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Reporting Live from the End of the World

Written by David Shukman

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Reporting live from the end of the world

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PREFACE

An innocent in the Arctic

A sharp wind flicks my legs as I climb out of a helicopter and stumble into my first discovery about reporting on global warming: that the Arctic can still feel miserably cold. For some reason I'd convinced myself that chinos would be robust enough; they aren't. I'm in Greenland in July and, although the forecast was mild, something known as a katabatic wind descends from the heights inland, gathering chill over a thousand miles of ice, and successfully targets a poorly protected spot just above my ankles. I wrestle with the idea of tucking my trousers into my socks but know how that kind of thing can look ruinous on television. Vanity wins.

I then discover that those crystal-clean, chocolate-box pictures you often find in coffee-table books of the Arctic don't exactly tell the whole truth. In fact the scene I've entered is startlingly ugly, a mess of ice and rock, a giant's dump for oversized rubble. From the air, glancing at Greenland out of the window on flights between Europe and America, there isn't much to see except a beautiful, rather restful white. Close-up, this bit couldn't seem more disturbed.

I didn't arrive wholly ignorant; I knew that Greenland was covered by an ice sheet, it's just that I now realise how

I never understood what that meant. Standing here, I learn that the so-called ice sheet isn't a sheet at all, and that the phrase is misleadingly genteel. Sheets are thin and delicate, soft enough to lie between. This gargantuan mass of ice is incredibly thick – sometimes nearly two miles thick – and rock-hard. Ludicrous that anyone would call it a sheet. It's more like a monstrous mountain of ice that's lying sideways on the land. Its edges are some of the biggest cliffs I've ever seen, numbingly sharp, skyscraper-tall. There are lurid blue fissures the size of urban canyons, chunks of ice as big as office buildings, a jumbled frozen version of a ruined Manhattan.

Until now my closest encounters with snow and mountains have been in the benign surroundings of the European Alps and in fact, in the rush to get ready for this trip, the chinos aren't my only failing because I have managed to bring nothing more robust than my usual anorak, a bright red thing better suited to a hike in the hills. Not quite the gear for this raw, unforgiving spot. I also can't help thinking that if you get into trouble in the Alps you're rescued in minutes while, if we get stuck here, there's only one other helicopter within a day's flying of us.

I look down and get another shock. The ice I'm scrunching over is not pristine. Instead this jagged, shattered surface, a blasted wilderness stretching towards the North Pole, is actually grey or even black in patches. A bit like a building site littered with dirt. A landscape that ought to be unsullied is menacingly dark.

I shuffle about, testing the ground because all around me the ice is scarred with deep crevasses. My mind keeps churning over the thought that the Arctic ought to be white, that something's not quite right up here. I bend down to look at the surface more closely. I can actually see thousands of little black flecks in the ice. It looks like it must be possible to scoop them up so I take off a glove and reach out but my

fingertips meet solid ice, clear, incredibly smooth and unyielding. The dark particles are locked inside. I picture one of those tourist ornaments where plastic snowflakes tumble around a landmark except that in this case the snowflakes would be a sinister black and frozen in place.

As the giant white island at the top of the Atlantic, Greenland should be one of the purest corners of the planet. I'm on what's called the Sermilik glacier at its southern tip and the nearest settlement is the little town of Narsarsuaq, not a place many have heard of. In fact it's so out of sight that this corner of the country has an eerie history: the Americans chose it as the site for a vast, discreet hospital to treat their wounded from the Korean War. Of the secret wards that housed hundreds of injured soldiers beyond the gaze of the US public, only the foundations remain.

Now, from where I'm standing on the ice, there are only pockets of people for thousands of miles around. So where did the dark dust come from? There's no industry here, hardly a power station.

I call out to the scientist who has brought us along, a Danish polar expert called Carl Boggild. He doesn't reply at first. He's a short distance away, with his anorak pulled over his head to keep the sunshine off the screen of his laptop. He's focused on his work.

Carl does not look like the stereotypical scientist. In fact he'd pass for someone big in mountain rescue, his hair cropped short and his face burnished. A hands-on, outdoors type, he's trying to get hard facts about Greenland and its fate, which is why we've joined him, to bypass what campaigners are saying about the Arctic and see what frontline field researchers are actually measuring.

With a series of automatic monitoring devices, spindly tripods like stick insects, his instruments record the weather and the height of the ice. Usually the evidence from these fragile robots is transmitted by satellite back to Copenhagen

but, whenever he can, Carl visits them and downloads the data directly into his laptop. Not the sort of person to trust technology, he's also very cautious about jumping to conclusions: he wants his own figures to help form his own judgement about what's happening in the Arctic, which is just the kind of approach I'm after.

Job done, Carl stands up, data downloaded, and pulls his anorak back on. It's not just me that's feeling the cold.

It's probably from China, he calls back.

China? Soot from China?

Or maybe Europe, the big industries.

It's a startling idea, that soot could travel so far. It turns out that whatever belches out of the chimneys of the world's biggest industrial heartlands – the north-east United States, China or northern Europe – is whisked into the weather systems and carried around the world within about 10 days. Carl explains that much of the soot is scattered but a lot gets caught in the air circulating northwards, the wind acting as a spiralling conveyor belt carrying the plumes of black smoke to the Arctic. And the darker the surface, the warmer it'll get, and the faster the ice will melt.

I look down again at the much-travelled particles, and it strikes me that for all the talk of a global village I'd never thought to ask what happens to the village's exhaust, where it goes, where it ends up. I can tell that Carl is being deliberately patient with me, watching the reactions of a slow student in a new class. And the cold isn't helping.

I've been here only a few minutes and I'm confused, a supposedly seasoned correspondent surprised to be so out of his depth. The trouble is, I'd always seen pollution as something that afflicted the industrial corners of the old Soviet Union or the choked streets of Asia, not the distant white Eden of the polar bear, not the ice beneath my boots. I need time to think all this through. But the helicopter pilot keeps glancing at his watch and checking the sky for an approaching

weather front. We have to get on with our filming. And my ankles are starting to feel numb.



Dressed to chill: as an ice-sheet novice, I underestimate the cold of Greenland in July. The soot covering Sermilik glacier near Narsarsuaq is also a surprise: note the darker patches in what should be a pristine polar Eden. *BBC*

I'd never imagined being on assignment to a place like this, let alone becoming an Environment & Science correspondent covering an issue like climate change. The idea had never occurred to me and, when it came, the proposal was a real shock. The sunshine in an editor's office suddenly seemed brighter, the objects starker, and I had that slow-motion feeling that can kick in when faced with something momentous. It was the summer of 2002: the Iraq invasion was on the horizon. Four small televisions were tuned to the rolling news channels – our two, CNN and Sky – and all were carrying a Bush speech live. The sound was down. My first reaction: could I contemplate switching jobs and then miss being involved in such a huge international event as a war in the Gulf?

Taking the Environment & Science job would mean

leaving Foreign News where I'd spent most of my career and joining Home News. This might sound like an administrative detail but the two departments are almost tribally distinct. Foreign reporting, I felt, had been my natural home for fifteen years and it was on foreign assignments that I'd had some of my most searing and formative experiences.

I was in East Berlin to witness the fall of the Wall, seeing the tears of a family who in the 1960s had watched the brutal grey barrier being assembled outside their apartment and who were now overcome as it was breached. In Armenia, during the conflict following the collapse of the Soviet Union, my crew and I were given dinner by a group of rebels and realised that everyone else around the table was armed. In the war in Angola I'd interviewed three brave, polite sisters who'd each gone to fetch water and had then each lost a leg to landmine. In the golden light of a Bosnian summer evening, I'd winced at the sight of two children, familiar faces from a house close to the BBC's, lying in our lane bleeding from a sniper's bullets; they survived but I'll always recall how the impact had blasted the girl's new shoes from her feet.

Part of me worried that the environment brief would feel comparatively tame, even dull. But another part realised that I'd had my fill of horror, that I was becoming too uncomfortable, too nervous about the hazards of reporting conflicts. The precise tipping point came when I was in the dust of Central Asia. Tajikistan, once part of a superpower, was gripped by a famine after several years without rain and, by macabre coincidence, we checked in to our Soviet-era hotel just as the South Tower of the World Trade Centre collapsed. It was 9/11. The assumed perpetrators were from Al-Qaeda. And Al-Qaeda's base was Afghanistan, the country just next door. Tajikistan, fly-blown and forgotten, was suddenly on the map and we were there.

An opportunity quickly came up to cross into Afghanistan

with the Northern Alliance, the group opposed to the then Taliban government, and, though it was a potentially clever move, I was worried. We were to be ferried by helicopter, battered machines which I'd seen, forlorn and unserved, at the airport. Our route was to be over Taliban-held territory at an altitude well within range of their surface-to-air missiles – I'd been a defence correspondent and knew about the risks of these things. But these were mere details: fundamentally I'd come to see that I just wasn't prepared for that level of danger anymore. When I rang London I explained that my decision not to go was not a safety issue or an editorial one. It was about me, and it was hard to talk about. The editor at the other end fell silent as the implications of what I was saying sank in: that this chapter in my career was closing.

Fast forward to that bright office and Bush on the box with the sound down. It was one thing to stop heading off to conflicts, quite another to become Environment & Science correspondent. Was I really that interested in agricultural policy and fish quotas? While covering the European Union in Brussels I'd had a heavy dose of protests by muck-spreading farmers and all-night talks over cod stocks. And did I really want to spend time in labs filming test tubes or be on the receiving end of press releases about yet another threat to the whales? I'd always seen myself as someone involved in stories that were part of the major currents of history – presenting a profile of Mikhail Gorbachev on the night the Soviet Union ended; reporting on the launch of a major global currency, the euro; developing contacts in Washington, London and Moscow that yielded scoops on nuclear weapons and Iraq and terrorism.

And, most significantly, if I thought about it all, I'd have described myself as cynical about green causes and quite

distrustful of the sincerity of some environmentalists. Not that I ever articulated it but, if pressed, I'd have declared myself sympathetic to the view that economic development in a capitalist system is broadly a good thing, that industry and cars and jets have improved our lives, and that returning to some eco-friendly rural idyll simply isn't realistic. I'd seen how the old Communist regimes not only failed to deliver the basic things people wanted but also crushed their aspirations. And trips to developing countries had shown me how it's human nature to want to be more secure and comfortable, not just to have basics like running water and electricity, but also to enjoy the comfort that comes from controlling our immediate surroundings. Standing in front of a vent of chilled air in the summer heat of Disneyland in California was a real pleasure and I understood why a family in China or Mozambique would save up to buy, above all else, a fan or an air-conditioning unit. In hot countries, a potent form of apartheid between haves and have-nots is whether you can afford to keep cool.

It was a colleague who first identified my dilemma. With long experience covering environmental issues, he made a very personal and perceptive point: that he'd never seen me as someone who'd be instinctively comfortable with things ecological, or even interested in them, joking that he didn't see me as 'one of us bunny huggers'. He was right. I definitely did not see myself as in any way green or even particularly interested in a green agenda. In fact I never even liked the word 'environment'.

One reason is that I've always disliked being branded. In Northern Ireland, as a middle-class reporter from London with a posh voice, colleagues semi-jokingly accused me of being a spy. Working as defence correspondent, learning about weapons and spending time with the military, led to the easy assumption that I was virtually clad in khaki myself. And being based in Brussels for four years, reporting on the

European Union, convinced many that I'd gone native, morphing into a Euro-acolyte. So the thought of having an 'eco' label attached to me as well was a step too far.

And I've always been mildly allergic to the more strident campaigners, turning off anything that smacks of a lecture about lifestyles. So when a friend joked that if I took the job I'd have to build my own bike and make my children walk to school, I bridled.

But then came a line from my editor so persuasive that I'd have been a fool to even hesitate over it: that the job would be global, that it was about reporting the planet and its changes, that it was a role to generate strong visual stories on major themes. Put more simply, I was to cover anything I might see featured on the front of National Geographic magazine – or even imagine seeing there. Amazing wildlife, polar bears, rainforests, pollution, that kind of thing ...

So that's how I come to be in our helicopter, a frail little craft, hovering above Greenland's cliffs of ice. We've been hopping around different locations to get the best footage. I ask the pilot to set us down again. It's so loud in the cabin we're talking over headsets. Where, he asks. Anywhere safe, I reply. Towards its margin, the ice is scarred by vast cracks and those closest to the coast are more like chasms. This regular pattern of deadly crevasses will eventually delineate the contours of the icebergs which will crash into the sea. It was an iceberg from Greenland that reputedly sank the Titanic. We head a bit further inland and, where the scars in the ice aren't so deep, we make a gentle touchdown.

We're about to start filming when there's another surprise. Carl has three of his monitoring devices at this spot but can't see one of them. It's not the sort of place where things get stolen; a polar bear might have wrecked it but surely not carried it off. We all hunt around and find the

device lying on its side in a shallow crevasse.

The ice has moved so far and so fast in the past few months that it's tipped the tripod over.

I can't believe it, says Carl. The ice is vanishing so quickly.

Until now, the most recent estimate had come from the American space agency NASA which said that parts of the margins of the ice sheet were falling by up to one metre every year. That's what I'd read in a scientific journal and had come to see for myself. But what Carl says his tripped-up tripod has revealed is that the ice, in this area, at the height of summer, is dropping at a far greater speed – it's vanishing at a rate of one whole metre every month. It takes us a few moments to digest this. A metre a month – that means the ice is in effect collapsing.

We rescue the tripod and manoeuvre it back into position. Cameraman Steve Adrain reminds me that we've a lot to do, that different programmes require separate recordings, and we're aware that it's cost a lot to get us here. People often ask if I've ever been scared on assignment. The truth is that nothing sharpens the mind like the fear of failing to gather the right material.

While we're working, we keep hearing booms and cracks. Down at the distant seafront, where the glacier is breaking into the sea, huge blocks must be crashing into the waters. It's the iconic image of global warming but from where we are, we can't see it. So I suggest to Steve that we wrap up at this location and get the pilot to fly us to a position on a rocky hill overlooking the edge of the ice. Maybe we'll get lucky and catch an iconic shot ourselves.

It isn't as easy as it looks. We set up the camera and Steve starts filming. Of course, nothing happens. He keeps running tape and still no ice breaks away. One of the batteries packs up and needs changing. Then a tape runs out so we install a new one. Minutes pass, and we're still waiting, desperately

scanning the now silent, motionless ice. It's always said that nothing's less predictable than filming children or wildlife but a camera-shy ice sheet should be added to the list.

Now and again, there's a burst of thunder and we frantically search the ice front to seek the telltale puff of snow and a big lump tumbling. But the sound echoes around the fjord and we can't tell where it's come from. The ice front is nearly a mile wide so, even if we do spot a decent break, the chances are that Steve will be pointing in another direction. It's incredibly frustrating.

And then the temperature rises. Not much, but enough to cross some invisible but biologically critical threshold. From nowhere, clouds of mosquitoes emerge. These are more like daddy-long-legs in scale – large, floppy, clumsy fliers that swarm onto our necks and faces, and into our ears and nostrils. I wave my hands almost continuously around my head. Steve just keeps his face pressed tight to the eyepiece but he occasionally twists in annoyance.

We need the shots but can't take too much of this. Our patience with the insect life of warming Greenland is running out. In the course of a tortured hour Steve manages to capture a few icefalls, he's done well in the circumstances, so we can return with enough shots of collapsing ice to compile an effective report, our heads reasonably high.

We climb back into the helicopter, always a fiddly process because it's so cramped. Steve clambers to the back, gets strapped in and I hand him the camera. He then realises he needs to switch from his regular lens, the best for the ice shots, to the wide angle lens which is better for working inside the helicopter. Because I'm still not strapped in, it falls to me to help him. No problem. I move towards the luggage locker at the back of the helicopter, open its little door, reach for a small metal flight case and pull out the lens.

And it's at that moment that I hear a terrible series of explosions. It's like an artillery barrage. I get a flashback to

a night in Bosnia when the heavy guns of the Croats roared into action not far from our house, the booms so resoundingly deep and ferociously loud as the shells flew overhead that you could actually feel your guts quiver. I feel the same shaking now but there's no gunpowder here, no warheads erupting. Instead, it's the ice.

A monumentally large wall of it, a series of tower-block cliffs, is slowly tearing away from the ice sheet and starting a mesmerising, inching, deafening collapse towards the sea. It's the biggest break-up of the day. By far. It's our money shot, what we've waited for. But Steve is strapped in and has a camera without a lens. And I'm holding a lens without a camera. It's a television journalist's nightmare. I grab a smaller video camera that we have as backup and run towards the action. But it's not a camera I've ever used before and, as I fumble over the controls, I can hear and see what was meant to be our dream shot bursting into the ocean, thousands of tons of ice splashing and rising and splitting.

I've had tricky moments, potentially brilliant television robbed by bad luck, but this is one of the worst. I feel a bit sick. Steve's face is white. I'm sure mine is pale green. Suddenly, we feel the strain of working in this weird, treacherous land. We lift off, tired and itchy.

The ice passes below us, no longer interesting. We're slumped, exhausted. But the pilot, a steady sort, casts us the kind of look you might shoot at spoiled children, as if urging us to get over it, and comes up with a suggestion. Maybe he is sympathetic to our dented morale.

A little off our route, he says, on the edge of a small settlement down by the coast, there's a farm.

A farm, so what? I'm not thinking clearly, I'm hungry and irritable.

A farm where they grow potatoes.

Potatoes? In the Arctic? It turns out that it's been so warm the past few summers that the ground is now soft enough and the growing season long enough for an intrepid fisherman to lay down his nets and take up a shovel to dig spuds instead.

Of course we stop, it's a great idea. We're now out of the wind and it's like entering yet another new world, one in which I'm far too hot. We walk with the farmer, Ferdinand Egede, and his sons over to their plot; these Inuit men with lined, impassive faces are apparently unmoved by the unexpected arrival of a helicopter bearing a sweating BBC news team.

We're deep in mud. The fjord beside us is festooned with icebergs, brilliant against the green of the hills which could be the Alps in high summer. The farmer shows us his rows of vibrant plants and, when he pulls one up, rich soil spills from a clutch of bright white potatoes, a scene from Ireland, not Greenland. For Ferdinand, cultivating the land is a novelty, an activity outside his family's memory – his father never had the chance, nor his grandfather. There's simply nothing in the culture here about having a summer season warm enough to yield any useful growth.

I turn to Carl, the robust, no-nonsense scientist, to discuss what this means.

He's clearly surprised at what Ferdinand and his sons are doing. But he's also cautious. It's likely, he says, that this isn't the first time that vegetables have been grown in Greenland. There's evidence that this has happened before when Viking settlements were established here, in an era known as the Mediaeval Warm Period, when life would have been easier.

Which raises another line of questioning. That warming in the Middle Ages clearly had nothing to do with mankind – it was centuries before the Industrial Revolution, long before man-made greenhouse gases appeared. It must have been



Oven-ready in the Arctic: Ferdinand Egede and his family dig up spuds. Theirs must be the world's only potato patch with icebergs for a backdrop. Greenland has warmed enough to allow the first farming for a thousand years. *BBC*

part of a natural cycle of climate change, driven by shifts in the earth's orbit or fluctuations in the power of the sun.

So what's different about the warming now? Couldn't it also be the result of natural forces? Maybe we're witnessing a perfectly normal rise in temperatures which we have no hand in?

Carl pauses, preparing what will be a lengthy explanation. But Ferdinand wants to get back to work, the pilot is anxious to get moving, and I've never been so hot in a potato field.

I get a feeling I've had in previous jobs, a mix of awe, nerves and doubt, on learning of a development or a threat that sounds really serious. The neckhairs can tingle, a quiet descends and questions proliferate. In every subject I've covered, the practitioners have been well-rehearsed in scaring themselves to death.

In the 1980s, the generals I lunched fretted ceaselessly about our failure to prepare for the threat of an onslaught by Soviet forces: you know, they'd say, that we couldn't hold them for more than a few minutes. In the age of Gorbachev, intelligence types worried that his reforms were luring the West into a false sense of security: in a bunker beneath Nebraska, a US Air Force colonel, pointing to a picture of a smiling Gorb, warned that he could be the front man for a devious Communist plot. After the Cold War, analysts in Washington urged me to see that far worse than the Soviet Union was the limitless threat of Islamist terrorists equipped with anthrax and nerve agents. Even in Brussels, officials would hint darkly that disputes over anything from halibut quotas to the price of the euro could readily undermine the whole enterprise and risk seeing Europe slide back into its age-old state of uncertain peace and occasional war.

Experts in any field can get caught in a vortex of anxiety. And the news media are receptive, with an appetite for scares. Missile gaps, dodgy chemicals, creepily-modified food, monster asteroids – all can be big stories because editors think rightly that they'll fascinate readers and viewers. Stories about environmental dangers, above all climate change, have also long attracted the vocabulary of cataclysm. The challenge, I was realising, as with the generals and the spies, was to judge how to respond. As it turned out, the dire warnings about the likelihood of Russian tank columns racing for the Channel were wrong but the fears about attacks by Al-Qaeda were right. So what about global warming? Was it really plausible that Greenland was melting so fast that it was going to drown London?

In the hotel that evening, I'm knocked off balance once more. It happens to be seafood night with a buffet breathtaking for its range and total absence of political correctness: carpaccio

of minke whale and smoked fillet of fin whale, which are delicious, and an Inuit dish that has to be attempted but is then best avoided – chunks of fermented cod which stink like shit.

I also come to hear of a tale that leaves me appalled. It may be entirely untrue. But when in the bar I recount my ordeal of our missed icefall, I wonder out loud how previous film crews have successfully focused on one particular section of ice and, in close-up, captured its collapse into the sea. I know now how difficult that is. If the cameraman stays wide, he has a chance of getting the break but it will only form a tiny part of the image; to get the close-up involves gambling on one piece of ice. When I raise this, I notice a few knowing looks.

And then, because the drinks are flowing, one veteran of the region comes out with a disturbing account of media trickery. He's heard a story of a film crew who were so determined to get the killer shot that they staged it. They got into position and then had the helicopter fly over the edge of the ice so that a crew member could drop an explosive charge into a deep crevasse. Once the helicopter was safely out of the way, and the camera was running, the charge was detonated by remote control, triggering a stunning collapse, filling the frame and achieving television perfection. And of course there'd have been no hanging around getting eaten by mosquitoes. Apparently, when challenged, they justified it by saying the ice was going to break off sometime anyway, so no big deal.

I go to bed, mind racing. We have done well, no question, even without high explosive, and we can fly back satisfied. But Steve's customary bottle of malt whisky, which has proved wonderfully calming in many other corners of the world, isn't quite working. I'm kept wide awake by images of dark ice, gelignite and the wrong trousers.