

with the 2009 Bear Canyon and 2004 Upshaw fires to the northwest and the 2013 Creek fire to the southeast. The summer fire season—with its normal dry-lightning fire busts—was still weeks away. Staff were already wondering how to handle the reburns that would be essential to turn a spate of fires into a functioning fire regime.¹⁸

Meanwhile, lightning had kindled the Black River Tank fire along the border with Fort Apache reservation. Fort Apache tried to emulate the San Carlos strategy, but instructions were confused, and an air attack operation saturation bombed to hold the burn to an expensive 3,244 acres. What San Carlos had accomplished depended on the dynamics of its people, not just the dynamics of fire burning through pine, juniper, and grass.

Fire behavior is fire behavior and universal, but behavior toward fire is specific to cultures and not transferable with algorithms. Box and burn is not a simple tool, like a Neptune air tanker or a D6 caterpillar that can be dropped into any landscape. It is a negotiation between fire and fire managers. Like all things human it has to be learned, but unlike many it is not something easily taught.

A REFUSAL TO MOURN THE DEATH, BY FIRE, OF A CREW IN YARNELL

I shall not murder

The mankind of her going with a grave truth . . .

—DYLAN THOMAS, "THE REFUSAL TO MOURN
THE DEATH, BY FIRE, OF A CHILD IN LONDON"

ON THE 30TH OF JUNE 2013 a fire blew over the Granite Mountain Hotshots outside Yarnell, Arizona and left 19 dead. Three months later, on September 30, a formal investigation released its findings. The inquiry focused on the mechanics of fire behavior and how the Granite Mountain Interagency Hotshot Crew might have understood their "situational awareness," which is to say, how the crew recoded the information they were given with what they saw for themselves. Instead of ascribing blame, the investigative team sought to appreciate how the hotshots engaged in sensemaking in an effort to explain decisions that, to nearly all observers, made little sense. But the need for sensemaking extends also to the meaning of the fire for American culture at large.

For anyone conditioned to read landscape for fire behavior, Yarnell Hill is a Google of clues ready to be coded into the existing algorithms of fire behavior. The fundamentals point to fuels of mixed brush and grasses, parched by seasonal drought, to the terrain of Yarnell Hill, and to record temperatures, blustery winds, and the downdrafts ("outflow boundary") from passing thunderheads. There is nothing in the reconstruction of the fire's behavior that suggests it was anything other than a high-end variant of what happens almost annually.

What made a difference was that the collective will of a hotshot crew crossed that flaming front. The reaction intensity that matters is fire's

interaction with American society. The behavior we want to explain is the crew's, and what their death signifies, and for that we must look outside the usual fire-behavior triangle and into that triangle of meaning framed by literature, philosophy, and religion. The fire came as a tear in the space-time continuum, opening into a void for meaning. There are fires that belong with science, fires that stride with history and politics, and fires that speak in the tongues of literature. Yarnell Hill is a literary fire. It's a fire for poets and novelists, and maybe the stray writer-philosopher.

In a profile of James Pike, Joan Didion observed that he might be understood as a "great literary character" like Jay Gatsby. So, after the reports are filed, the lawsuits settled, and the scientific interrogations published, we may well linger over the Yarnell Hill fire as a great literary moment, for which character, conflict, and plot serve as the fuel, terrain, and weather resolved into the blowup of tragedy.

The greatness of the fire does not lie in its physical behavior or scale. Hannah Arendt famously spoke of the "banality of evil." It is likely that the mechanics of the 8,000-acre Yarnell Hill burn will prove equally banal, not with active evil but with an unsettling emptiness. It is not what happened but what it means that mesmerizes the public imagination. Giving story to that sentiment will be the task of literature.

*Nor blaspheme down the stations of the breath
With any further
Elegy of innocence and youth.*

When it studies fire behavior, the fire community reaches for models; so, as it ponders the fire's meaning, it will need to search for narrative templates. The vital parameters are a wrathful gust of wind and a devouring fire, the immolation of 19 men, a lone survivor, a landscape of ambiguous purpose as a determined brotherhood chases flames by a nearly deserted town. These facts the community will try to reconcile with fire behavior and to the interpretive models that it uses to account for why fire suppression today is dangerous. The problem is that its prevailing models don't fit.

Expect that the community will turn first to Norman Maclean's Talmudic *Young Men and Fire*. Attention will focus, in particular, at the point where science met literature, the study of comparative behaviors,

the fire's and the crew's, that Maclean's inquiry inspired from Richard Rothermel. At Mann Gulch the steep terrain quickened the fire even as it slowed the smokejumpers. Where the curves of their differing rates of spread crossed, the crewmen fell. In Maclean's hands the mathematics became the narrative lines of a Greek tragedy in which fire and crew each did what they were destined to do. Bob Sallee and Walter Rumsey were high enough on the slope that they could just evade the flames. For the others, only Wag Dodge's escape fire—like a *deus ex machina*—interrupted the logic of fate.

Yarnell Hill will become another "race that couldn't be won." But the analogy stumbles. The smokejumpers at Mann Gulch had no choice: they were trapped in a closed basin, almost a chute, and would perish unless they could outrace or outsmart the flames. The hotshots at Yarnell Hill were safely on a ridge, in the black, and chose to race with the fire by plunging downhill into a box canyon thick with boulders and brush. Theirs was an act of volition denied the jumpers at Mann Gulch. At Mann Gulch the fatal numbers were coded into the scene at its origin. At Yarnell Hill the Granite Mountain Hotshots did the calculations and added the sums incorrectly.

The numbers tempt: they are hard facts, recorded in the landscape, not unknowables embedded in the nebulous "sensemaking" of mind and heart. So one narrative will turn to explanations for the fire's "extreme" behavior from outflow winds, box canyons like thick chimneys, and the boiling dynamics of plumes. The story will look, in particular, to long-unburnt fuels and especially to extended seasons, record temperatures, and climate change. The explosive Yarnell Hill fire will become another signature of the Anthropocene's new normal. The loss of an elite crew will be tallied as part of the cost of ignoring global warming.

It was hot, dry, and windy, but it's always like that in the early summer lead-in to the monsoon. Central Arizona has known higher temperatures, stronger winds, and deeper droughts. When thunderheads collapse, particularly in the season's first storms, those blasting downdrafts drive flames as they do city-enveloping haboobs. A similar outburst drove the 1990 Dude Creek fire (eastward at Payson, a sister city to Prescott) through a crew and killed six. The flames at Yarnell Hill leaped and spotted through grass and brush—combustibles ideally suited to react quickly to wind. Conditions on June 30 were not beyond the region's

environmental or evolutionary scale. We don't need climate change to account for the fire's behavior.

Already, the community is turning to that other great narrative template invoked to describe the contemporary scene, the geeky-named wildland-urban interface. The Granite Mountain Hotshots were putatively on the scene to defend Yarnell, an exurban enclave that may have been indefensible and in any event was mostly evacuated. It's unfair to demand that fire crews risk their lives for property. That burden belongs to the community. If they build houses where fires are, they have to live with fire.

But Yarnell frustrates this generic model. The town sprang up during an 1860s gold rush. It was platted 50 years before Arizona became a state. It survived by being repopulated, most recently by retirees. Whatever the firescape at the time of founding, it was undoubtedly scalped by the miners, who burned off the cover to expose outcrops, cleared any trees and shrubs for firewood, and brought in meat cattle that stripped away the grass. The existing scene is the jumble of recovered pieces. The town was not plucked down amid combustibles; the firescape grew up around the town. In fact, by the early 1950s the state of Arizona was actively promoting Yarnell as a retirement community, which is what it became.

The dispersed outliers were mostly indefensible, so there would have been little justification in trying to shield them, particularly with fire bearing down imminently. The Granite Mountain IHC was outfitted with hand tools for cutting fireline, not with hoses, pumps, and shielding for defending structures. Before they left the ridge, they were working a free-burning fire; they were assigned to establish an anchor, not to protect structures. This was not an Esperanza fire in which flames washed over an engine crew positioned to defend a house. The Granite Mountain IHC did not perish, arms locked, standing between the flames and homes. They died in a box canyon into which they had voluntarily hiked.

The other template—everything has to come in threes—is that legacy agencies are unable to overcome their culture of suppression. They fight fires where and when they shouldn't because they know no other way to respond; the endless roster of shelter deployments, near misses, and fatality fires is the inevitable outcome. Even the shock of the 1994 South Canyon deaths, the prospects for civil and criminal penalties, and the emphatic edicts from above have failed to dislodge that culture. It

invites risk-taking that leads remorselessly to Thirtymile Canyon, Cramer, and Yarnell Hill. The rules keep being broken—must be broken to satisfy the nature of the beast. Implicit, too, is a tint of gender bias; the Granite Mountain crewmen were all young men engaged in what could seem an extreme sport.

Yet again this particular fire turns such understandings into shades of gray. Granite Mountain IHC was not a Forest Service or BLM crew: it was proudly, defiantly, the only nonfederal IHC on the national register. Undoubtedly it absorbed elements of traditional mores and camaraderie, but perhaps without the institutional checks that have been cultivated over the generations since 1994. It belonged to a city fire department. It absorbed at least as much culture from urban fire-service expectations as from wildland agencies. It was fighting a wildfire on Arizona state lands, under the auspices of the Arizona Department of Forestry, the youngest state forestry bureau in the United States, established the last year fires burned in Peoples Valley. There were other crews on Yarnell Hill, including federal hotshots. None of them put themselves into the path of the fire.

In the least valley of sackcloth to mourn

The majesty and burning of the child's death.

If the traditional templates don't apply, what might? If this is a literary fire, they will come from literature, and in truth possible models seem to leap from the scene. There are those that help arrange the particulars into a story, and those that invest that narrative with the kind of meaning that speaks to the extraordinary reach of interest that this fire has sparked. They move the tale from physics to metaphysics.

Look, first, to *Moby-Dick*. The pivotal—the Ahab—character is surely Eric Marsh, cofounder and crew superintendent, not because he is mad or malevolent, but because he is driven, and his role, and whatever future inquiries determine to be the chain of events, this is his *literary* role.¹ Wildland fire was his obsession: he helped transform a brush-clearing crew into an IHC, he established the Arizona Wildfire Academy in his living room, he modeled the crew after his own character. They were all young, male, and Anglo. They had something to prove: they were a proud “oddity,” he had written some months earlier, a city-sponsored IHC among a federal-dominated workforce; a “mystery,” to city coworkers;

“crazy,” to family and friends. They prided themselves in showing up “to a chaotic and challenging event, and immediately breaking it down into manageable objectives and presenting a solution.” They did not just call themselves hotshots, they were “hotshots in everything that we do.” They “loved” the life they had chosen. They “managed to do the impossible.”²²

On the afternoon of June 30 Marsh was a division superintendent, but he left the line to scout and then moved the crew away from a blackened ridge and back into the action. He showed an élan and initiative that in many circumstances of life we would applaud but what here looks like an obsession. They were safe. He took them to the flames. His drive became a fatal flaw and carried the others with him. The crew, even the Starbucks among them, follow, all caught up in the chase. So at last that great white whale of a fire turned on them, and left one survivor, a solitary witness to proclaim, after the Book of Job, “And I only am escaped alone to tell thee.”

Still, tragedies abound. What made this of interest in Toronto and London as well as Phoenix is that the fire dramatized with sudden and graphic violence the question of what purpose if any informs our existence, whether our lives reflect the workings of a plan or of accident. Look, in this case, to Thornton Wilder’s *The Bridge of San Luis Rey* to account for the awful coincidences and the quest for patterns in the void. “On Friday noon, June the twentieth, 1714, the finest bridge in all Peru broke and precipitated five travelers into the gulf below. . . . People wandered about in a trance-like state, muttering; they had the hallucination of seeing themselves falling into the gulf below.”

Why this crew? at this time? in this way? Why, as residents of Yarnell asked, were some houses spared and others burned? Was there a hidden order, which is to say, a deeper providence in the tragedy, or was it just an arbitrary collision of actions with no more design than the scatter of summer cumulus? The Granite Mountain IHC had for its original logo a pair of flaming dice that always came up seven. This time the dice rolled snake eyes.

What the *Bridge of San Luis Rey* model also suggests is that the way to narrate the meaning is not directly under the gaze of an omniscient narrator arraying events within GIS grids and plotted along timelines, but through the quest for their significance. Norman Maclean made that pursuit personal: *Young Men and Fire* became the story for his own search for the story. Thornton Wilder refracted that inquiry through Brother

Juniper, whose pursuit of and meditation on the gathered facts leads ultimately to an auto-da-fé, the burning of self and book at the stake.

Beyond metaphysics and theology lies the tangible grief of the survivors. They want significance ascribed to the sacrifice. They want their loved ones honored and valorized. This, too, is an old provenance of literature, and it offers a full gamut of consolations, from doggerel and sermons to narrated emotion fused with artful intellect. For this task ponder James Agee’s *Let Us Now Praise Famous Men* to appreciate how to ennoble ordinary lives without sentimentalizing their fate. And at its most challenging, read Dylan Thomas’s inextinguishable “A Refusal to Mourn the Death, by Fire, of a Child in London” for the cold, obdurate turning inside out of emotional trauma in the face of a tragedy of innocents.

For all its splendor and pathos, American fire has no novel to match its stature in the American scene. It has some powerful nonfiction, most notably Maclean’s *Young Men and Fire*, which has many imitators but stands alone, itself a survivor and posthumously published witness. But the fusion of fire and art remains unmet. In Yarnell Hill, however, the American fire community has the themes and latent structures for a great work of literature.

That doesn’t guarantee it will happen. Five books are promised on Yarnell Hill (two published, to date). My guess is that the enduring voice of the tragedy, however, will come long after the event, much as the great novel of the American Civil War, *The Red Badge of Courage*, was published 30 years after Appomattox by someone who was six years away from being born when the war ended. The author will be a writer who recognizes that this is not just human-interest journalism, a gripping story of a disaster, a procedural on fireline behavior, or a political parable about misplaced national priorities, but someone who appreciates the fire as a great literary character whose meaning must depend on the ambiguities of art to extract significance from the indecipherable. Not just someone who can see patterns in the flames and hear cries among the roar, but someone who can say with Dylan Thomas that

After the first death, there is no other.