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The Big Lie: discursive risk analysis and wildland firefighter safety in the Western United States

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Abstract

While increased length and intensity of wildfire seasons in many places have led to more concern about wildland firefighter safety, we believe ethnography has been underutilized as a method within this domain. In response, we begin building a shared idiom for ethnographic engagement with wildland firefighter safety and similar occupations. We draw on ethnographic approaches to late industrialism to develop a method called discursive risk analysis (DRA) as an initial stage in a broader collaborative and generative research practice. By collaborative, we mean cooperation among stakeholder, disciplinary, professional, and other groups. We use DRA to analyse ethnographic data and documentary sources relevant to discussions of ‘the Big Lie’ among firefighters and agency leadership. The Big Lie is a term that both firefighters and agency leaders used to suggest that wildland firefighters are being harmed by agency discourse that says firefighters will be kept safe despite the unavoidable danger of the job. It is important to the Big Lie discussion that this harm is conceptualized by firefighters as discursively driven, necessitating a research method attentive to discourse. Discursive Risk Analysis of the Big Lie discussion suggests two discursive gaps that may result in two discursive risks. The first gap, found in agency discourse, is that ‘everyone knows the job is dangerous’ but ‘zero fatalities is a reasonable goal.’ This gap is associated with a discursive risk, a possible decrease in trust among wildland firefighters in agency leadership. The second gap, observed in firefighter discourse, is that ‘the job is dangerous’ but ‘no one will get hurt today.’ This gap is associated with another discursive risk, the possibility of decreased situational awareness. Finally, we clarify each of these gaps and risks through two anthropological concepts (the Sapir–Whorf hypothesis and the public secret) that can bring new perspectives to discussions about institutional cultures of health and safety.

1. Introduction

The United States Forest Service (USFS), part of the Department of Agriculture, spends over 50% of its budget suppressing wildfires; this includes efforts in 10 states that have experienced their largest fires on record in the past 20 years and during fire seasons that are now 78 d longer than in the 1970s (USDA 2020). While large and deadly wildfires in states like California have garnered international media coverage, they are not alone in doing so, as wildland fires in Canada, the Amazon, Australia, and Europe have provoked intense global concern over climate change, wildlife and ecological health, and human health and safety. In this article, we turn anthropological attention to forest workers, specifically in the Western United States, who risk their lives to manage wildland fire. We argue that the complexity of wildland firefighting makes it an excellent object of innovative ethnographically-grounded collaboration with experts and professionals already working in this domain.

Ethnographers and ethnographic concept workers have contributed less to the discipline and practice of occupational health and safety than we might have hoped. Despite inroads made in agricultural, including forestry, health and safety specifically (see Arcury 2017, Fortun 2017, Durbin *et al* 2019) and the existence of high-quality scholarly ethnographies of wildland firefighters, there has so far been minimal impact and engagement across these domains, yet we see a great deal of potential for such a focus. Several examples of scholarly ethnography are worth mentioning here, including notable work by Matthew Desmond, whose monograph *On the Fireline* explores in detail the question of why wildland firefighters, primarily men, choose to take occupational risks (Desmond 2007; see also, 2006, 2008, 2011). Other ethnographers have followed, including those paying special attention to the role of prison labour and how wildland firefighting challenges our social constructions of criminality (Goodman 2012, 2014, Feldman 2018, 2020), the training and embodied knowledge of firefighters (Desmond 2007, 2011, Thomas 2022), and the role of gender in the organization and practice of wildland firefighting (Desmond 2007, Pacholok 2013, Eriksen 2019). Of special interest to us is Adriana Petryna's work (Petryna 2018), where she clearly demonstrates that grappling with the complex and uncertain reality of wildfire is beyond any existing episteme and is therefore subject to 'horizoning work' that acts 'amid imperfect information, sustaining spaces for coordinated human action; stepping away from the primacy of prior models and, in doing so, revealing a host of underappreciated social and technical activities—the very material of ethnographic concept work...' (Petryna 2018, 587).

1.1. A turn toward discursive risk analysis and ethnographic looping

While embracing Petryna's insights about the need for horizoning work, we will acknowledge that even ethnographic concept work, to the extent that it remains within its own idiom and practice, is similar to other research idioms and practices in being insufficient to the complex challenges represented by wildfire. We make a modest attempt to draw upon the strengths of ethnographic techniques while also opening possibilities for new epistemic idioms to emerge beyond any single disciplinary practice by translating, for broader audiences, the methodological propositions made by Kim Fortun in her essay 'Ethnography in Late Industrialism' (Fortun 2012). The method she proposes for dealing ethnographically with complexity involves listening for discursive gaps that, because of the misalignments among representations of reality and an actual emergent reality, produce discursive risks that are constituted as an inability to attend to potential hazards. As a result, emerging risks may go unrecognized within existing forms of expertise and disciplinary domains. The job of an ethnographer of these situations, according to Fortun, is to identify discursive gaps and risks and then bring these to the attention of the worlds from which they were derived through a process she calls 'ethnographic looping.' While all these steps are necessary, our article focuses on the first, or the identification of what Fortun (2012) has called discursive gaps and risks, a preliminary stage of research prior to ethnographic looping, an experimental, interdisciplinary collaboration in the production of innovative solutions. For ease of reference, we call this approach discursive risk analysis (DRA). We argue that an incipient version of DRA is already emerging among some groups within the professional wildland fire community in the US, amounting to a parallel practice of ethnographic concept work similar to what Holmes and Marcus (2005) called para-ethnography and Boyer (2008) referred to as para-theory. These terms reference the fact that non-social scientists are also doing social science and that these attempts to understand can become an excellent opportunity for collaborations and shared research idioms.

We use DRA to sketch an initial description of the discursive gaps and risks implicit in recent conversations about 'the Big Lie,' a term used by some in the wildland fire community to indicate that official agency discourse about firefighter safety is both misleading and, perhaps, making firefighters less safe. In doing so, we offer a limited but more broadly accessible illustration of how DRA might be applied by and with stakeholders that are attempting to grapple with problem domains that already exceed our ability to adequately speak and think about them. In the conclusion, we speculate about how this instance of DRA might be looped back into the professional worlds from which it was derived. This ethnographic looping is the ultimate goal of DRA under normal circumstances.

2. Methods

The data used for our DRA is derived from a month of rapid, multi-sited ethnographic fieldwork. We draw on 'rapid ethnographic assessment' to distinguish our research from more sustained ethnographic fieldwork, traditionally taking one year or more (Sangaramoorthy and Kroeger 2020). By 'multi-sited' we mean that our field site cannot be characterized by a physical research location that is taken as a representative sample of a larger macro-culture (Marcus 1995). Whereas long-term ethnographic research classically takes *ethnos* (the total way of life of a people) as its object of research, both rapid ethnographic assessment and multi-sited ethnography tend to ask more limited questions of a cultural system. Likewise, our object of cultural analysis is a discursive episode that we follow from forest to federal agency and professional discussions.

Field research was conducted across four Western US states. Research locations included Custer, SD, Laramie, WY, Missoula, MT, and Grangeville, ID. Field sites were selected to include a range of ecosystem and terrain types. Fieldwork included direct and participant observation and both informal and semi-structured interviews over two summers from 2016–2017. However, because nearly all participants worked or had worked for the US Forest Service, where employees can be highly mobile over their careers, the data were not limited to perspectives on these locations. We must also acknowledge that because many wildland firefighters do not work for the US Forest Service but for other federal or state agencies, private companies, and even as local community volunteers, our data and the discourse we analyse are not inclusive of these other positionalities. Direct observation included following a hand faller in Idaho for a day as he felled trees and watching loggers in Idaho and Montana use larger equipment, like feller bunchers, to harvest living and beetle-killed trees. Participant observation included several all-day ride alongs, for example with a district ranger in Wyoming, and helping to map out a timber sale in Idaho. Strategic participant observation included informal interviews and was complemented by semi-structured interviews. In total, 20 semi-structured interviews lasting from 25 min to two hours, with most lasting from 1–1.5 h, were recorded with 23 participants. One interview with a wildland fire crew was conducted as a group interview at the request of the participants. Participants were selected as part of a larger project interested in how forest workers perceive and negotiate the risks associated with beetle-killed trees. After preliminary research, it was clear that wildland firefighters were most eager to talk about these issues and about the related institutional and cultural contexts of safety. The primary fieldworker is not a wildland firefighter and, although it was discussed with participants in interviews, did not directly observe fire-specific training. Participants were selected, using convenience and snowball sampling, from a diversity of jobs and skill sets within forest management and wildland firefighting, with most having direct experience with wildland fire management.

During participant observation and semi-structured interviews, participants would often recommend that we read the same professional publications, training materials, and other documentary materials they were reading and referencing. We adopted a technique of field site construction that Marcus called ‘following the conflict’ (Marcus 1995), to follow the discursive agonisms surrounding the Big Lie out of our face-to-face encounters with US Forest Service personnel and into the world of written professional discourse. This coherent, multi-sited, ethnographic data set, including fieldnotes from participant and direct observation, interview transcripts, and documentary sources, was subjected to detailed thematic analysis that was concluded when central themes (in this case discursive gaps and risks) reached saturation, meaning no additional discursive gaps or risks were found (Braun and Clarke 2006).

2.1. Ethnography in late industrialism

In her article on ethnography in late industrialism, Fortun (2012) outlines a method that is both ethnographic and capable of producing new ways of talking and thinking beyond any one sphere of expertise. By late industrialism, she means the obvious failure of modernist ontology to maintain its most foundational binary categories, such as nature and culture. As she characterizes it, in late industrialism ‘the levee has broken, retention walls have failed. The sludge runs over homes and lives...’ (Fortun 2014, 310). This is not simply a failure of infrastructure but also of expertise that is highly developed, specialized, and necessary but also corresponds to epistemic domains that no longer align (if they ever did, see Latour 1993) with the messiness of our reality. Likewise, wildfire both requires and defies description in terms that are (at least) physical, socio-economic, ecological, cultural, phenomenological, psychological, political, epidemiological, discursive, and historical. From all these epistemic perspectives, wildfire is what Knorr Cetina (2001) might call an epistemic object, characterized by continual unfolding in which the object as it is now will only be known in terms of the object as it will be later. Not only is wildfire too complex for any one sphere of expertise, it is changing, and what it is now depends on what it is becoming. Fortun’s methodological approach to this problem (what we are calling DRA + ethnographic looping) is an attempt to draw on the strengths of ethnographic research and concept work, while also attempting to move beyond ethnography’s own epistemic and discursive limits. After all, ethnography as it is classically practiced is also a modernist project.

This method for dealing ethnographically with late industrialism involves listening for discursive gaps that, because of the disjuncture between representation and an emergent reality, produce discursive risks that are constituted as an inability to attend to potential hazards. The job of an ethnographer of these situations is to identify discursive gaps and risks and then bring these to the attention of the worlds from which they were derived. Through this collaborative design and research process, referred to as ethnographic looping, ethnographers can then help facilitate an emerging idiom that bridges discursive gaps and is more capable of dealing with emergent realities. Ethnographic looping is applied to real-world problems but is done in such a way that the ability to articulate those problems emerges because of the process itself (see table 1, and Fortun 2012 for an example of ethnographic looping). This is especially useful in the context of para-ethnography/

Table 1. Fortun's 3 steps for ethnography in late industrialism (see Fortun 2012).

Kim Fortun's 3 steps for ethnography in late industrialism	
Step 1	Identify discursive gaps and risks and render them within existing idioms, including the idioms of anthropology. This step constitutes DRA.
Step 2	Loop in by leveraging ethnography to describe and to respond to the discursive gaps recognized in Step 1.
Step 3	Creatively design an experimental and collaborative system that can produce new idioms better able to grapple with complex realities. These idioms cannot be known in advance.

theory because it renders the parallel interpretive practices of ethnographers and their interlocutors methodologically and pragmatically visible.

In the next section, we use our interviews and documentary sources to show that what is left unsaid in official wildfire safety discourse may affect the risks firefighters take with their own lives. Specifically, we show how what is not said is discursively related by firefighters themselves to both their perceived ability to remain attentive on the job (or situationally aware) and the so-called 'Big Lie.' In professional literature, the Big Lie conveys the idea that official discourse about wildland firefighting emphasises a worker's right to safety despite the irreducible danger of the job. We argue that this constitutes two discursive gaps. The first gap is between what is said and unsaid in official discourse (that 'zero fatalities' is a reasonable goal BUT everyone knows the job is dangerous). The second gap relates to understandings of risk among some wildland firefighters (that the job is inherently dangerous and that even the safest people, making the best decisions, can be killed BUT institutional protocols can keep firefighters safe). Furthermore, we support our claim that DRA is an appropriate infrastructure for collaboration in wildland fire safety by showing that participants are already working toward identifying these gaps. We argue that participants already recognise some of the associated discursive risks but also that these conversations can benefit from conceptual clarification.

3. Results: the Big Lie and the discursive risks of not talking about danger

The Big Lie designates a discussion that was most visible in firefighting blogs, training publications, professional journals, and informal conversations between 2016–2017. It indexes the idea that although wildland fire agencies (such as the US Forest Service, Bureau of Land Management, and state level equivalents) explicitly insist that wildland firefighters have a right to a safe work environment, a wildfire can never be made completely safe. This idea was confirmed by Petryna in her ethnographic fieldwork as well. She writes the following about wildland firefighters:

Along the way, senses of paradox were personally felt. As one observer shared with me: "We focus on safety. Go out there and be safe. And the counter to that is, 'That's bullshit. You can't.'" (Petryna 2018, 587)

The naming of this concept as 'the Big Lie' is attributed to Mark Smith, a firefighter and consultant, and his article 'The Big Lie,' published on the *Wildland Fire Leadership* blog (Smith 2016a). However, in the article, Smith writes that the concept emerged out of conversations within a diverse group of 'seekers' called Honor the Fallen that included 'hose-draggers, fire directors, dirt diggers, academics, "Ollies", agency administrators, ICs (Incident Commanders), [and] FMOs (Fire Management Officers)' that formed in the wake of the 2013 Yarnell Hill fire, in which 19 members of the Granite Mountain Hotshots, an elite wildland fire crew, were killed. Smith (2016a) quotes an unnamed founder of Honor the Fallen who said that the group was formed to 'realize and seek to highlight that cultural and other human factors risks are just as profound and potentially deadly as physical risks on any incident.' Smith goes on to quote another member of the group who believes that a presentation of the Big Lie idea needs to be preceded by drawing attention to what we would call a discursive gap between the goal of zero fatalities within wildland agencies and what seems to be the complex political and physical realities of fighting a wildfire:

I can't help but feel that there is a conversation that needs to precede it. A conversation about our mission as suppression resources. Are we now in the business of intentionally risking lives to achieve wildland fire objectives? I ask because at least the [Agency] has never accepted that position before and maintains its stance on zero [fatality] tolerance to this day. I understand

that firefighters are going to die but there is a big difference between vehicle accidents and entrapments. (Smith 2016a)

Smith ends the preamble to his article by saying that the discussion about the Big Lie is just the first step toward a much broader political and ethical discussion that must occur with political representatives in the United States and the American public.

This essay takes the position that, by default, and for many reasons, risking lives to achieve wildland fire objectives is exactly what is happening. The debate on whether that is what **should** be happening is stifled by the denial that it's happening right now.

If the calculus is going to change, then wildland agencies are going to have to decide how to reconcile the expectations of taxpayers and their elected representatives with agency culture on acceptable risk. (Smith 2016a, emphasis original)

The Big Lie, therefore, is a call to agency leadership, U.S. politicians, and the American public to clarify what is, in fact, being asked of wildland firefighters. The argument is that if we are requesting that these men and women risk their lives, we should be honest about what we are asking of them and say so explicitly.

These themes were also found among our interview participants. For example, the tension between the goal of zero fatalities and the inherently dangerous nature of wildland firefighting was especially salient. That wildland firefighting is inherently dangerous means that while it can be made safer, it will never become completely so. Because of this, some participants added that telling firefighters to 'stay safe' was dishonest. Two wildland firefighters, as part of a group interview, put it bluntly:

Firefighter 1: We can follow every safety protocol we have and no matter what we do it's just dangerous. Even if we're not cutting corners, it's still dangerous. You know, it just is. ... we got really shit full of hearing people say 'well, be safe out there. Be safe, be safe.' And I think it was like a general or somebody that was quoted as saying: 'go do dangerous shit. But come back in one piece,' you know? I mean that's more of an honest statement, you know? [...] Yeah, go do dangerous stuff because we have to acknowledge that we're doing dangerous stuff. But come back in one piece, you know?

Firefighter 2: So, with that, a big pet peeve of mine is we always talk about, no fire is worth risking a life. No home is worth saving to risk a life. And that's bullshit because every fire we go to, we are risking lives. So, until we say that this fire is worth risking life, and I agree none of it is worth losing life, but you are risking every single time. As soon as we pull out of this parking lot to send guys to project work, we're risking life. For them driving down the highway, we're putting their lives at risk. So, unless we admit that, we're not going to look at what the risk truly is and really look at ways to minimise that risk. We're just putting our heads in the sand. (Interview 5, USFS Fire Crew)

Part of the claim here is that even the safest firefighters who are following protocol and making the best possible decisions can get hurt or killed and that this recognition is often left out of safety discourse as it is applied in safety training and briefings.

Smith's article sparked additional professional discussion about whether the Big Lie actually exists and, if it does, how it affects safety. This literature appeared to influence the way some interview participants thought about their jobs. For example, the reference to 'a general or somebody' in the last quotation may derive from an explicit discussion of the Big Lie by Smith in *Two More Chains*, a professional publication for wildland firefighters. The actual reference is attributed to Colorado National Guard Lieutenant Colonel Mitch Utterback: 'People say: "Be safe out there." i am not going to say that. This is dangerous shit we are doing. So go do dangerous shit. But come back alive' (quoted in Smith 2016b). This willingness to speak frankly about risk to life among military personnel is contrasted in the same article with a conversation overheard between a district FMO and a district ranger about how they approach the uncomfortable topic of potential on-the-job death:

District FMO: When you first talk to new hires for the season, do you tell them that the job might be dangerous? Suggest they have a will? Things like that?

District Ranger: God no! That would **not** be politically correct! (quoted in Smith 2016b, emphasis original).

The implication, here, is that institutional and, perhaps broader, political factors influence what is considered articulable within some agency contexts.

In contrast, the claim that the Big Lie exists as a real phenomenon has also been actively disputed. In a response to discussions of the Big Lie, Mike Degrosky asked in a *Wildfire Magazine Online* article titled ‘The Biggest Lie Never Told’:

Has anyone really told anyone firefighting is safe? In my 39th fire season, I cannot recall an instance in which someone intentionally conveyed this message. Do we really need to be told that firefighting is dangerous? I, like many a young firefighter before me and after me, found the danger appealing, just as did many of Smith’s soldier colleagues. To pretend that firefighters remain unaware of, and are not motivated by, the danger of the work represents as big a deception as any. (Degrosky 2016)

This sentiment has been echoed by others, including a follow-up to the Big Lie discussion. In an article titled ‘The Big Lie Continues to Fester and Inspire,’ published on the website of the Wildland Fire Lessons Learned Centre, a woman who was a fireline supervisor at the time of publication said:

I became a wildland firefighter BECAUSE I knew it was dangerous. I craved the adrenaline, hero-respect, and, above all, the deep and irreplaceable camaraderie that accompanies dangerous work. (I’m not sure why the young men do it. But after caregiving for my husband through years of terminal illness, I needed what fire gave me.)

I recognized ‘The Lie’ and lumped it with all the other bureaucratic-CYA [Cover Your Ass] lies that release agencies from liability.

I accept ignoring that lie as a cost of doing a job that I love. HOWEVER, now that I am a fireline supervisor, my perspective is very different. I have honest-as-possible discussions with my ducklings, and I do my best to keep them away from the risk I used to embrace. (Keller 2017, emphasis original)

This is interesting for a few reasons. First, it reiterates an explanation for the Big Lie as being a bureaucratic or political artefact. Second, it shows not only that this woman’s attitude toward risk changed as she became a supervisor, responsible for the safety of others, but also that some supervisors are already trying to speak more openly and directly, although informally, about risk to life. Third, it highlights the tension between the knowledge of risk to life and the suggestion that a lie is being perpetuated about those risks. This is Degrosky’s point, and indeed, it is difficult to believe that anyone, especially a qualified firefighter, would believe the job is safe. In fact, all wildland firefighters we interviewed explicitly spoke about their job as dangerous.

Yet, in a professional poll of wildland firefighters, conducted by the Wildland Fire Lessons Learned Centre, only four respondents out of 106 disagreed with the idea of the Big Lie, meaning 102 respondents believed the Big Lie was real. One respondent put it this way:

I am bothered when I hear folks say our goal is zero fatalities because I think it is unrealistic. Like having that goal for police officers, or structure firefighters, or even the military. Firefighting is inherently dangerous. I think that message should be more openly discussed. I see new firefighters so excited and thrilled with their new job and my guess is that no one has mentioned that they might want to prepare a will. (Respondent 6 quoted in WFLLC 2017)

Here, the respondent believes the Big Lie is an important discussion specifically because he knows how dangerous his job can be. He is not arguing that new firefighters do not understand the risk, but that it is not more openly discussed. The difference is subtle, but it does appear to highlight a discursive gap between what rank and file firefighters are attempting to say with the Big Lie and how they are being heard. How might we, as ethnographers, help bring a sense of clarity to this discussion?

We argue that one of the keys to understanding what is being said (and not said) can be found in our interviews with wildland firefighters, some of whom connected the idea of the Big Lie, although without explicitly using that term, and their ability to remain out of harm’s way. The first example is of the normalization of safety briefings leading to a false sense of security. One supervisory forester at a state level agency put it this way:

Well on fires, you know, you get there in the morning, and they’ll have briefing, and everybody and their brother has to get up to say something, and at some point they give the safety briefing, and nine times out of ten they always say the same thing. It goes: ‘firefighters safety, blah blah blah blah’. Yes, I know. I got it. I’ve heard this before. And the problem with that is you just become.. um.. calloused. And you don’t pay attention to that anymore. And I know people in fire deal with that all the time. ... [They say] ‘look, number one. We’re not going to let you die.

Table 2. Discursive gaps, risks, and clarifications from analysis of the Big Lie.

Discursive domain: The big lie	Discursive gaps	Discursive risks	Conceptual clarifications
Agency discourse	'Everyone knows the job is dangerous' BUT 'Zero fatalities is a reasonable goal'	Diminished trust in agency leadership	Sapir–Whorf hypothesis
Firefighter discourse	'The job is dangerous' BUT 'No one will get hurt today'	Perception of negative impacts on situational awareness	The public secret

We're not going to let that happen. We're not going to let you die, we're not going to let anybody else die, we're not going to do that.' And then you know.. coffee was good this morning, and I got a bagel for lunch, I need gas before.. (Interview 2)

Some participants linked this kind of safety talk and normalization with the ability of firefighters, especially young firefighters, to maintain situational awareness:

I think it's pretty well acknowledged that the best way to keep folks safe is higher situational awareness. Everybody being more aware of what's going around. So, tell me, how would you be more aware, what would make you pay more attention? Somebody give you a briefing and said 'yeah, there's some snags up there, we're not going to risk anything, be safe today,' or if I said 'hey there's a lot of snags on this hill, steep hill there's a lot of rolling rocks. Every one of these things can kill you. You are risking your life today. Pay attention out there.' What's going to wake you up and make you look around more? Probably if somebody tells me, if I hear that, 'hey you're risking your life today. You might die. Pay attention to what's going on.' Especially your 19, 20 year-old kids just coming into it. They don't know a lot; they're counting on folks around them. ... So, if you're.. admitting it to them early on, then maybe they're going to pay a little more attention and gather that situational awareness a little quicker. (Interview 11, USFS Fire Management Officer)

Here, the conceptual substance of the Big Lie is explicitly linked to diminished situational awareness. In contrast, explicitly talking about job hazards and danger is seen as a way to both heighten situational awareness and build it more quickly in newer firefighters.

3.1. Discursive gaps and risks

Two discursive gaps emerged from our analysis of the Big Lie literature and participant interviews (see table 2). The first gap occurs at the level of official agency discourse. By official agency discourse we mean discourse produced on behalf, or in the name, or seen as representative of the agency position as opposed to informal discourse that is not considered representative of the agency. The first gap can be expressed briefly in the logically disjunctive statement 'everyone knows the job is dangerous' but 'zero fatalities is a reasonable goal.' This gap is reflected in Degrosky's response to the Big Lie discussion as well as participant perceptions that zero work fatalities is promoted by leadership as achievable in wildland firefighting. The two sides of this gap, however, are not symmetrical because, as we have shown, explicit discussions about the danger of the job are perceived as rarely occurring in official discourse. The second discursive gap can be expressed in the disjunctive statement 'the job is irreducibly dangerous' but 'no one will get hurt today.' This gap occurs at the level of firefighter experience. As with the first, this gap is asymmetrical because while informal communication about danger occurs, as the experience of the fireline supervisor shows, participants in the Big Lie discussion claim that recognition of inherent danger must also occur at the level of firefighter engagement with official discourse, which constitutes the other side of the gap. Interestingly, a version of this discursive gap, between official discourse and firefighter experience, may be as old as the agency itself, with informal fire stories among fire crews contrasting with agency safety protocols (see Cochrane 1991).

Two discursive risks corresponding to these discursive gaps also emerged from our analysis (see table 2). The first is the risk of a diminished sense of trust in agency leadership. Former wildland firefighter and ethnographer Matthew Desmond argues that wildland firefighters build trust in the US Forest Service by embodying the agency's institutional perspective by joining in 'the various symbolic battles in which the Forest Service engages, battles over legitimation and classification' (Desmond 2006, 405). However, the discursive gap between an agency perspective and that of some wildland firefighters as articulated in the Big Lie is an incongruence of perspective and is a direct result of claims that existing institutions are incapable or unwilling to be explicit and direct about immanent occupational risks to life and health. The second

discursive risk is the claim that what is unsaid in official discourse may negatively affect situational awareness. This perspective is explicit in the quotation from the Fire Management Officer, given above. The argument being made here is that even though firefighters know intellectually that their job is dangerous, this knowledge is not the same as speaking openly about risk to one's own life among colleagues. Finally, we suggest that some in the wildland fire community are already approaching these gaps and risks and that in doing so, they are using intuitive versions of anthropological concepts. In the next section, we will argue that firefighters are thinking through a version of the Sapir–Whorf hypothesis and that the Big Lie may be better labelled a public secret. We will use these conceptual tools to help elucidate professional discourse about the Big Lie among wildland firefighters and, specifically, further clarify the discursive gaps and risks involved (see table 2).

4. Discussion: discursive risks and conceptual clarifications—Sapir–Whorf and public secrets

4.1. The Big Lie and the Sapir–Whorf hypothesis

When wildland firefighters say that not speaking openly about risk to life affects their ability to remain situationally aware, they are referencing a concept that is consistent with what linguistic anthropologists classically call the Sapir–Whorf hypothesis. The hypothesis suggests that the language used, and not used, by supervisors and the self-talk occurring among firefighters themselves affects occupational behaviour. It was in the context of fire hazards that the Sapir–Whorf hypothesis was first developed. Specifically, Benjamin Lee Whorf was an insurance adjuster who noticed that fires occasionally started because employees unwittingly tossed cigarette butts into 'empty' petrol drums. The word empty, in this case, is cognitively ambiguous, referring both to the idea 'not containing intended contents' and 'inert.' While the first idea was intended, some workers behaved according to the second. Occupational incidents resulted.

The 'strong' version of this hypothesis, meaning that language determines perception, is not commonly held. However, the 'weak' version, that different languages semantically structure reality in different ways, sometimes known as linguistic relativity, has been used to better understand how occupational accidents may be influenced by language. For example, some researchers have hypothesized that more accidents may occur in Finnish rather than Swedish factories due to how Finnish grammar favours a person-centred organisation of space over a more holistic and process focused organisation (see Lucy 1997 for a summary of this literature). We draw attention to this research not to endorse any specific version or claim about linguistic relativity, a concept that has been contested in its various formulations (Casasanto 2016), but to highlight the structural similarities between anthropological thinking about language and perception and firefighter beliefs about the linguistically relative way occupational experience is structured.

As we have shown, some firefighters believed conflicting goals and the unsaid within professional discourse, what linguistic anthropologists call semiotic incompatibility and omission, negatively impact their ability to remain safe on the job. An example of semiotic incompatibility is the explicit goal of 'zero fatalities,' which semiotically indicates that it is possible to eliminate all occupational death, despite the continued evidence to the contrary and despite beliefs among firefighters that it is not possible. Another example is the injunction to 'be safe' that referentially entails that safety is completely within firefighters' control when, in fact, it is not. Semiotic omission, however, may be even more significant. For instance, it is plausible from a linguistic perspective that the lack of explicit talk about risk to life in official safety discourse results in decreased situational awareness on the part of firefighters who may be young and inexperienced or those with more experience who may be accustomed to different occupational risks (Durbin *et al* 2019). From this perspective, a discursive emphasis on zero fatalities and assurances of workers' right to safety, while neglecting the real inevitability of danger and fatal incidents, may draw attention away from real, complex hazards. While this is certainly not an agency's or a supervisor's intent, it is a reasonably plausible effect of the discourse.

Reasonably plausible, though, is the most we can say here about the potential influence of language on firefighter behaviour. More linguistically informed research would be necessary to establish this argument with any certainty. However, we are not making an argument about language but about what some wildland firefighters think about language and perception on the job. We draw on the Sapir–Whorf hypothesis, a classic anthropological concept, to illustrate that some wildland firefighters are already thinking like anthropologists. Conceptual convergences like this are promising topics of interdisciplinary conversation and collaboration. Next, we give another example, the public secret.

4.2. The Big Lie as a public secret

We suggest that the idea of the Big Lie that has unfolded in professional discourse may be better thought of not as a lie, indicating incorrectly that agency leadership is lying to firefighters, but in terms of what

anthropologist Michael Taussig calls a ‘public secret’ or ‘something that is known by everyone, but not easily articulable’ (Taussig 1999: 216). Far from a specter to be rooted out and eliminated, even from rational institutions, public secrets enable social life to function by concealing what is culturally sacred and, therefore, what must exist for social and cultural institutions to persist in their present form. Importantly, according to Taussig, the explicit revelation of a public secret threatens to destroy the institutions that depend on it, at least temporarily (Taussig 1999). For this reason, reactions to revelations of a public secret, the explicit exposure of what is known but left unsaid, can understandably be strong. This dynamic is glimpsed in Degrosky’s reaction to the Big Lie and his insistence that everyone already knows that firefighting is dangerous. However, the problem is not that firefighters (and their families) do not understand that the job may be fatal but that saying so openly, especially in public fora that can be accessed by the uninitiated, risks revealing the vulnerability of an at least partially countervailing safety discourse within the wildland firefighting community that says, ‘but we will keep you safe.’

This vulnerability seems to reside in the relationship between the ontological claim that wildfires are irreducibly dangerous, meaning they can never be made entirely safe, and the explicit agency goal of zero fatalities. The latter is an acknowledgement of an important social value, that no source of income warrants the forfeiture of life. This value was contrasted in the Big Lie conversation with some prominent attitudes toward military service in times of war, where loss of life is expected and is framed by a transcendent value of sacrifice for country, thereby encircling death with a higher order virtue. Our interviews and documentary analysis highlights a perceived contrasting attitude within the national guard when deployed to fight fire that said ‘go do dangerous shit but come back alive’ instead of ‘no one will get hurt today.’ However, this difference within conversations about the Big Lie also seems to contrast with how firefighter deaths are represented within public and public-facing discourse.

In public discourse, wildfire seems more likely to be represented as an enemy, even an anthropomorphized and racialized enemy (see Kosek 2006) and firefighter deaths as more clearly heroic (Desmond 2008). The multiple ways of framing firefighter death as heroic, as an accident, or as the fault of particular firefighters can occur simultaneously and even among the same individuals in different social situations (see Desmond 2011). These differences not only point toward the reality of the discursive gaps we have described within conversations about the Big Lie but also toward the need for additional DRA. In particular, more attention could be paid to discursive gaps and risks among firefighter, agency, and public discourse that has remained beyond the scope of our analysis. Even now, however, we may speculate that the public secret inherent in agency discourse may be even less visible from the perspective of public discourse because it is potentially veiled by militarized language that appears to at least partially elide the explicit agency goal of zero fatalities.

5. Conclusion

Clarifying discussions of the Big Lie in terms of the Sapir–Whorf hypothesis and public secrecy is, we believe, a helpful move toward better collaboration between ethnographers and wildland fire professionals. However, this step is also ultimately inadequate to the task of creating safer work environments for wildland firefighters. Something is certainly illuminated through these anthropological juxtapositions, but other things, perhaps of great importance, are also covered over. Therefore, DRA is important but also limited precisely because parsing alone cannot deliver what is really needed: a *techne* (as technology or technique) for producing something new and, in this case, surprisingly helpful. This is the kind of work Kim Fortun seems to intend for an ethnography in late industrialism, a time of complex imbrications of expertise and problem domains such that problems resist articulation within existing idioms, including the classically anthropological (Fortun 2012). This is why the use of DRA to identify discursive gaps and risks should eventually lead to the ethnographic looping of research results back into ongoing conversations. The key to ethnographic looping is, therefore, leveraging ethnography as representation, as critique, and as insight to build justifiable grounds for new discussions and collaborations that will, hopefully, result in emerging idioms more appropriate to the complex realities of the contemporary world.

What this idiom would look like cannot be stated in advance. However, we can make some recommendations for the first steps of ethnographic looping based on our analysis so far and some general considerations. Generally, successful ethnographic looping should carefully consider (1) the ethnographically-derived insights that are to be looped back into the cultural system under consideration, (2) the stakeholders that should be included, and (3) the platform or medium of collaboration among stakeholders. Furthermore, these considerations should be approached in an integrated way, meaning a clear rationale should exist for bringing together the insights, stakeholder group, and platform or medium of collaboration.

In our case, the insights to be looped back in would include the discursive gaps and risks and conceptual clarifications identified in our research. The conceptual clarifications are especially important because they encourage a shift in perspective that may engender new ways of talking about old problems. This could be done by asking questions like: What difference might it make to refer to this discursive gap as a public secret rather than a lie? What might be the limits of official institutional action, given this insight? Might we facilitate informal, cultural shifts that encourage new ways of talking and thinking about ‘the Big Lie’? Given the limitations of rapid ethnographic assessment, we would recommend including additional background from more extended ethnographic work. This could be facilitated by including other ethnographers of wildland firefighters within the initial stakeholder group.

In addition, the stakeholder group in our case would likely need to include representation similar to the original Honor the Fallen group that began the Big Lie conversation, if not many of the original members. Thought leaders, like Degrosky, who were opposed to the Big Lie should be included, along with stakeholders from agency leadership. Given the question set forth by Honor the Fallen (Are we now in the business of intentionally risking lives to achieve wildland fire objectives?), we would recommend including participants from the public and political spheres as well. Given the history of the Big Lie discourse and the potential for misunderstanding, we would recommend a platform that includes an in person, multi-day, professionally facilitated think tank. The goal of the think tank would not be to produce a new idiom directly but rather to initiate an appropriate long-term process for doing so. To say more, however, risks becoming too speculative about a process that is, by definition, unpredictable.

We construe our work as an important step toward building better grounds for this sort of collaboration by articulating a dual entry point for ethnographers to participate in wildland fire discourse and for wildland firefighters and fire researchers to think through explicitly anthropological ideas. However, we must also note that DRA plus ethnographic looping, as we have illustrated them here, can be significant methods for engaging the complex problems of late industrialism beyond wildfire. All other dimensions of public and occupational health might benefit from this approach, an approach in which ethnographic research is seen as foundational but also not as an end in itself. Beyond the description of the others’ worlds, ethnographic research might help co-author new and better worlds for us all.

Data availability statement

The data cannot be made publicly available upon publication because they contain sensitive personal information. The data that support the findings of this study are available upon reasonable request from the authors.

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Ethical statement

Research activities were approved through the University of Wyoming Institutional Review Board (Protocol #20160923TD1305).

Conflict of interest

No potential conflict of interest was reported by the authors.

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