, 2018; Joronen and Griffiths, 2022). Fire escapes even as it offers; it generates even as it exhausts; it enables even as it destroys.

Highlights

- Fire is an important settler-colonial tool in Palestine, weaponised to devastate environments and expel Indigenous life.

- Pyrotechniques materially and symbolically remake land, expanding colonial frontiers through plantation, destruction and atmospheric terror.
- Settler and state uses of fire constitute "elemental devastation"— targeting futures, not just infrastructures and bodies.

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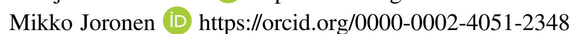
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Note

1. Joronen collected materials for the Jabal Abu Ghneim case, discussed later in this paper, during three 2–4-week fieldwork periods in the Bethlehem region (2019, 2022, 2023) as part of a broader project employing *documentary-making* as a participatory research method. The documentary '*Visiting the Dead*' (2023) approached the annual process of entering the land from an everyday perspective. The material collection involved preliminary meetings (notes) and extended filmed interviews with selected key stakeholders (landowners, Bethlehem municipality representatives, experts, protest participants), filming at annexed lands and other key sites, archival material collection (video, print, digital), and informal discussions with research participants (documented in a research diary). The documentary, conducted with a local team including a Bethlehemite director Elias Halabi, aimed to activate local participants throughout the filmmaking process and provide a means of dissemination to both the involved communities and the wider (non-academic) audiences. The outcome was planned to reflect the Palestinian, not the researcher's narrative on the conditions of entering the land, the theme of fire emerging prominently in the collected materials. The outcome has been screened twice locally (2024–2025), in Toronto Palestine Film Festival (2025), and in six cities in Finland between 2023–2025.

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