Some of the tweets have since been deleted, and you have to see them all in order to get the flow of events. The sections marked in yellow highlight are directly referenced in our article.

ZEYNEP TUFEKCI 4:26AM

Heard about <u>@Elonmusk</u>'s rescue "submarine"? The cave-diver who masterminded the Thai cave rescue called it a "PR stunt"—that was the politest thing he said. You might be wondering: well, he tried to help. Let me explain with this thread and this NYT piece. https://t.co/ihogDd8lMf

ZEYNEP TUFEKCI 4:29AM

First, there is nothing wrong with wanting to help. That's great. Wonderful. I commend <u>@elonmusk</u> and every single person who says they'd like to help—anyone, anywhere. The problem isn't that at all. But there is a huge lesson here for all of Silicon Valley—if they can listen.

ZEYNEP TUFEKCI 4:35AM

I dabbled in caving (no more, too dangerous) and am a certified diver (only open water!!!) and I have a long-term interest in institutional safety *and* Silicon Valley. I don't want to put down any effort to help but I want to explain this and more. (attached Vern's CNN interview)

As humans we do a lot of dangerous things—some for fun (like climbing or cave-diving!) and some routinely as part of modern life (drive, fly, factories, medicine) etc. Many more mature industries and sports have extensive experience in iterative, long-term learning in safety.

There is obviously a lot of smart and creative people in tech, but they suffer from an Achilles Heel trio of weaknesses: self-perceived idealism as excuse, overconfidence in their capabilities outside their own areas of expertise, and lack of attentiveness to details and harms.

In contrast, people like those top cave-divers who found & rescued the boys (their technical achievement & bravery is one for the ages) come from an opposite culture that is no less innovative but very very different. It's also quite modest so that hides the amazing nature of it.

Stanton and Volanthen—who first made it to the boys and shot the remarkable video of them huddling in jerseys—brushed off media while first entering the cave, refusing to give interviews and just said "we've got a job to do." Volanthen went back to work day after rescue.

So Musk's sub was impractical, and would never work. Ok. What's the harm & why is Vern Unsworth so irritated? Well, he's the one who organized everything, got Thai authorities to let cave-divers take over. One Thai Seal had perished and more would, along with boys. Listen up now.

Do have any idea what it must have been for some random guy to convince the Thai gov't to let a bunch of cave-divers run the whole thing? There were so few of them who could do this that the whole thing halted while they slept. That's why rescuers hate PR stunts AND VIP visits.

Some billionaire-struck gov't official might say, hey, let's try. It distracts. It's ok to develop a back-up plan, and given odds of a rescue, why not? What's not okay is to broadcast it, to bug the rescue team directly (find consultants!), and for media to give it such coverage.

Now moving beyond the cave rescue. As I write, Silicon Valley innovation has advantages.. for a young industry. No more. Software is eating the world, and it's time for the other approach also—iterative learning, domain expertise, safety culture, do no harm as a principle, etc.

But the idea that being smart in one domain qualifies one to just dabble in another is dangerous. For example, for long, many SV companies refused to understand they're in people business and tried to handle it as a side issue that they can handle because they are smart. NOPE.

Repeat: I'm NOT criticizing <u>@elonmusk</u> for trying to help. But his irritation at a Thai official saying his sub was sophisticated but not practical (rescue was almost over) may perhaps be a learning moment? Wealth, fame and power are curses to judgment. None of us would be immune.

Point isn't that everything should be like the airline industry or like cave-diving. But, look. After the 1996 TWA crash, they put the plane back together. Investigated for four years. Redesigned things. That's why commercial flying is so safe. This approach needs more respect.

The flashy tech solution and the savior make good movies. But what makes most things work is the quite hero/ine embedded in institutional knowledge—divers who brought decades of knowledge. The Thai officials who let go—must have been hard. Farmers who let their fields be flooded.

ZEYNEP TUFEKCI 5:33AM

In the comments for my piece, some Musk fans think people like me are just ungrateful for the saviors who steps up. I hope this thread explains it more—nobody is ungrateful. But the worst thing to do to a famous/rich person is to be their uncritical fan.

ELON MUSK 6:56 AM (3:56 LA TIME)

"Never saw this British expat guy who lives in Thailand (sus) at any point when we were in the caves. Only people in sight were the Thai navy/army guys, who were great Thai navy seals escorted us in - total opposite of wanting us to leave."

ELON MUSK 7.04 AM (4:04 LA TIME)

"Water level was actually very low & still (not flowing) - you could literally have swum to Cave 5 th no gear, which is obv how the kids got in. If not true, then I challenge this dude to show final rescue video. Huge credit to pump & generator team. Unsung heroes here."

ELON MUSK 7:10 AM (4:10 LA TIME)

"You know what, don't bother showing the video. We will make one of the mini-sub/pod going all the way to Cave 5 no problemo. Sorry pedo guy, you really did ask for it."

ZEYNEP TUFEKCI 7:12AM

So Vern is the diver who was among the first there, dug up the maps, brought in the other divers, figured out where the boys were and convinced authorities. Look beyond your irritation with his irritation and listen for a sec why he might be irritated, ok? https://edition.cnn.com/2018/07/13/uk/thai-cave-rescue-british-divers-intl/index.html

ELON MUSK 7:13AM (4:13 LA TIME)

I was *asked* to help repeatedly. Declined several times, as I thought they have it in hand & and only agreed to help when Thai SEAL died (deep cave pumps not operating at time). We designed the mini-sub to Stanton's specifications *and* brought a flexible rescue pod just in case.

ZEYNEP TUFEKCI 7:14AM

I know you said clearly you'd defer to the divers, and I point that out in my piece. But rescuers hate high profile interventions & VIP visits etc. Quiet, background development is great, publicity is not) because they're also fighting a million officials with own ideas/agendas.+

I was once in the middle of an earthquake rescue with an amazing team. Politest people. Their lives on the line. Humble. Years later, I just don't have words. Literally the biggest problem they faced was local officials, politicians & celebs who butted in. Even if well meaning.+

Officials pull/push actual rescuers. Sub as a back-up option (are people still working on it with domain experts?) is great to explore quietly, but the thing they fear is that an official comes and overrules the rescuers. Try this flashy thing! Happens to disastrous consequence.

We had someone important and famous land with a @#\$@!! helicopter to the earthquake zone to "support our work and improve our morale." At that point, we were working round the clock next to a burning refinery and the biggest challenge was establishing silence to listen for life.+

These rescuers I had been working, who were so humble, polite and expert—and who accepted everything and just worked and worked at great risk to themselves, climbing into rubble in the middle of 6.5+ aftershocks.. I learned more English curse words that day than since or before.+

I've too-long for Twitter stories on how hard it was to keep officials on track and from meddling wrongly. Anyway, the lesson I took is that publicity—even well-meaning—and anything flashy that officials might be attracted to during a rescue is dangerous. Many stories like that.+

ZEYNEP TUFEKCI 7:26AM

Take from all this, my piece, my thread, his irritation what you want, but we're all human and my two-cents is that too many people blindly cheer-on wealthy/famous people, and want saviors, and we're all worse off for it, and the wealthy famous people perhaps worst. /end

CHRIS KING 7:28AM

Some random guy who didn't rescue anyone blasts Elon and this is news? Elon should be commended for this, not raked over the coals. A hit piece by someone who did nothing to help anyone, and tut-tuts him with you-mad-bro condescension, is irritating and should be ignored.

ZEYNEP TUFEKCI 7:30AM

He's not some random guy. If you made a movie about this, he'd be the main hero, along with the other top divers he brought in. But he's obviously speaking in irritation, so the exact words is not the point.

ZEYNEP TUFEKCI 8:33AM

The rescuer I've quoted in the first tweet made the "PR-stunt" comment re:Musk's sub, not me. That diver is not a bystander—if someone made a movie, I'd make him the key character. Still, he clearly spoke out in irritation and I was trying to explain why.

ZEYNEP TUFEKCI 8:39AM

But my piece—and this thread—is an attempt to go beyond the irritations of the moment and discuss what the tech world could learn from the slow, iterative and deeper safety cultures—but there's a lot to recommend to the can-do optimism in Silicon Valley. Not in isolation, though.

ZEYNEP TUFEKCI 10:27AM

I'm dumbfounded by this. I'd understand getting mad at me (whatev) but Vern Unsworth is, by all accounts I saw, a key hero of the miraculous rescue. The kids certainly—and many more divers likely—would be dead if not for him. Apology badly needed.

JULY 16, 2018

ZEYNEP TUFEKCI 5:45AM - 16 JULY

Seems Musk has deleted his inflammatory tweets & his responses to me. That makes it hard to follow threads so here's my screenshots on why developing a back-up option QUIETLY is great but doing it with gobs of publicity has potential for harm. https://twitter.com/zeynep/status/1018498560789286912

ZEYNEP TUFEKCI 6:18AM - 16 JULY

Even well-meaning ones! Developing a back-up option quietly would have been right, and never ever bug hands-on rescuers whose time is super precious. They cannot technically evaluate the backup plan on-the-go like that. There are others who can, find them. Thanks for your work!