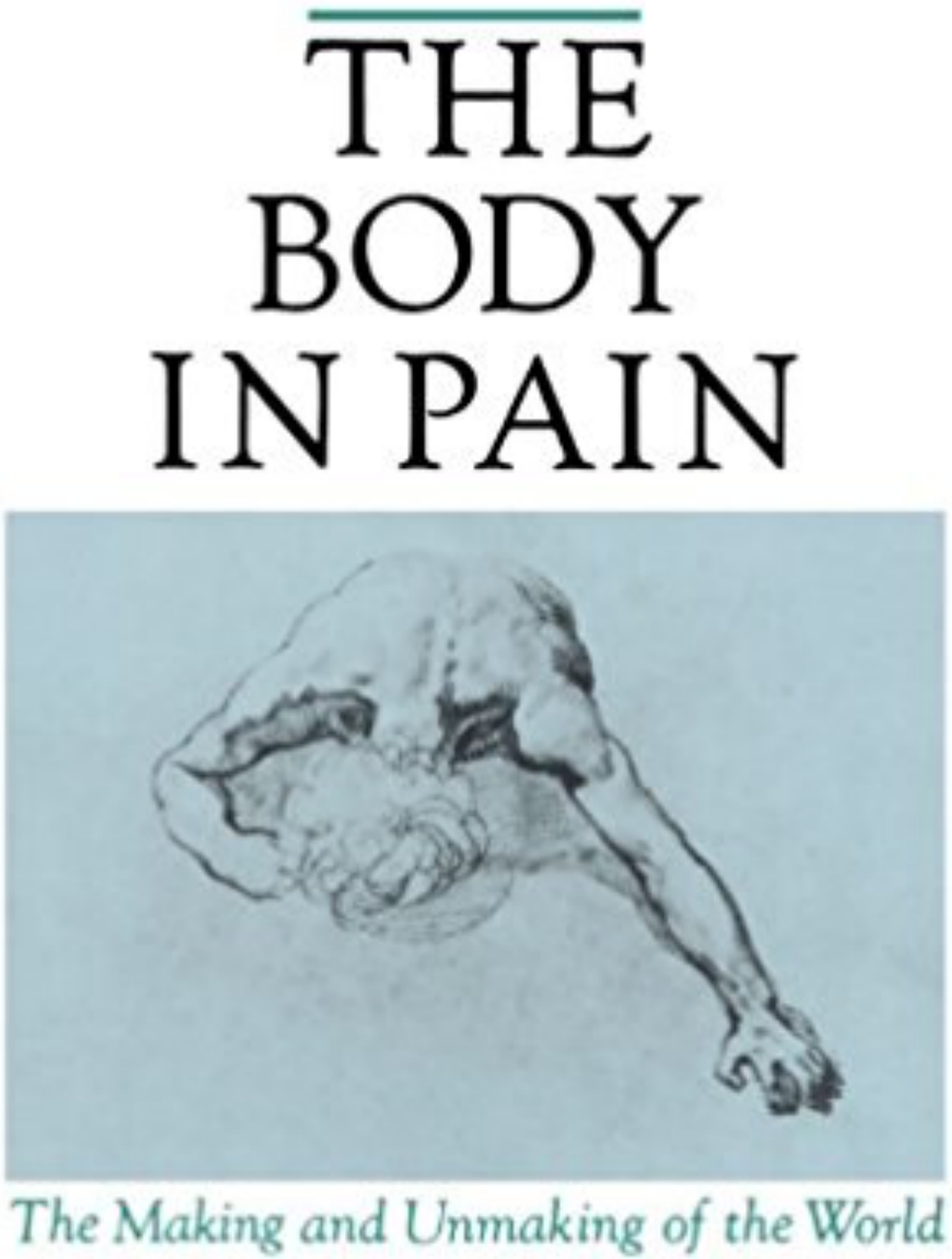
Trauma Geographies

Broken bodies and lethal landscapes



‘The main purpose and outcome of war is injuring. Though this fact is too self-evident and massive ever to be directly contested, it can … disappear from view along many separate paths.’

MAT *Medicine Anthropology Theory*

When wounds travel

Omar Dewachi

‘I ask: what is revealed in these wounds that travel, these wounds that enter new social worlds and multiple histories of violence?’

Belgium and France, 1914-1918

In Flanders Fields

—

In Flanders fields the poppies grow
Between the crosses, row on row
That mark our place: and in the sky
The larks still bravely singing, fly
Scarce heard amid the guns below.

We are the Dead. Short days ago
We lived, felt dawn, saw sunset glow,
Loved, and were loved, and now we lie
In Flanders fields.

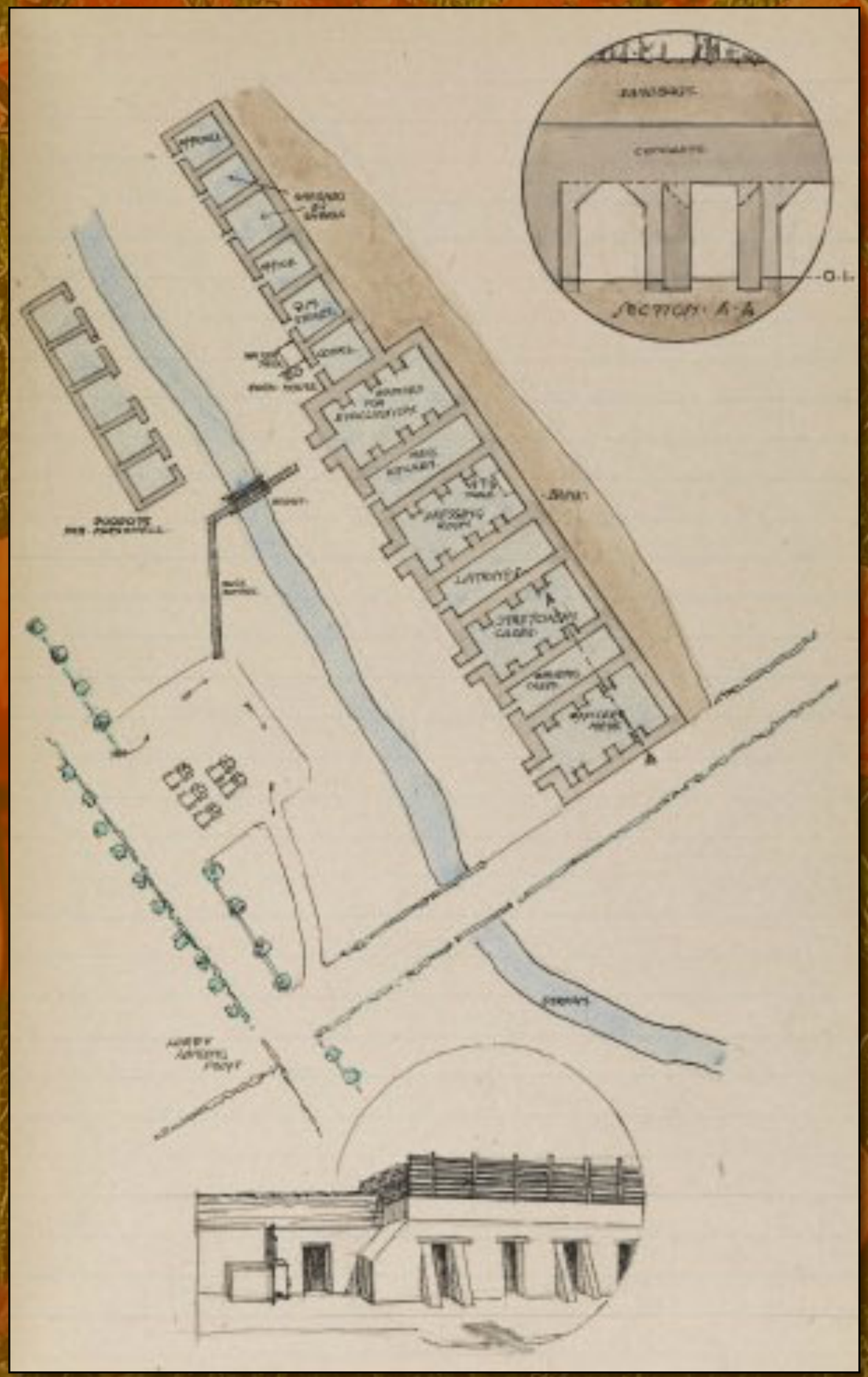
Take up our quarrel with the foe:
To you from failing hands we throw
The Torch: be yours to hold it high!
If ye break faith with us who die
We shall not sleep, though poppies grow
In Flanders fields.

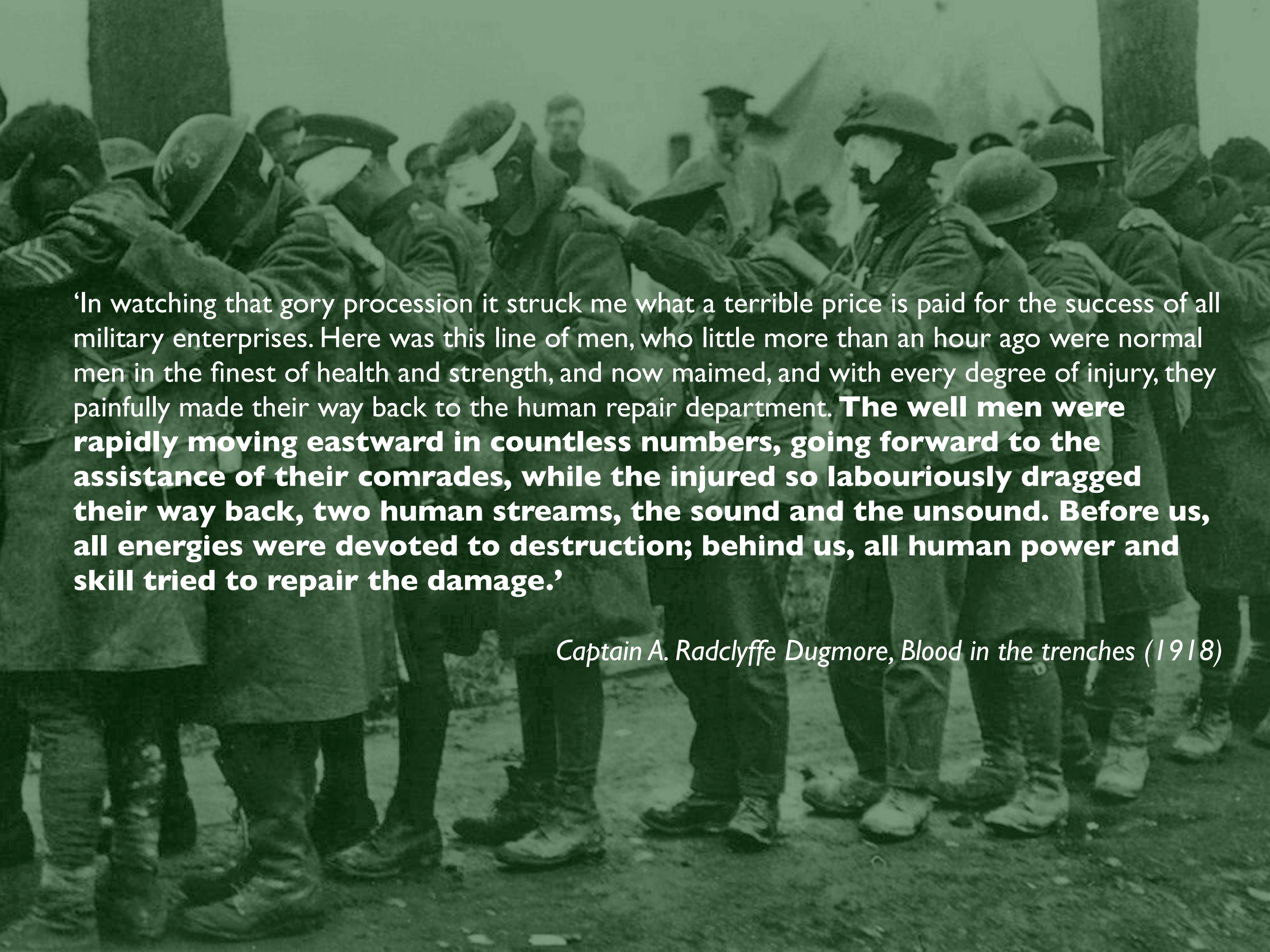
John McCrae

—

Major John McCrae,
Medical Officer, Canadian Field Artillery

Essex Farm Advanced Dressing Station





‘In watching that gory procession it struck me what a terrible price is paid for the success of all military enterprises. Here was this line of men, who little more than an hour ago were normal men in the finest of health and strength, and now maimed, and with every degree of injury, they painfully made their way back to the human repair department. **The well men were rapidly moving eastward in countless numbers, going forward to the assistance of their comrades, while the injured so labouriously dragged their way back, two human streams, the sound and the unsound. Before us, all energies were devoted to destruction; behind us, all human power and skill tried to repair the damage.’**

Captain A. Radclyffe Dugmore, Blood in the trenches (1918)

Private John Stafford

1/5th King's Liverpool Regiment

Attack on Guillemont (Somme) 8 August 1916

‘Raising my head slightly to take a wider survey of the land I saw a figure on my right moving very slowly… I spotted the khaki puttees and knew he was a Tommy!

‘I made my first effort of movement to follow him, only to discover that my right leg was so badly smashed that the slightest movement over the irregular ground caused indescribable pain... He was moving very slowly and when about fifteen yards had been made he slithered into a hole... With my eyes fixed on that spot I moved forward...

‘Heaven knows how long it took me to reach there... A craving voice brought me to my senses and I found I was lying on my back in a narrow trench ... my badly injured leg was screwed half way up my back...

‘He was in a sitting position at the other end of the trench and I could only gain view of him by looking backwards over my head…’

‘I attempted to examine my wounds and in the process discovered that my injuries would not allow me to sit upright. **I could tilt up on my elbow but only for a short time as this action caused severe pain to my hip. A bullet had passed through the flesh of the upper left thigh and entered the extreme inner high point of the right leg. The thigh bone was considerably shattered, the bullet having travelled downwards towards the knee. My field dressing was used and I lay flat again**…

‘My thirst increased; my small stock of water had gone at one gulp with little satisfaction. How my leg burned! Shells commenced to burst about me … The noise of the bursting shells had caused my head to throb and the smell of explosives had sickened me.

‘**The sun was high in the sky, it was a sweltering hot day**…

‘I tilted on my elbow and attempted to drag my body along, bending the left leg and pressing my foot on the ground for leverage, That effort alone exhausted me – I was too weak. This was no doubt due to the loss of blood which had been flowing freely from both legs for some hours. **The ground on which I lay was completely red…’**

‘**Then came darkness and with it my hopes raised. I could not move unaided but somebody would find me**…

‘As the sun rose high it seemed as though its very heat was concentrated on my wounds. The bloodstained portion of my trousers and tunic had hardened as though made of wood. My wounds had ceased to bleed, the field dressing which had also hardened felt like a ton weight… I removed the dressing and discovered that it was one mass of white grubs and no looking at my right leg I saw that my wounds were infested with maggots… the sight sickened me. I had no desire to replace the field dressing and I cast it over my head as far as my strength permitted…

‘**A second day drew to its close… A feeling of drowsiness overcame me.’**

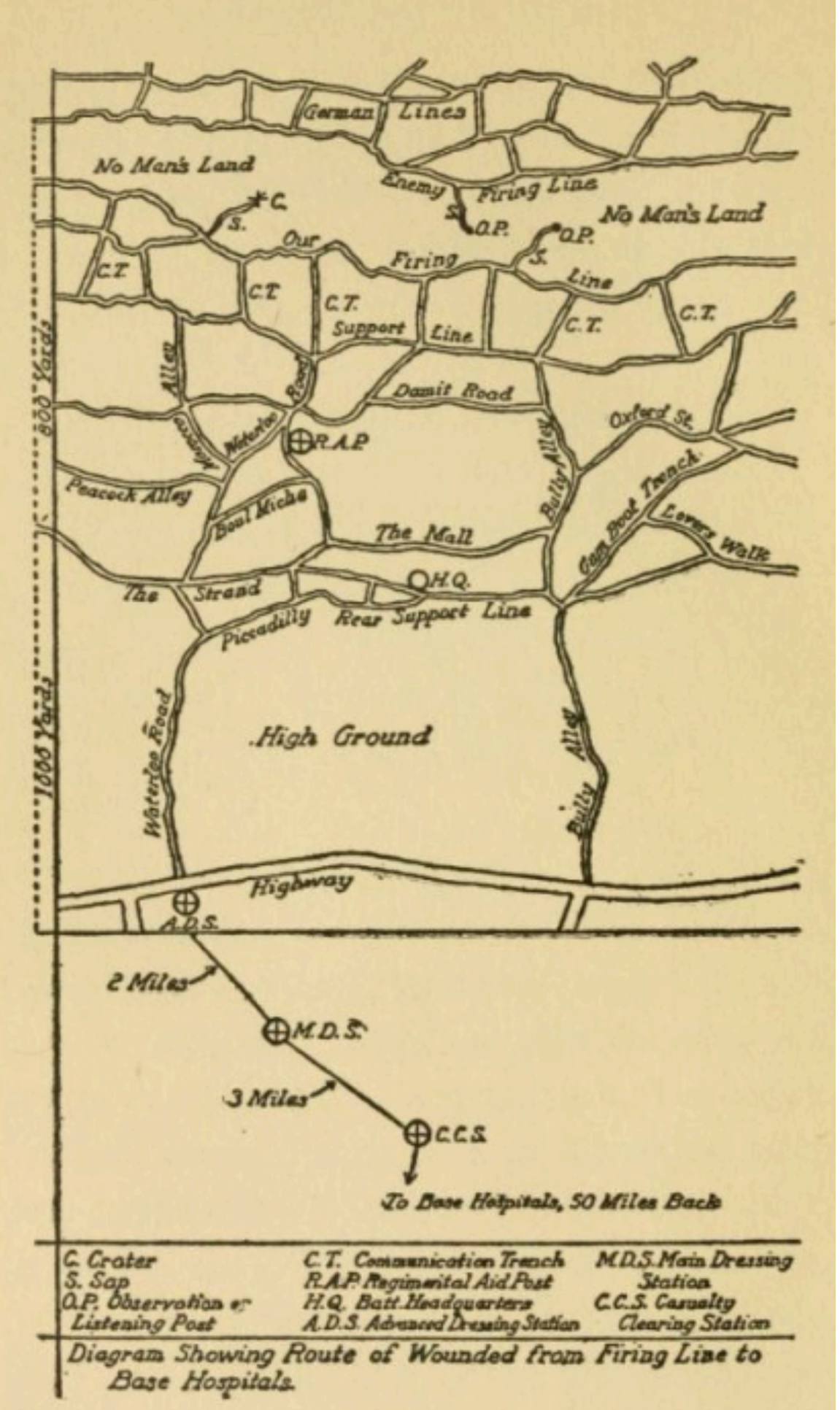
‘**My next sensation was that of cold water trickling down my neck into my chest. I heard friendly voices: “Where are you hit chum?”**

‘“… we relieved your mob yesterday. I’m in charge of a reconnoitring patrol… Up went a Very light and we dive into this strip of trench for cover… You fairly put the breeze up us when you yelled.”

‘**The corporal remained with me and sent his pals for a stretcher, urging them to hurry as dawn was approaching…**

‘How these fellows risked their lives that I already half-dead might live. **They struggled over uneven ground for about a mile, lowering the stretcher and laying flat whenever a Very light shot into the air…**

‘As dawn approached they carried on completely exposed to the Germans. **When they reached the British Front Line the stretcher was most tenderly lowered to the floor of the trench and everybody seemed anxious to add some form of comfort.**’



'Each pace took us nearer those rending crashes as the shell burst and before we had gone far, the continuous dragging of our legs and the suction on our boots tore the skin off our heels. **The stretcher, naturally, lurched and swayed precariously all the time; our "burden" got windier with every step. The drumfire – a shell every half-minute – continued; each shell landed with terrifying regularity almost in the same spot, right in the trench**.... We drew nearer, waited for the shriek, the crash, ducked so low that the stinking mud touched our faces; took another pace or two, ducked again, and again, sweating and tearing our legs frantically out of that dreadful mud. The horror of that passage remains indelibly stamped on my mind....'

'…The rain has made the ground a sea of mud, and we have to carry the wounded three miles to the Dressing Stations… Two men using stretcher slings could not carry a man thirty yards, and I have seen four bearers up to their knees in mud, unable to move without further assistance.'

J.H. Newton, 17 September 1916

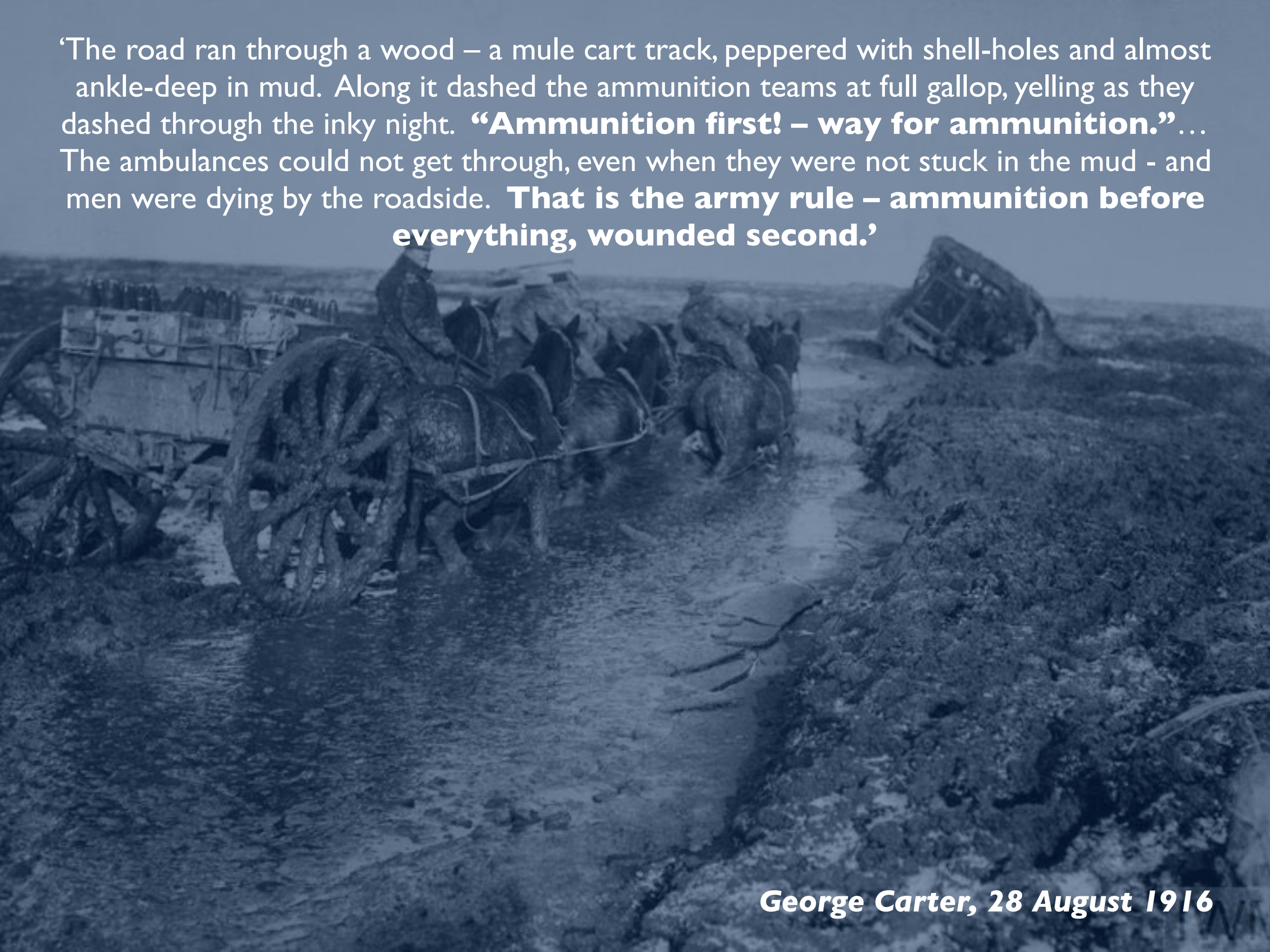
Advanced Dressing Station

‘My work consists of nailing every patient and getting his number, rank, name, initial, service, service in France, age, religion, battalion and company. That is usually fairly plain sailing, I find, but entails a certain amount of searching [extracting paybook or diary, for example] when a patient is too ill to be bothered with questions. Then I have to find out what is the matter with him, what treatment he has had, and what is going to be done with him…

The reason for taking these particulars and making out forms is to prevent any man being lost sight of, whatever happens to him. If he finishes in England after taking a week on the journey, he has got all his partics on him, everywhere he has stopped, the RAMC have been able to see at a glance all about him and can turn up all about him if called on.’

George Carter, 31 August 1915

‘The road ran through a wood – a mule cart track, peppered with shell-holes and almost ankle-deep in mud. Along it dashed the ammunition teams at full gallop, yelling as they dashed through the inky night. **“Ammunition first! – way for ammunition.”**… The ambulances could not get through, even when they were not stuck in the mud - and men were dying by the roadside. **That is the army rule – ammunition before everything, wounded second.’**



George Carter, 28 August 1916

Casualty Clearing Stations

‘I recollect lying in a huge corrugated-iron elephant-hut, where four **doctors, stripped to their trouser-tops, worked like butchers on mangled men**; the sweat streaming from them as they amputated some hopelessly shell-shattered limb; and as fast as they worked, the ambulances rolled up that shelled road for their loads.’

Pvte P Hoole Jackson

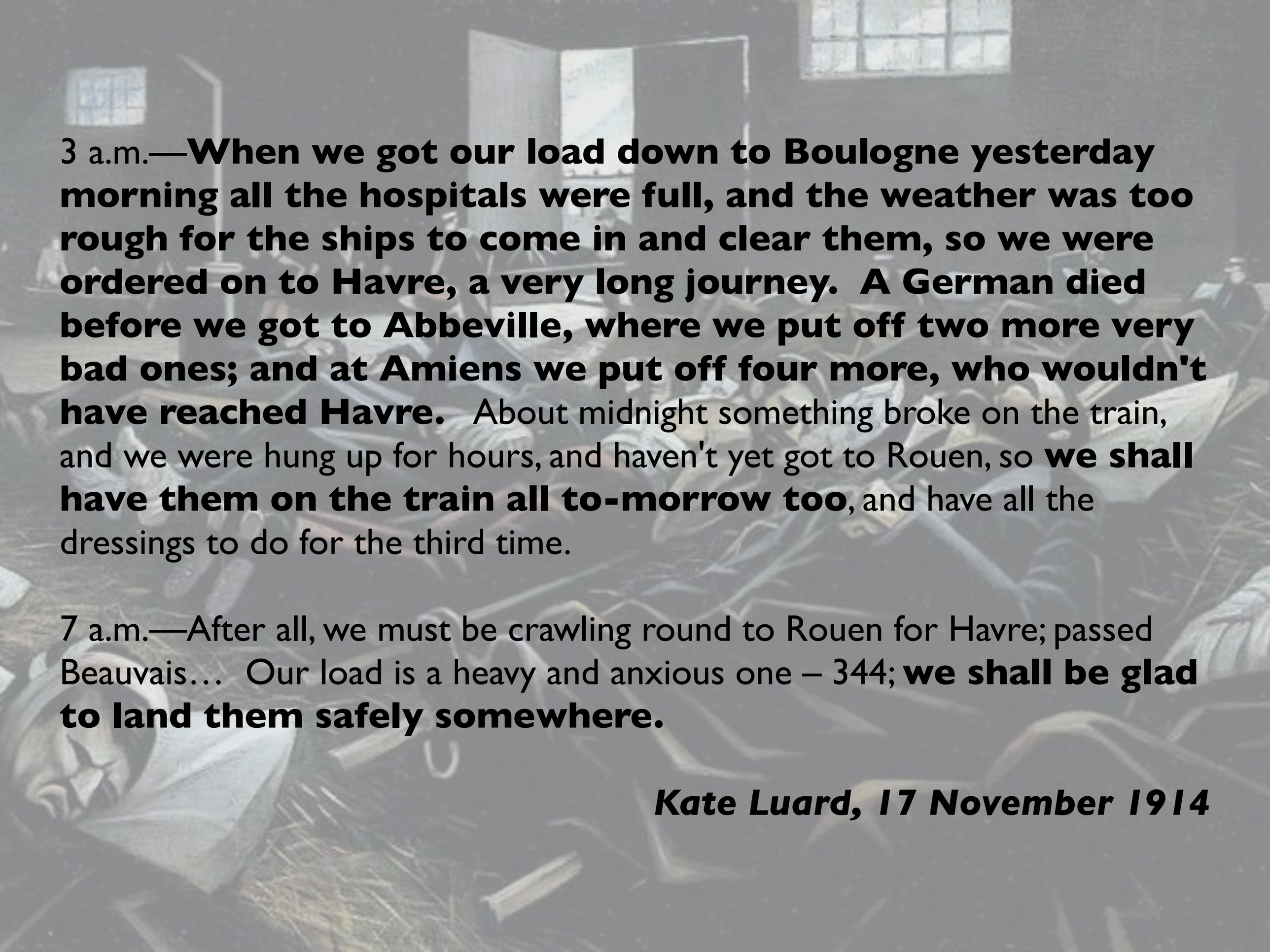
A quick surgeon might get through from fifteen to twenty cases in a spell of twelve hours. I certainly could not do more than ten or twelve. Among so many cases it was a sickening thing to have to make a choice for operation. We were dealing with a mass, not individuals, and if selection had to be made, it must be made in favour of those who by operation had a chance of being made fit again to return to the Front sooner or later to keep up our man power and afford fresh fodder for the guns.’

Capt. John Hayward, RAMC

‘From the train itself you can scarcely see anything of the clearing station tonight; only the headlights of the cars as they turn in through the gate, and a few hurricane lamps flickering here and there. Near one end of the train, at the wooden footbridge which crosses the stream separating the camp from the railway track, there stands a powerful acetylene flare, casting a circle of vivid light on the deep mud of the path. Save for three or four feeble oil-lamps on the ground beside the long darkened train, this is the only light at the loading place. A few moments of uncertain waiting, and **the first stretcher comes down, its weary bearers slithering and stumbling in the watery mire. As you watch the flare you see them emerge suddenly from the utter blackness beyond into the fierce glare of the light; they halt for a moment, while a cloaked officer standing on the bridge raises the waterproof sheet which protects the wounded man’s face from the beating rain; a name is given and noted; the covering is dropped over the head, and the bearers move on again, seeing to vanish as if by magic as they pass with their burden out of the light into the enveloping blackness.**

A pause, another stretcher enters the circle of light; the same words pass, the same motions, and it too moves on, blotted out as suddenly as it appeared. **Watching this time after time, you feel as if a picture were being cast on a screen and flashed off, over and over again: for there is something cruelly mechanical about it all.’**

Night loading, 1915



3 a.m.—**When we got our load down to Boulogne yesterday morning all the hospitals were full, and the weather was too rough for the ships to come in and clear them, so we were ordered on to Havre, a very long journey. A German died before we got to Abbeville, where we put off two more very bad ones; and at Amiens we put off four more, who wouldn't have reached Havre.** About midnight something broke on the train, and we were hung up for hours, and haven't yet got to Rouen, so **we shall have them on the train all to-morrow too**, and have all the dressings to do for the third time.

7 a.m.—After all, we must be crawling round to Rouen for Havre; passed Beauvais… Our load is a heavy and anxious one – 344; **we shall be glad to land them safely somewhere.**

Kate Luard, 17 November 1914

Base Hospitals

No 2 General Hospital, Le Havre

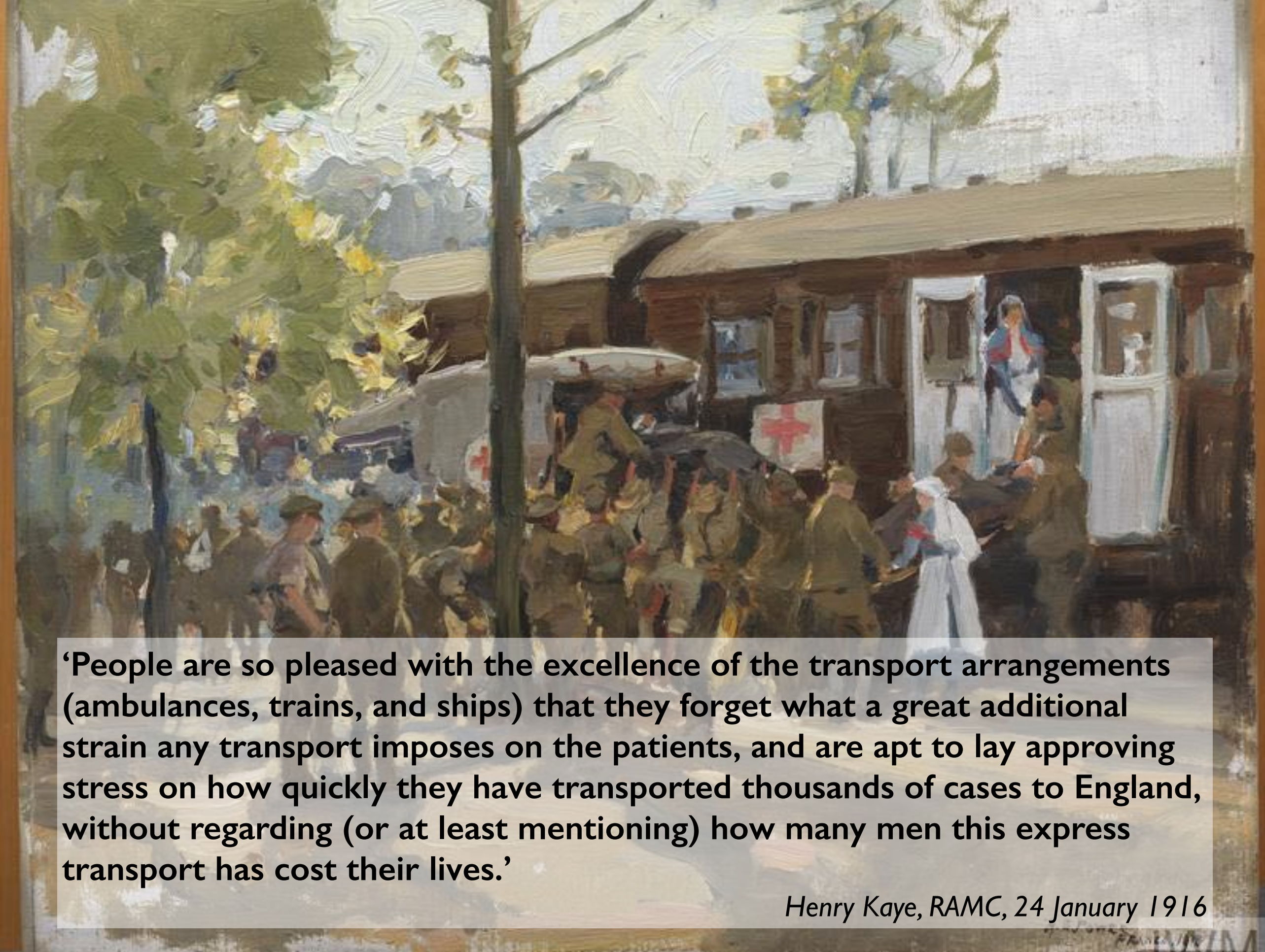
Hospital Ships

John Hodgson Lobley,
Loading the wounded at Boulogne

John Hodgson Lobley, Casualties from the Somme arriving at Charing Cross, 1916

‘The most critical cases had been unloaded and sent to hospitals as close as possible to the ports of arrival. Those who could not be accommodated, and those who were seriously wounded but likely to survive a longer journey, were sent on by train to Birmingham, Bristol, Exeter, Leicester, Norwich and Plymouth. But seven out of every ten hospital trains were directed to London, and during the first days of the Somme they rolled in almost every hour to Charing Cross and Paddington stations.’

Lynn McDonald, *The Roses of No Man’s Land*



‘People are so pleased with the excellence of the transport arrangements (ambulances, trains, and ships) that they forget what a great additional strain any transport imposes on the patients, and are apt to lay approving stress on how quickly they have transported thousands of cases to England, without regarding (or at least mentioning) how many men this express transport has cost their lives.’

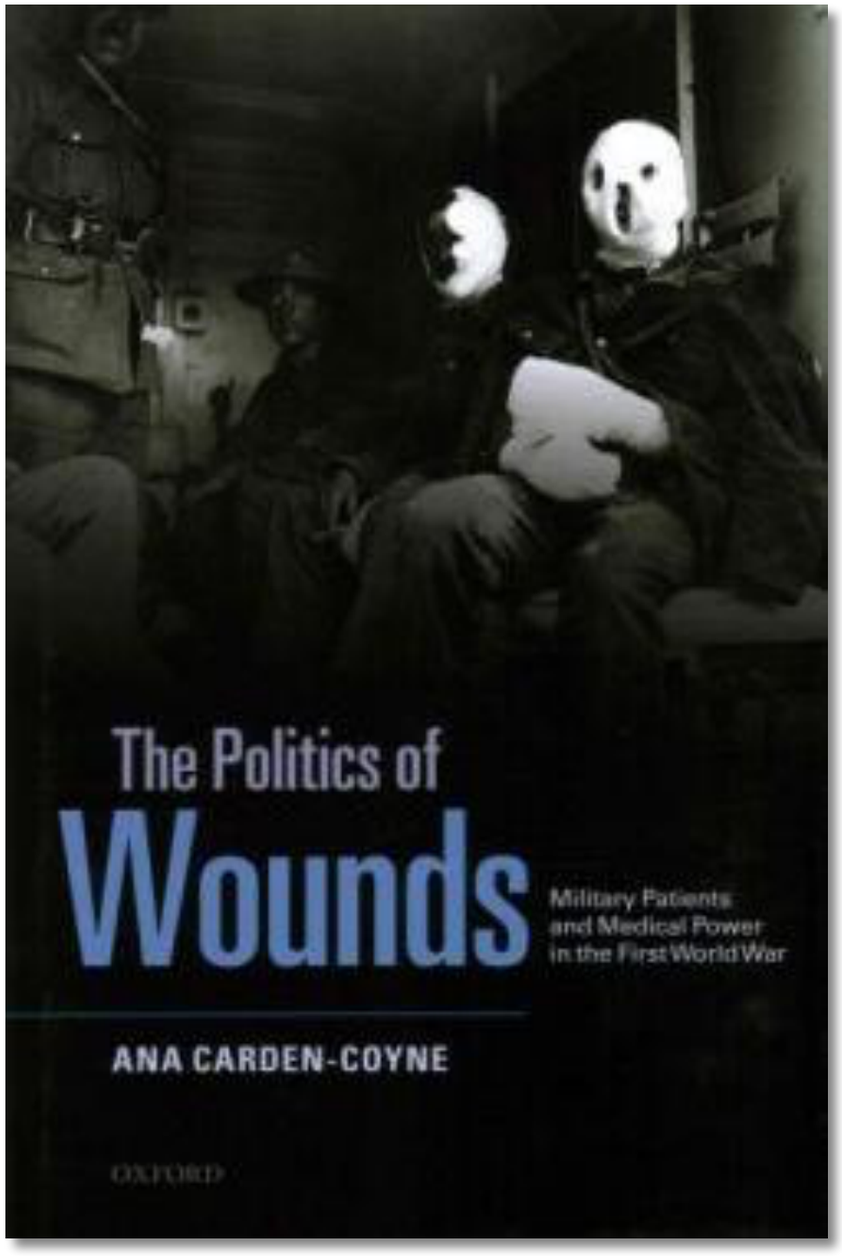
Henry Kaye, RAMC, 24 January 1916

‘Salvage’

‘The instructions given to stretcher-bearers are rather harsh. “If you find two men wounded, and can take only one away, take away the one more likely to make a fit soldier again.” Therefore the one more urgently in need of attention must be left to die, because he would walk with a limp and would never again be able to carry a pack. Sound business, of course, but just a little hard.’

A.M. Burrage, War is war

Four out of five of those wounded on the Western Front were returned to the fighting



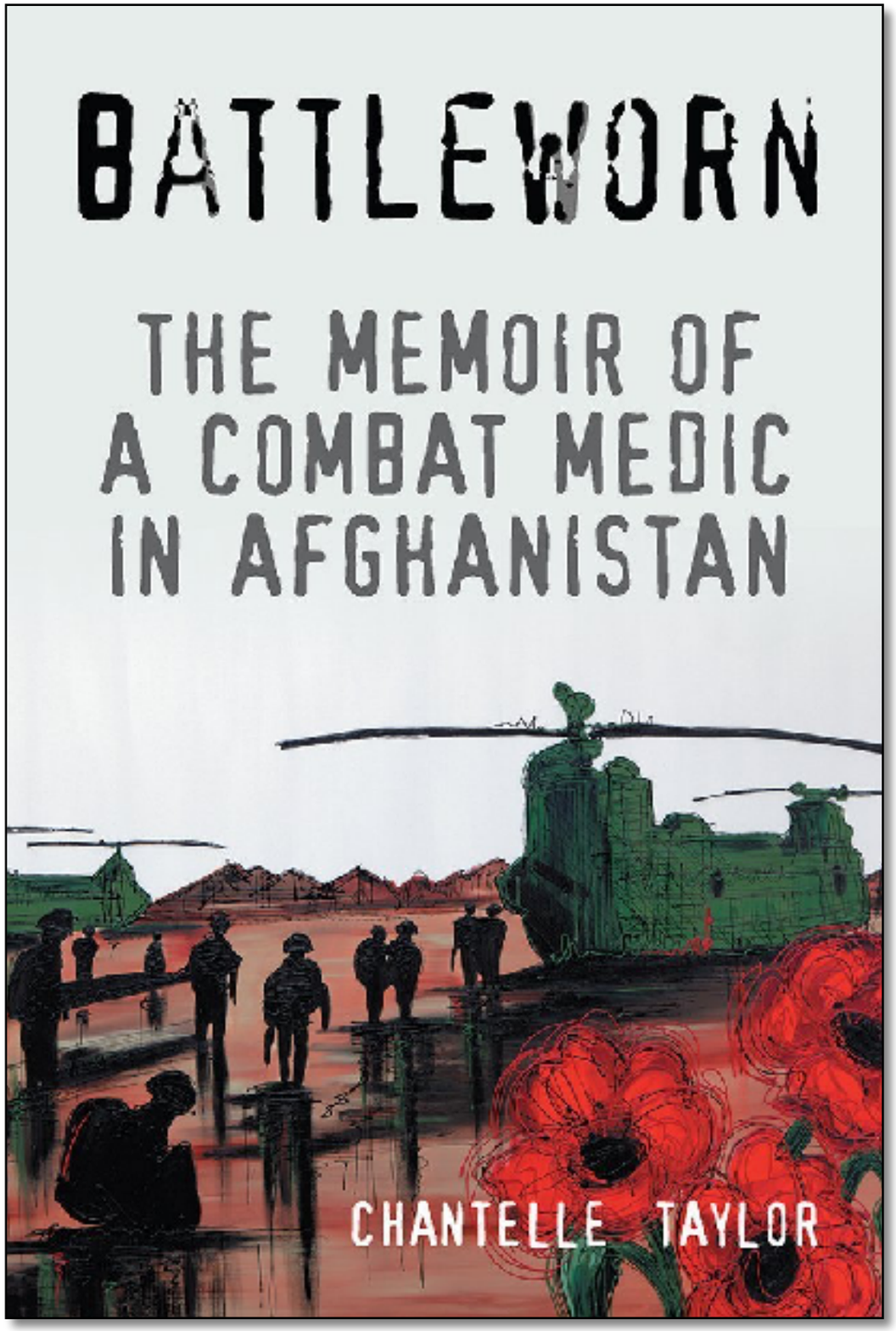
‘[The] Taylorist approach in modern war … was particularly evident in the assembly-line style of evacuation and in triage.’

Haydn Reynolds Mackey,
Civilian casualties at Main Dressing Station,
Flines-les-Raches, 1918

Most civilian casualties were treated in place; few were evacuated by the military, and these were delivered into the regular French medical system.

Afghanistan, 2001-2018

Combat Medical Technician



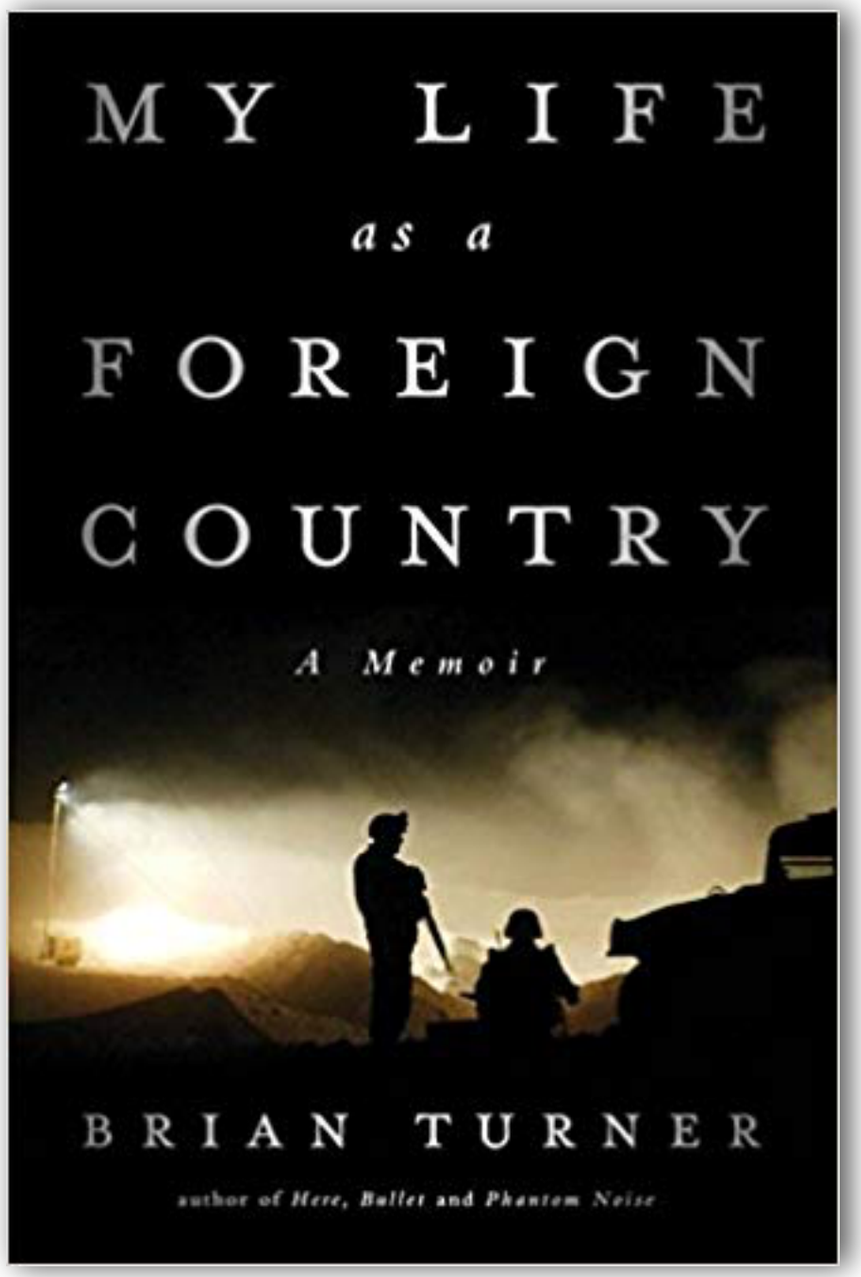
The ‘platinum ten minutes’: immediate life-saving care

‘My assessment takes less than sixty seconds, getting the all-important tourniquet applied to a heavy bleed on his left arm. It’s care under fire, so the initial survey is super quick – we are just lucky enough to carry out any medical interventions at all.

‘…our next move is to identify the need for early surgery. More often than not, **injuries sustained on the battlefield require minimal first aid and super-quick evacuation to the hands of the highly skilled surgeons in Camp Bastion…’**

‘We won’t hear the battle in progress and work our way toward it as baggage trains of wounded, exhausted soldiers and civilians carrying their lives on their backs travel in the opposite direction. Our battle space … will occur in a 360-degree, three-dimensional environment.’

Brian Turner, My life as a foreign country

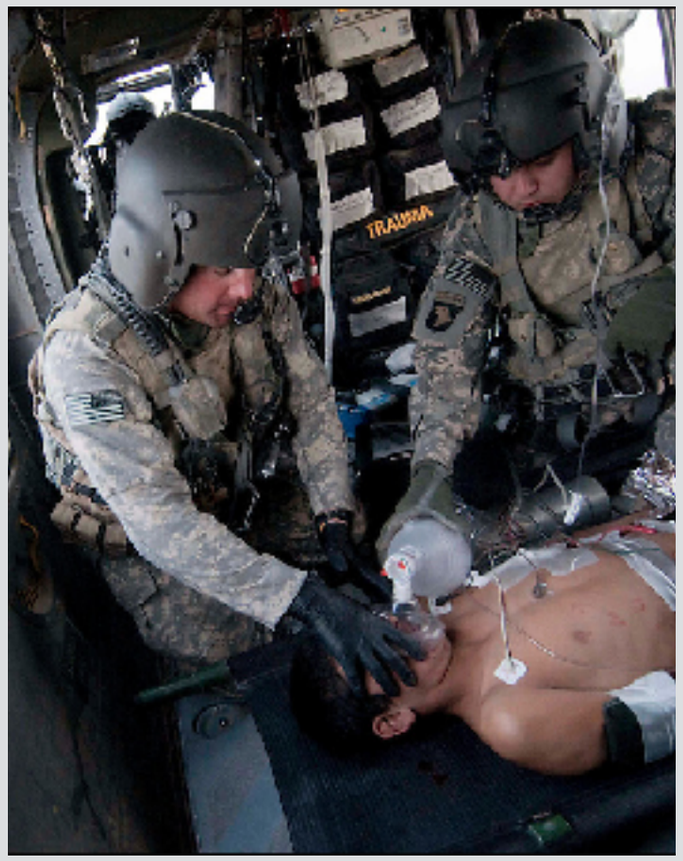


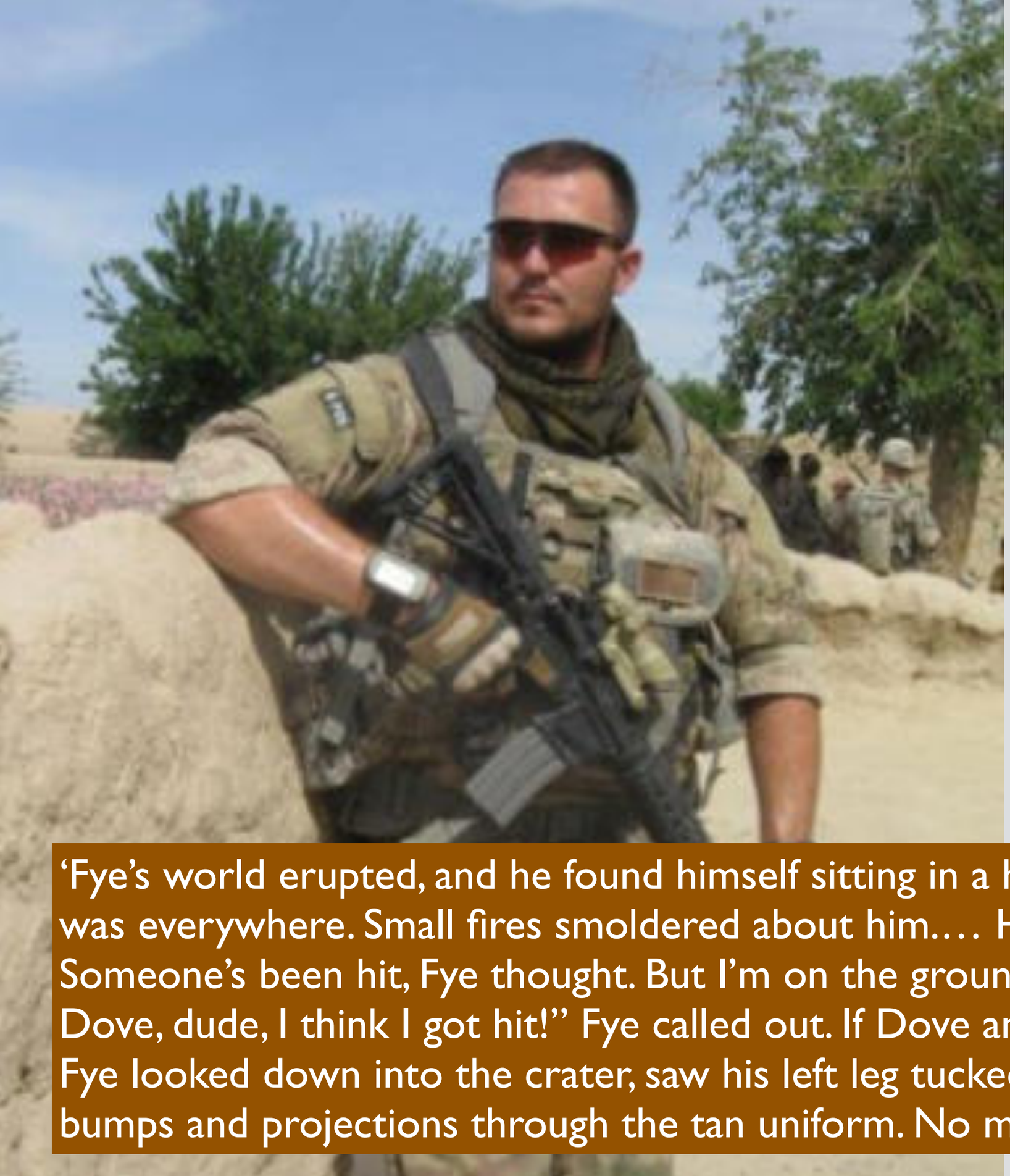
Detail		9 Line Message	Add details as required
1	Location (grid of pick up zone)	1	
2	Call sign & frequency	2	
3	Number of patients/precedence	3	
	A URGENT P1		IN HOSPITAL (ROLE 2/3) IN 90 MINUTES
	B PRIORITY P2		IN HOSPITAL (ROLE 2/3) IN 4 HOURS
	C ROUTINE P3		IN HOSPITAL (ROLE 2/3) IN 24 HOURS
4	Special equipment A None C Extrication B Hoist B Ventilator	4	A B C D
5	Number to be carried L Litter (stretcher) A Ambulatory (walking) E Escorts (e.g. children)	5	L A E
6	Security at pick up zone N No enemy P Possible enemy E Enemy in area X Hot pick up zone	6	N P E X
7	Pick up zone marking methods A Panels B Pyro C Smoke D None E Other (explain)	7	A B C D E
8	No. of patients by national status A Coalition mil B Civilian with coalition forces C Non coalition security forces D Non coalition civilian E Opposing forces / PW / Detainee F Children	8	A B C D E F
9	Pick up zone Terrain / Obstacles	9	

INCLUDE A "MIST AT" REPORT
M – Mechanism **I** – Injury **S** – Symptoms **T** – Treatment **A** – Adult/Child **T** – Time

Priority evacuation categories
(time to hospital)

A: within 90 minutes
B: within 4 hours
C: within 24 hours

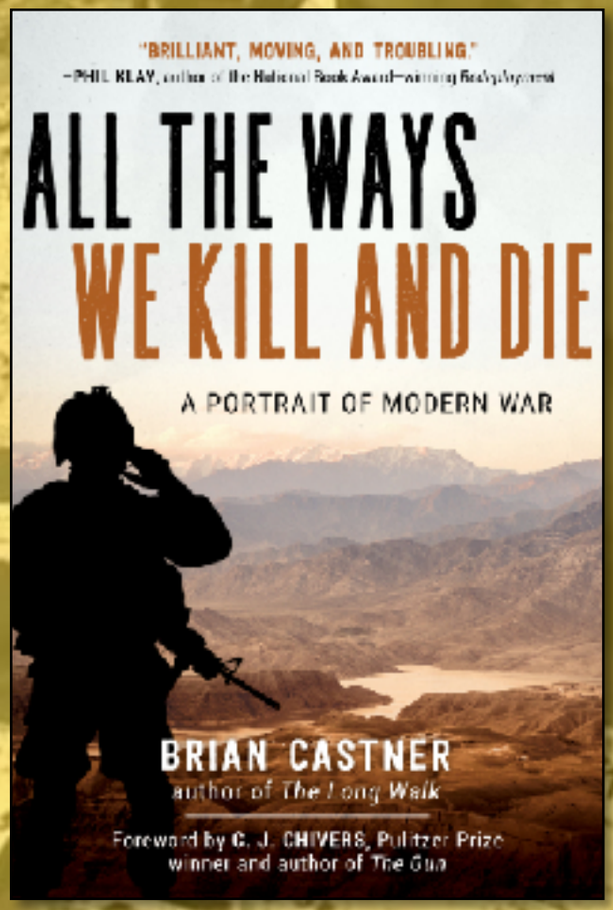




US Air Force Technical Sgt Daniel Fye

He stepped on an antipersonnel mine during a clearance operation in Mushan (Panjway) 27 May 2011

'Fye's world erupted, and he found himself sitting in a hole. … His ears rang. Dirt was everywhere. Small fires smoldered about him.… He couldn't hear anything. Someone's been hit, Fye thought. But I'm on the ground. That means I got hit. "Hey, Dove, dude, I think I got hit!" Fye called out. If Dove answered, Fye couldn't hear… Fye looked down into the crater, saw his left leg tucked under his right, saw odd bumps and projections through the tan uniform. No more looking down…'

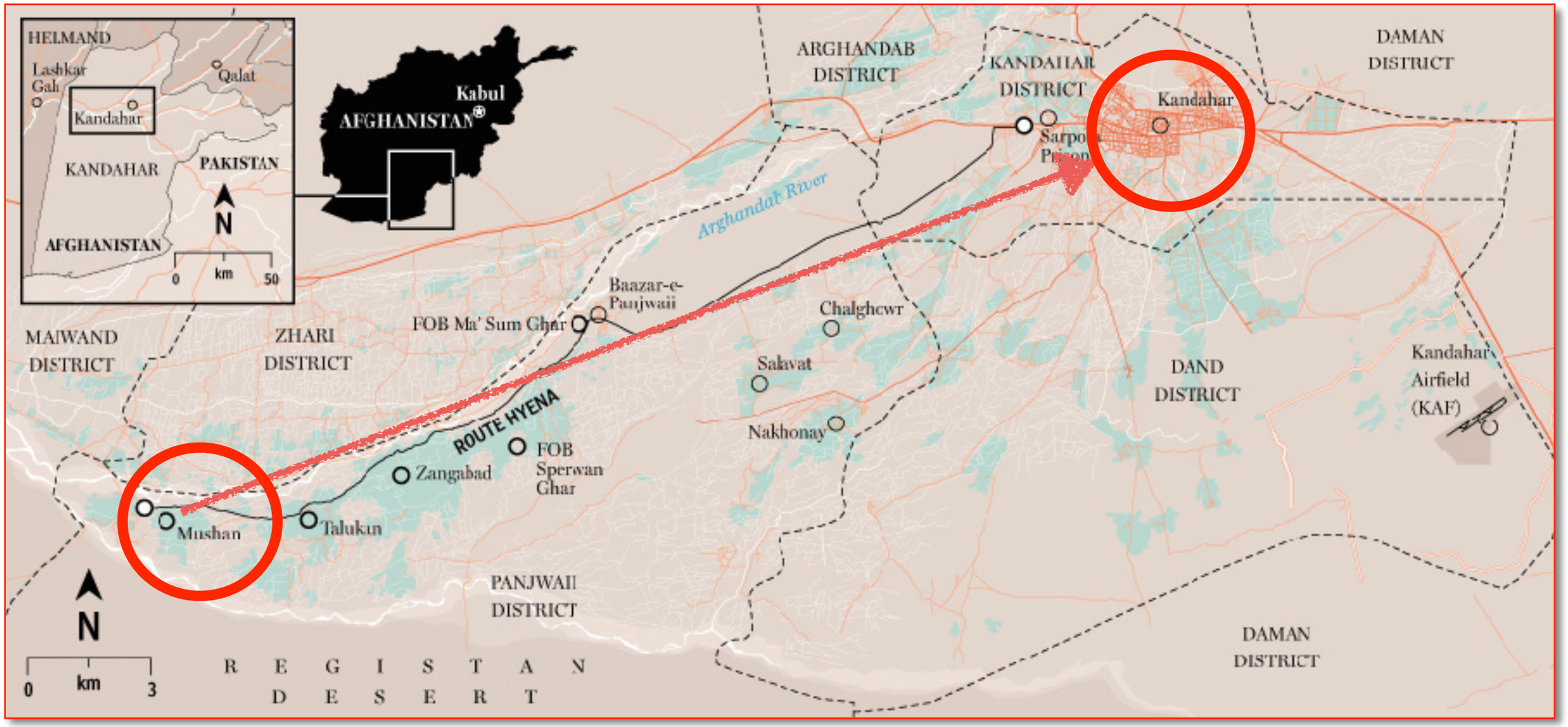


'Dove put the tourniquet on Fye's right leg because that was the only one that looked injured. An injured leg has bones sticking out. An injured leg is wet and dark and smells of a vital funk. Fye's right leg matched that description….

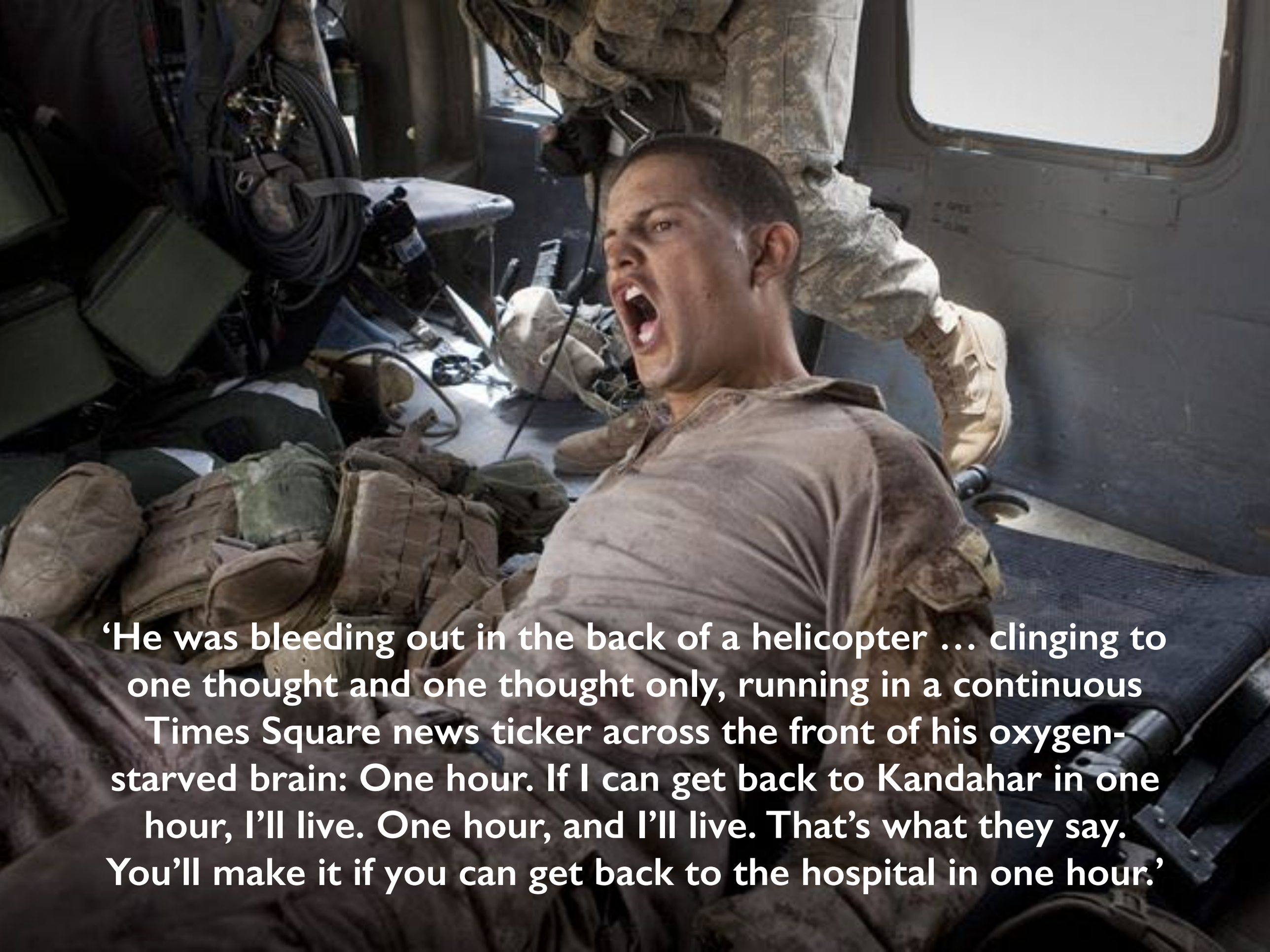
'**[Pete Hopkins, the medic] threw open his aid bag, slipped on a condom, and fist-fucked Fye's left thigh with his gloved hands. He buried his fingers in the wounds and twisted them around until he found the femoral and stopped the worst of the hemorrhage.** Dove kept twisting his tourniquet and Hopkins held pressure. Someone called about a problem with the medevac and Hopkins held pressure. They pulled new tourniquets from Hopkins's bag and put one on Fye's left leg, and a second on his right, and another again on the left, and Hopkins held pressure, and still Fye kept bleeding. Now there was a crowd of soldiers around, all working on Fye. They cranked again and again on the tourniquets. **They pushed their hands into his legs and needles into his arms**.'

'They worked on Fye a long time, and the longer they worked, the more anxious Fye got about the precious minutes slipping away. **"I don't hear the bird," he said, over and over.** Eventually … **twenty-five minutes after the blast**, the hyperactive thump of helo blades cutting air slowly emerged in the distance.

'**Fye thought it was the most wonderful sound he had ever heard. They were at the extreme limit of the NATO footprint, and so it was a sixty-kilometer flight to the main hospital at Kandahar. If they moved quickly, Fye would just make it in the magic golden hour**.'

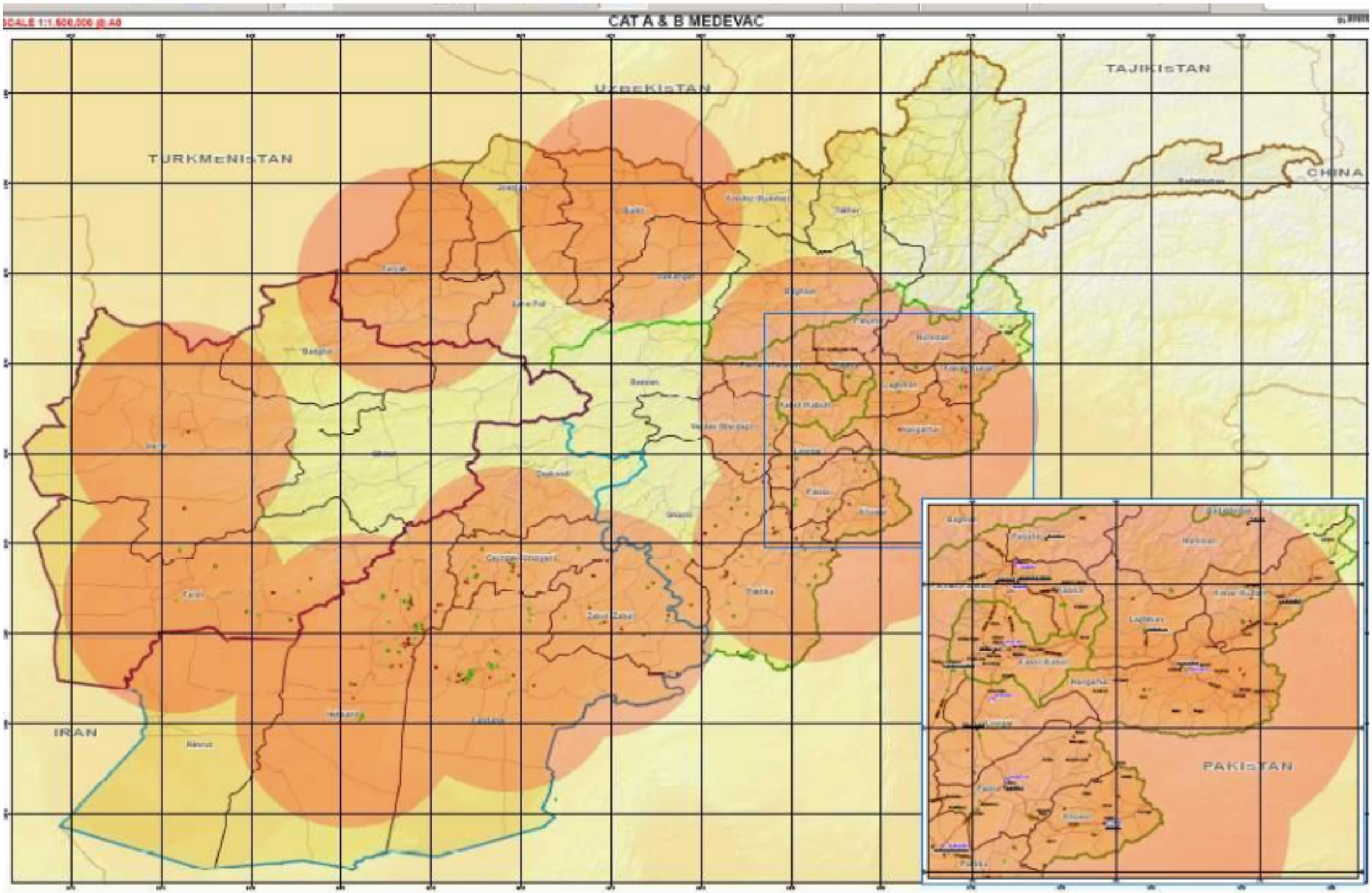


‘With a heft they slid his stretcher into the helo, and Fye’s view changed from open blue sky to enclosed black sheet-metal and rivets… Fye spun in a morphine dream of swirling and vibrating wind. The rotor wash pummeled him with engine exhaust.’

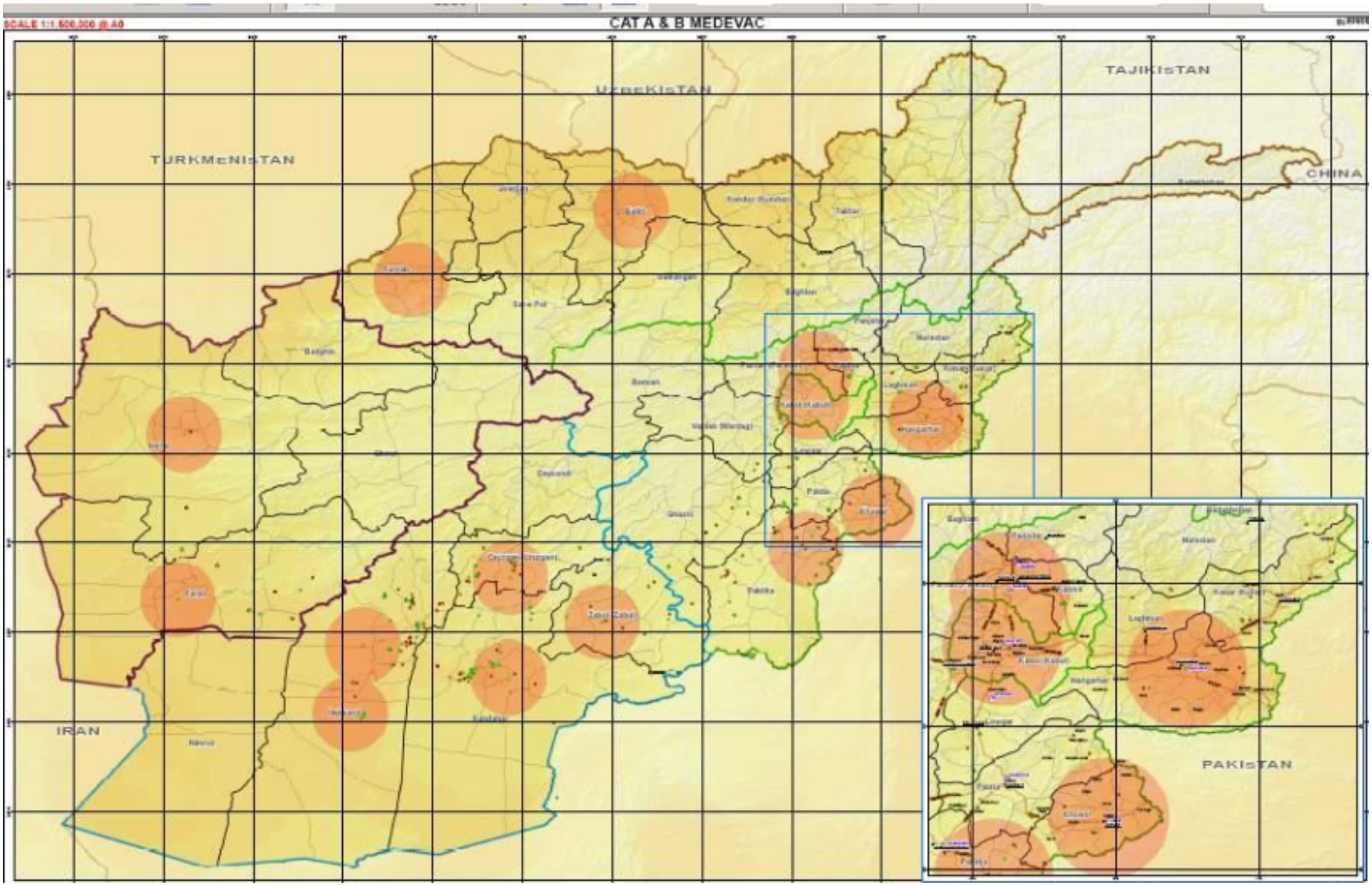


‘He was bleeding out in the back of a helicopter … clinging to one thought and one thought only, running in a continuous Times Square news ticker across the front of his oxygen-starved brain: One hour. If I can get back to Kandahar in one hour, I’ll live. One hour, and I’ll live. That’s what they say. You’ll make it if you can get back to the hospital in one hour.’

ISAF Medical Evacuation, ca. 2007
Coverage allowing 2 hours between POI and Surgery



ISAF Medical Evacuation, ca. 2007
Coverage allowing 1 hour between POI and Surgery

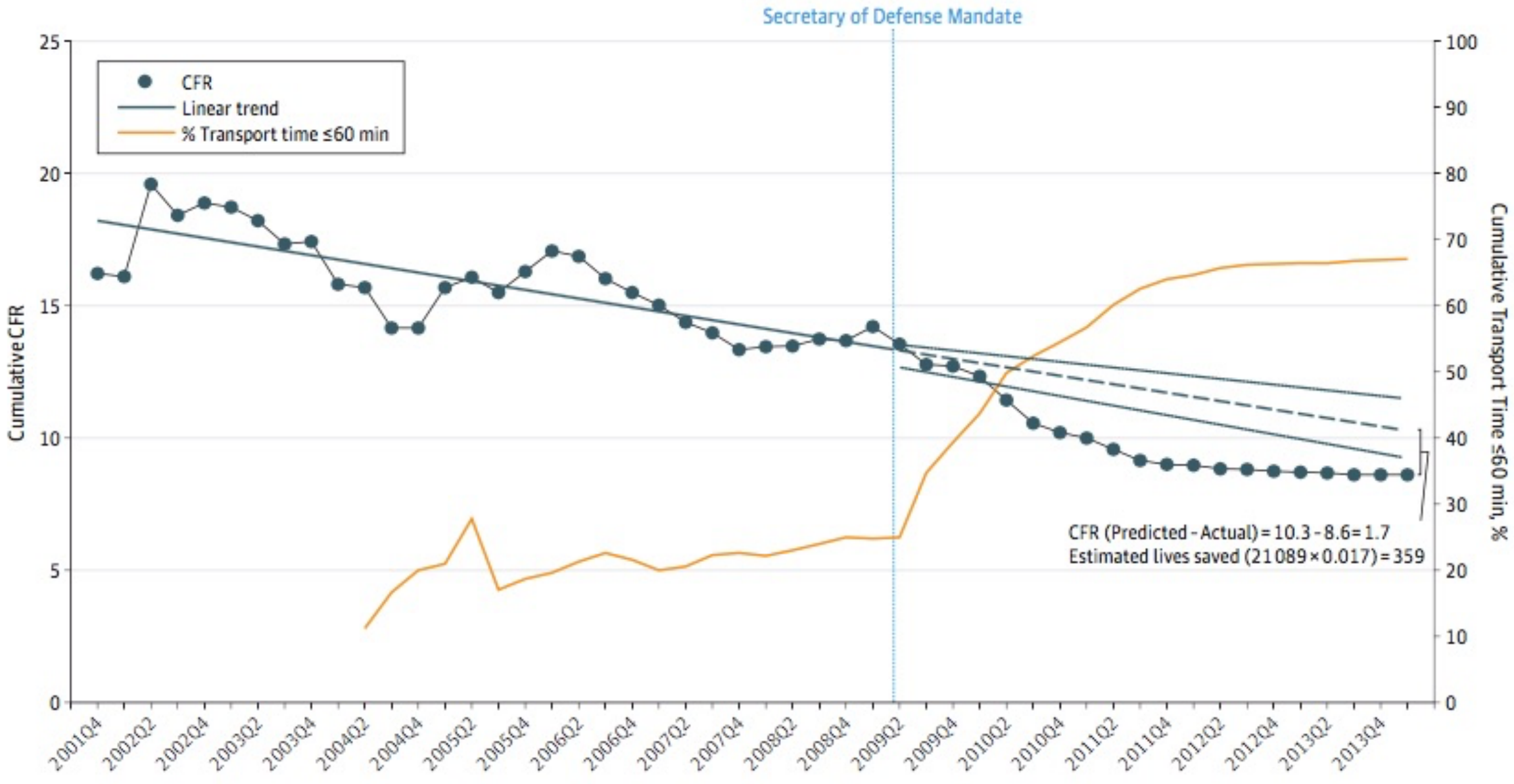


SOP is to write medical information across the chest of each casualty; includes the time a tourniquet was placed on one leg and the time he was given morphine for the pain.

MEDEVAC of Afghan POWs, Marja, September 2010

(Scott Olson/Getty Images)

Medevac Times, US Forces Afghanistan



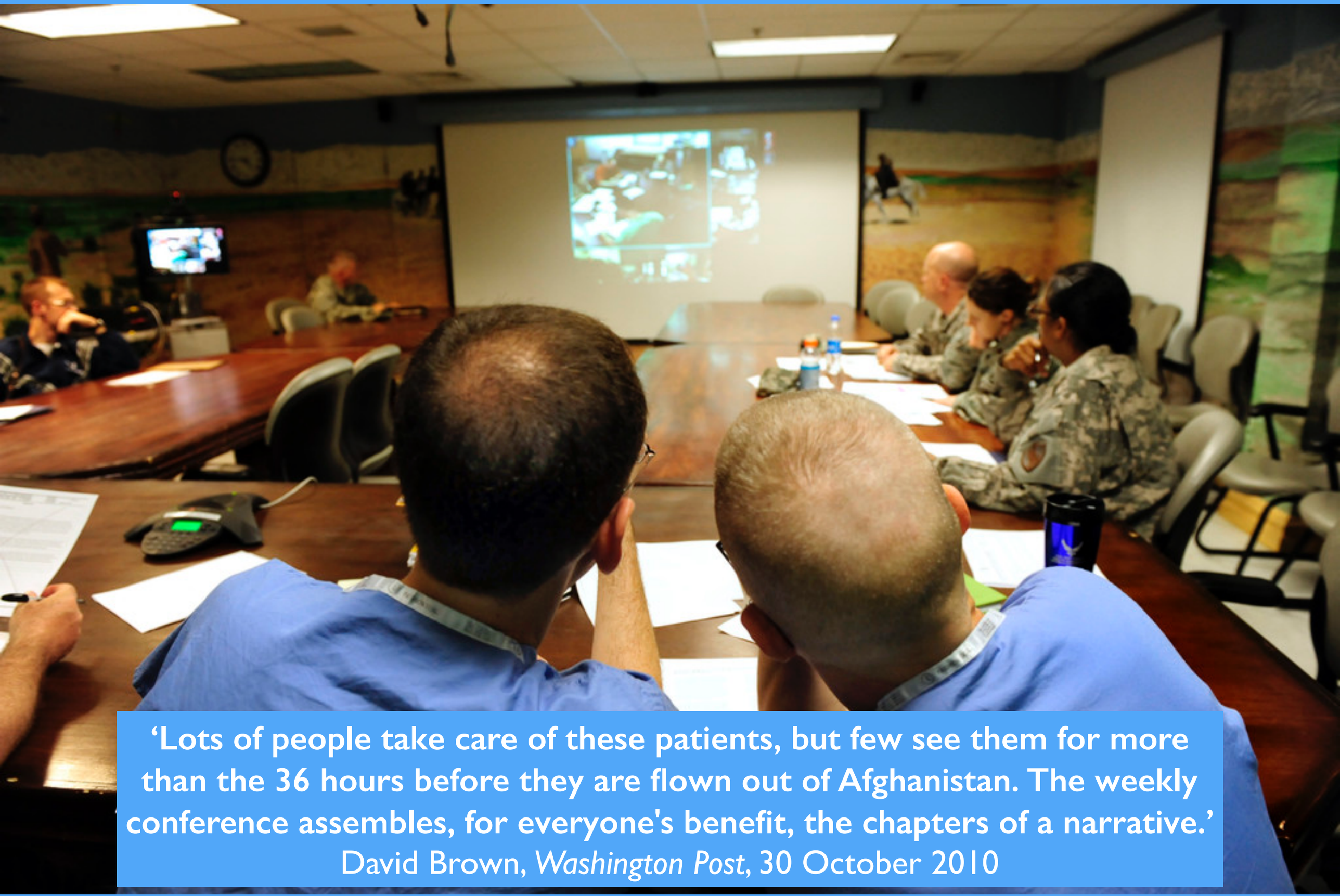
CFR Casualty Fatality Rate

Camp Bastion

Photograph by Marco di Lauro

‘Damage-control surgery’

Teleconferencing: transcontinental medical rounds

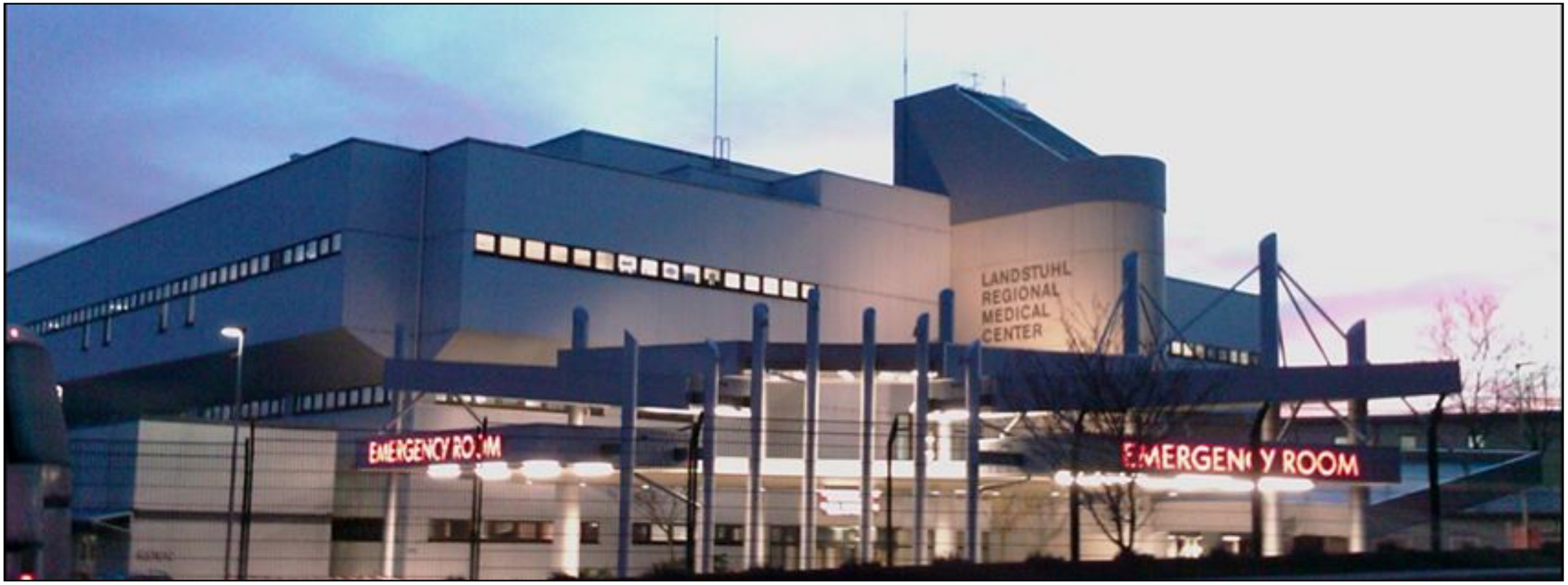


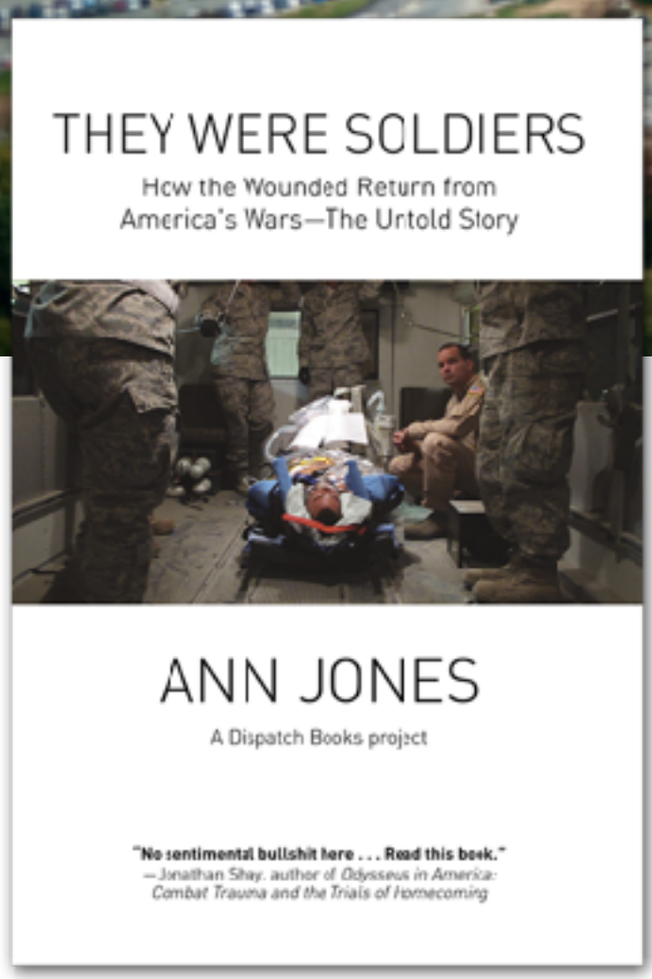
‘Lots of people take care of these patients, but few see them for more than the 36 hours before they are flown out of Afghanistan. The weekly conference assembles, for everyone's benefit, the chapters of a narrative.’

David Brown, *Washington Post*, 30 October 2010

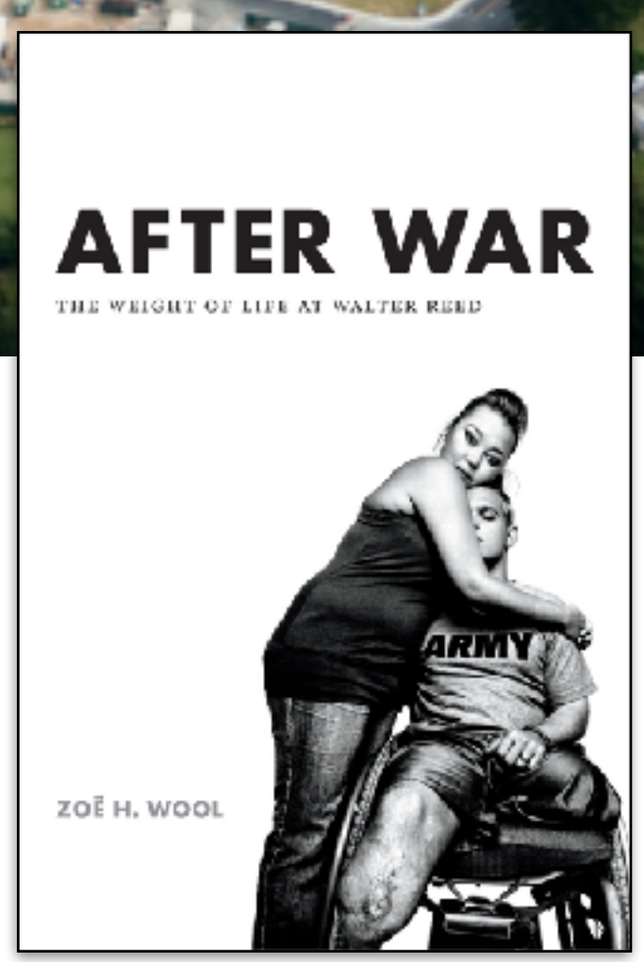
Landstuhl Regional Medical Center

‘the largest American medical facility outside the United States’





Walter Reed National Medical Centre, Bethesda MD



BETWEEN RHETORIC AND REALITY

THE ONGOING STRUGGLE TO ACCESS HEALTHCARE IN AFGHANISTAN

February 2014

MEDECINS SANS FRONTIERES

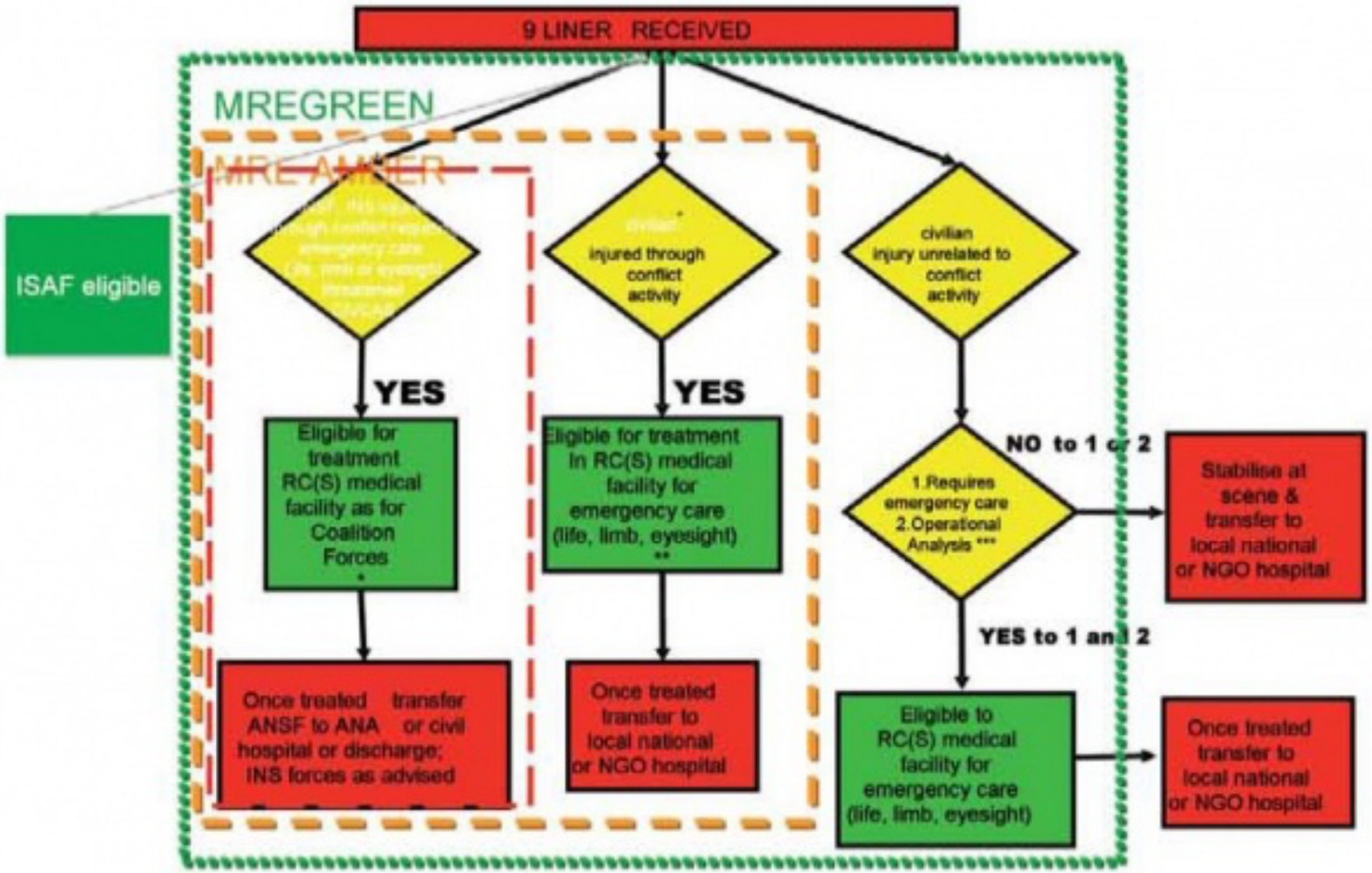
"It is too dangerous to go out at night. So we can't bring someone to the doctor once it's dark, even if their sickness or injury is serious. We can't move at night or all of us would be killed on the road. So, we prefer that they die quickly rather than having to suffer through the night only to die the next day or on the way. This is our reality."

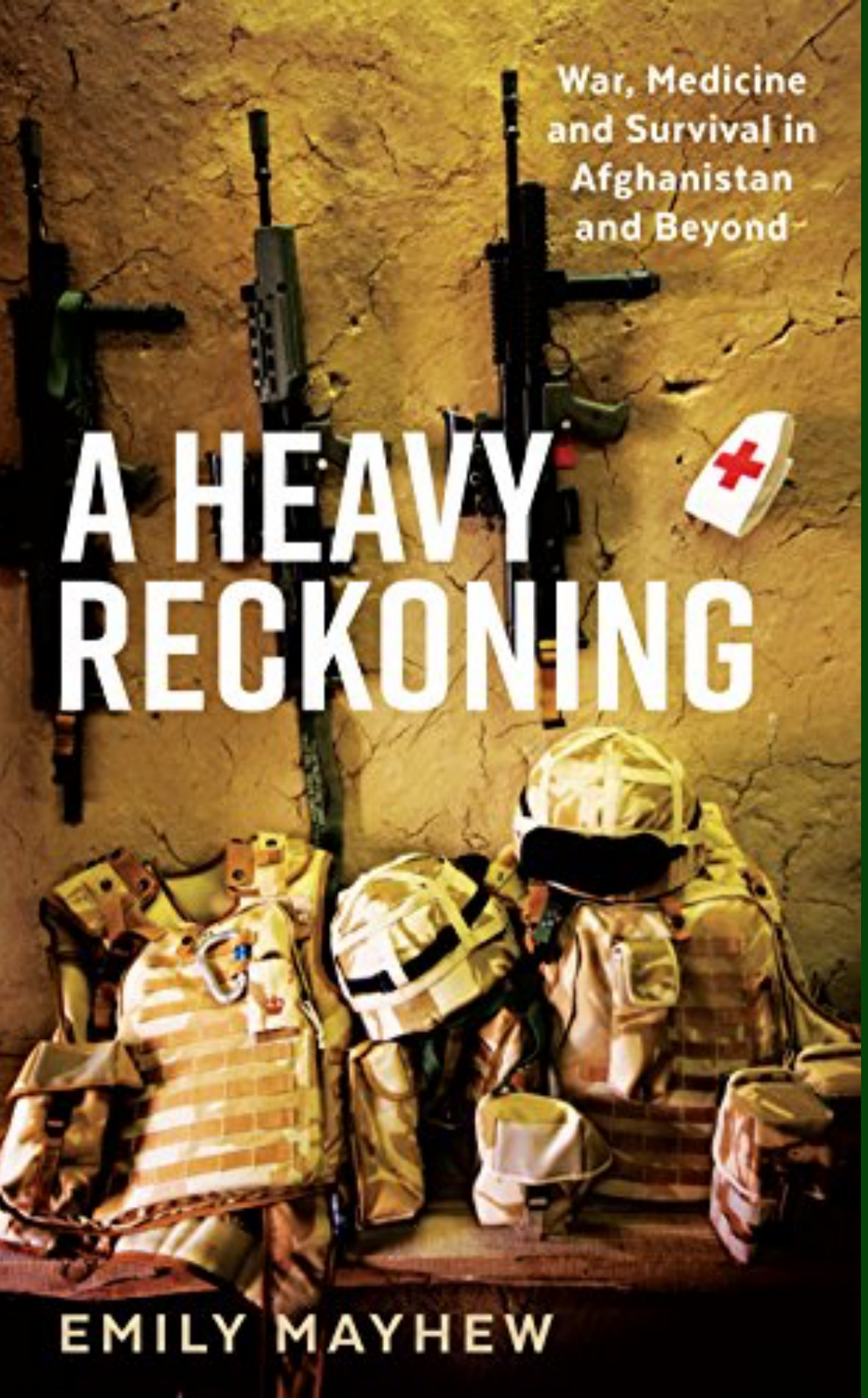
"Where we live is too far away from clinics for injured people to reach them on time to save their lives. There is no proper system to treat people while they are being transferred to a clinic. There is no ambulance, no doctors to go with them. So, by the time you finally reach a clinic, the person is already dead. They die from their injuries on the way."

Medevac of injured Afghan civilian (Image: Rafael Fabres)

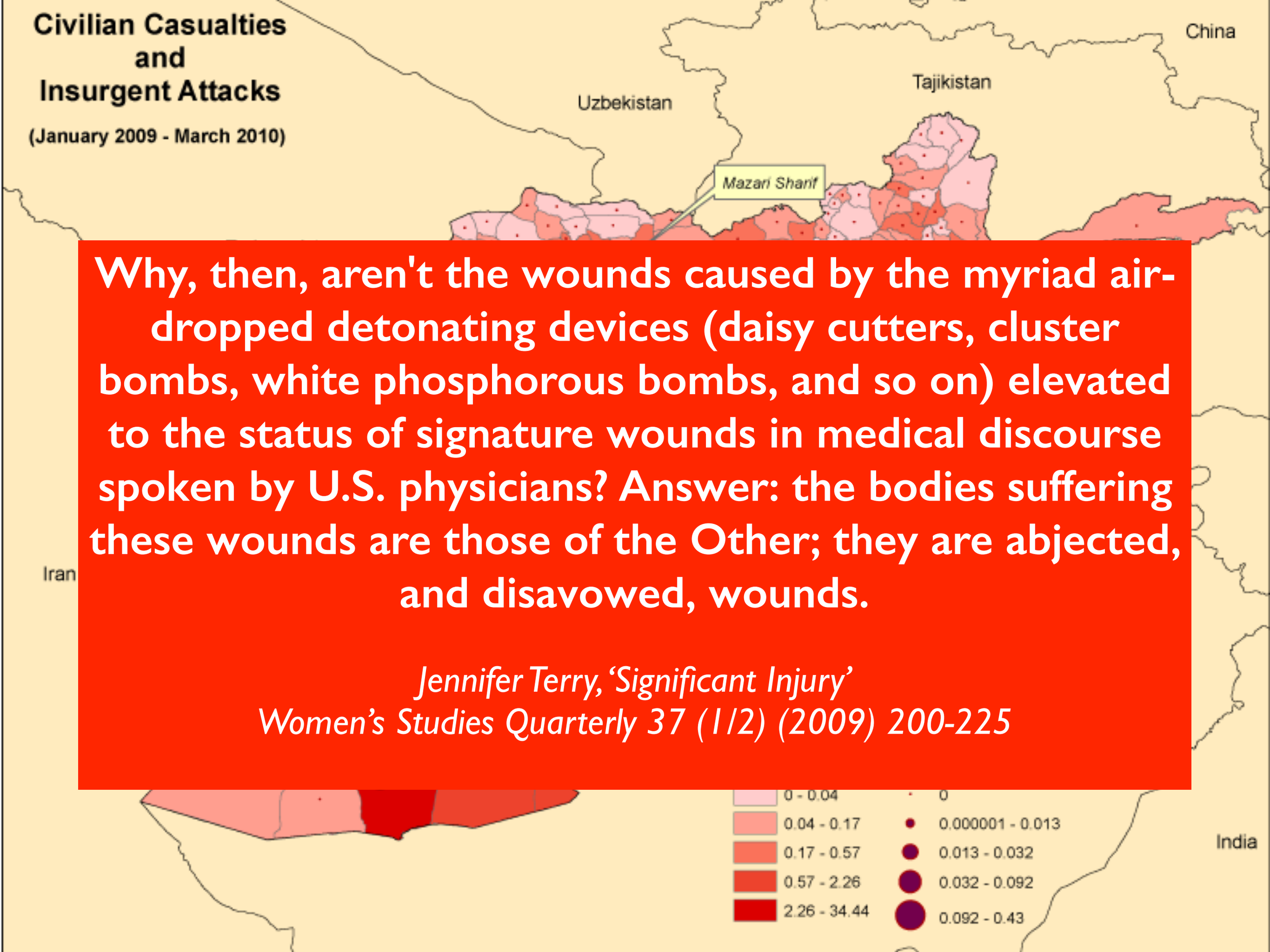
ISAF Medical Rules of Eligibility (MRE)

'By default, ISAF provides MEDEVAC and hospital care, if there is no suitable Afghan hospital, to **Afghan civilians with life, limb or eyesight (LLE) threatening medical emergencies**, defined on the medical rules of eligibility (MRE) matrix as MRE Green. A MRE Amber grade of eligibility was introduced to **restrict care of Afghans only to those with LLE emergencies resulting from conflict for use if the NATO hospital bed capacity was under pressure.'**





‘**Locals made up the majority (probably as much as 80 per cent) of the patients cared for during the lifetime of the hospital.** During the war there were no Afghan hospitals with the technology or capability to ventilate patients with severe chest wounds, therefore leaving Bastion meant death. So anyone intubated who could not be returned to Britain had to stay at Bastion until they could breathe unaided, which sometimes took days or weeks. **They were discharged only when it was certain they could survive away from Bastion: probably in a local hospital that was under severe stress, and which could only provide medical care for two or three hours a day, where the rest of the time they would be looked after by their families.’**



Why, then, aren't the wounds caused by the myriad air-dropped detonating devices (daisy cutters, cluster bombs, white phosphorous bombs, and so on) elevated to the status of signature wounds in medical discourse spoken by U.S. physicians? Answer: the bodies suffering these wounds are those of the Other; they are abjected, and disavowed, wounds.

Jennifer Terry, 'Significant Injury'
Women's Studies Quarterly 37 (1/2) (2009) 200-225

Aisha's story
7 September 2013

D1: 1730–1750 five missiles strike the pick-up truck

'These were men and women Mohibullah had grown up with, but he couldn't recognize any of them. Their mangled body parts made it difficult to ascertain where one person ended and another began: spilled brains over severed limbs over ground flesh. Amid the charred corpses, he found a woman who appeared to be nearing death. Nearby, a girl lay mute. **Mohibullah did not recognize the girl — her face had been "scrambled, she didn't have her nose." She still had both of her legs, but he wasn't sure if her torso was connecting them to the rest of her body. It wasn't until she asked in a frail voice — "Where is my father? Where is my mother?" — that he understood her to be his 4-year-old niece Aisha.'**

D1: 2000 Nasir leaves for Asadabad

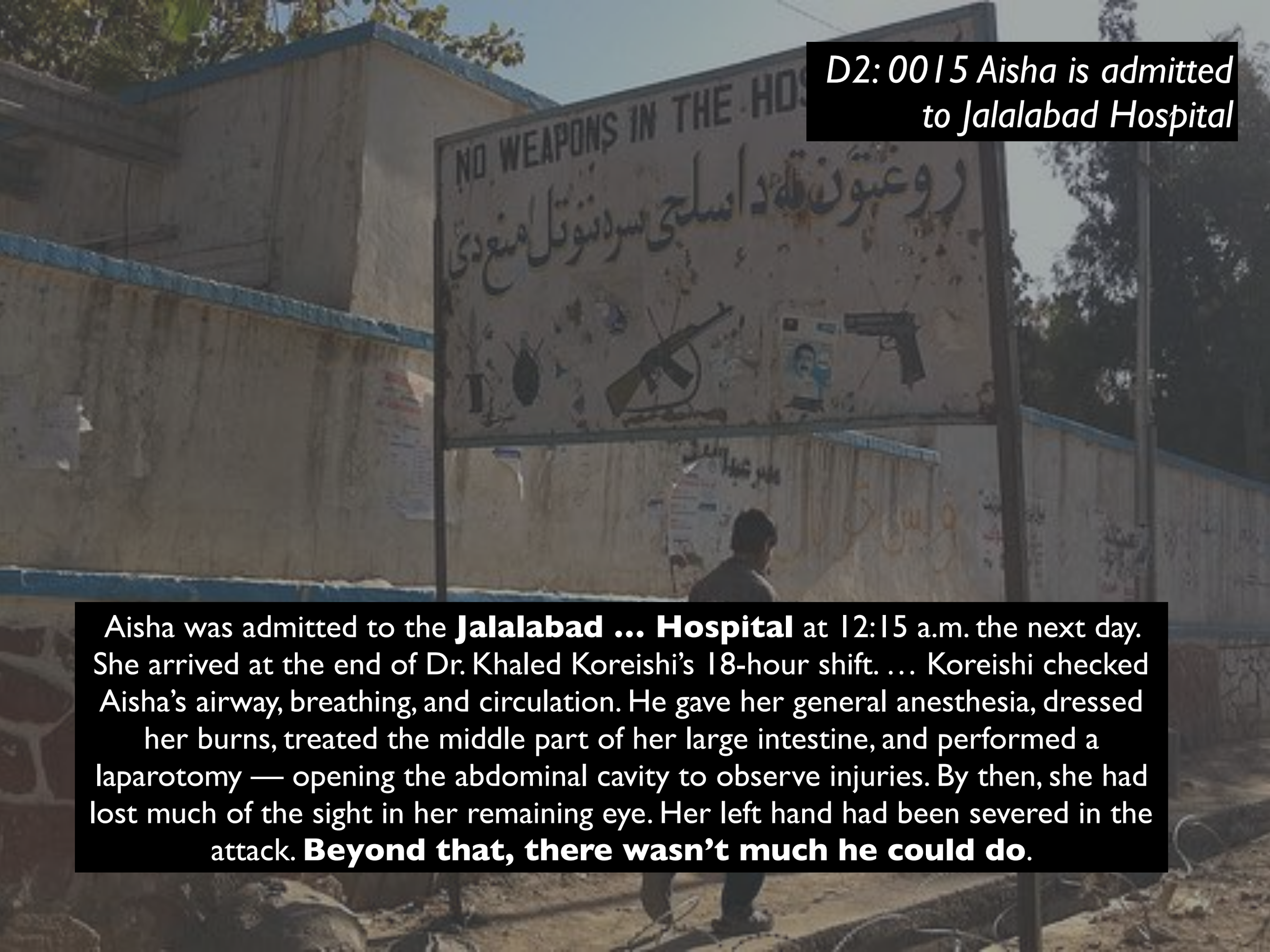
‘Nasir held Aisha together for the drive back to Gambir. During the 2-mile journey, Aisha did not make a sound. Life seemed to be slipping away from her. Nasir assumed she would be buried. But when they arrived in **Gambir**, Aisha turned her head and asked for water. Her voice was so full of intent that they decided to rush her to a hospital in Asadabad.

Nasir volunteered to drive… He set out after 8 p.m., tracing the route to **Asadabad.** They were fearful of the open sky above and drove slowly. They wouldn’t arrive at the hospital until after 10 p.m., a full seven hours after the attack.’

May Jeong, ‘Losing Sight’, The Intercept , 27 January 2018

D1: 2230 Aisha arrives at Asadabad Hospital

Haji Rafiullah was the nurse on duty at **Asadabad Provincial Hospital** [above] when Aisha was brought in. **There wasn't much he could do for her**. Her stomach was missing, as were parts of her face and her left arm. He registered her into the hospital database, writing "acute abdominal injuries" next to her name, treated her with basic first aid, and sent her to the nearest hospital in **Jalalabad**, 57 miles away.



D2: 0015 Aisha is admitted to Jalalabad Hospital

Aisha was admitted to the **Jalalabad … Hospital** at 12:15 a.m. the next day. She arrived at the end of Dr. Khaled Koreishi's 18-hour shift. … Koreishi checked Aisha's airway, breathing, and circulation. He gave her general anesthesia, dressed her burns, treated the middle part of her large intestine, and performed a laparotomy — opening the abdominal cavity to observe injuries. By then, she had lost much of the sight in her remaining eye. Her left hand had been severed in the attack. **Beyond that, there wasn't much he could do**.

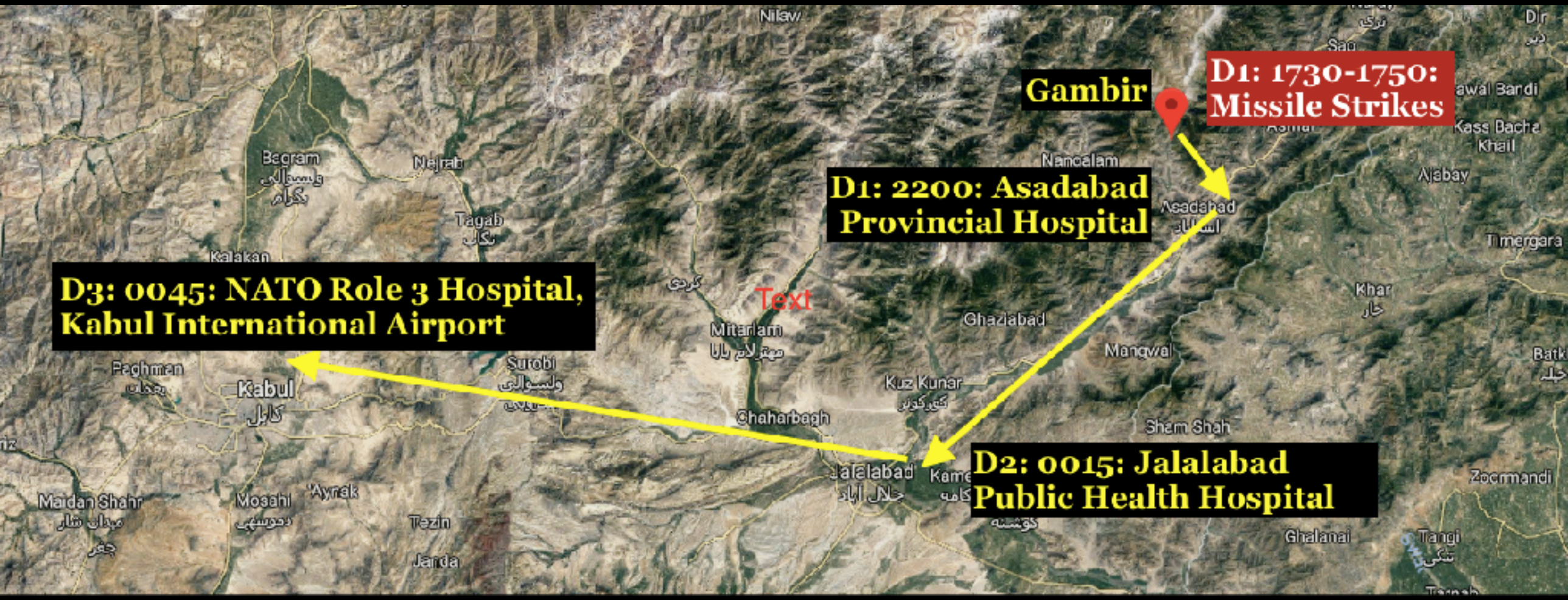
A helicopter came at 10 p.m. to take Aisha to Kabul, but it had trouble landing and left without her. Another came around midnight, taking her to the French military hospital at Kabul airport.

D3: 0015 Aisha is flown to Kabul

The NATO Role 3 Medical Treatment Facility at KIA had three surgical teams (including an orthopedic surgeon, a neurosurgeon and a maxillofacial surgeon to provide ‘damage-control surgery’

NATO medical planning calls for casualties to reach a Role 3 hospital within 1-2 hours of injury

Aisha's Journey, 7-9 September 2013



It took Aisha 30 hours to reach the Role 3 Hospital in Kabul

For wounded civilians in Afghanistan there are no ‘platinum ten minutes’ – and in the case of a drone strike, any first responders in the immediate vicinity are deterred by the threat of a follow-up ‘double-tap’ – and there is often not even a ‘golden hour’….

Suhrab's story
21 February 2010

Sensor: Oh sweet target.

Battle Damage Assessment
Sensitive Site Exploitation

AT APPROX. 1230Z THE GFC REQUESTED AIR ASSETS FROM FB(b)(1)1.4aTO TAKE A SPLIT ELEMENT OF ODA AND ANA MEMBERS TO CONDUCT BOOTS ON THE GROUND BDA OF THE SITE. GFC CONFIRMS 15 X EKIA AND UPDATED THE SOTF WITH 7 X EWIA. GFC IS WORKING MEDEVAC THROUGH AOB CHANNELS ATT FOR THE WOUNDED. GFC ADDITIONALLY CONFIRMS NO CIVCAS OR COLLATERAL DAMAGE. UPON COMPLETION OF SSE, THE SPLIT FORCE WILL RETURN TO OBJ KHOD.

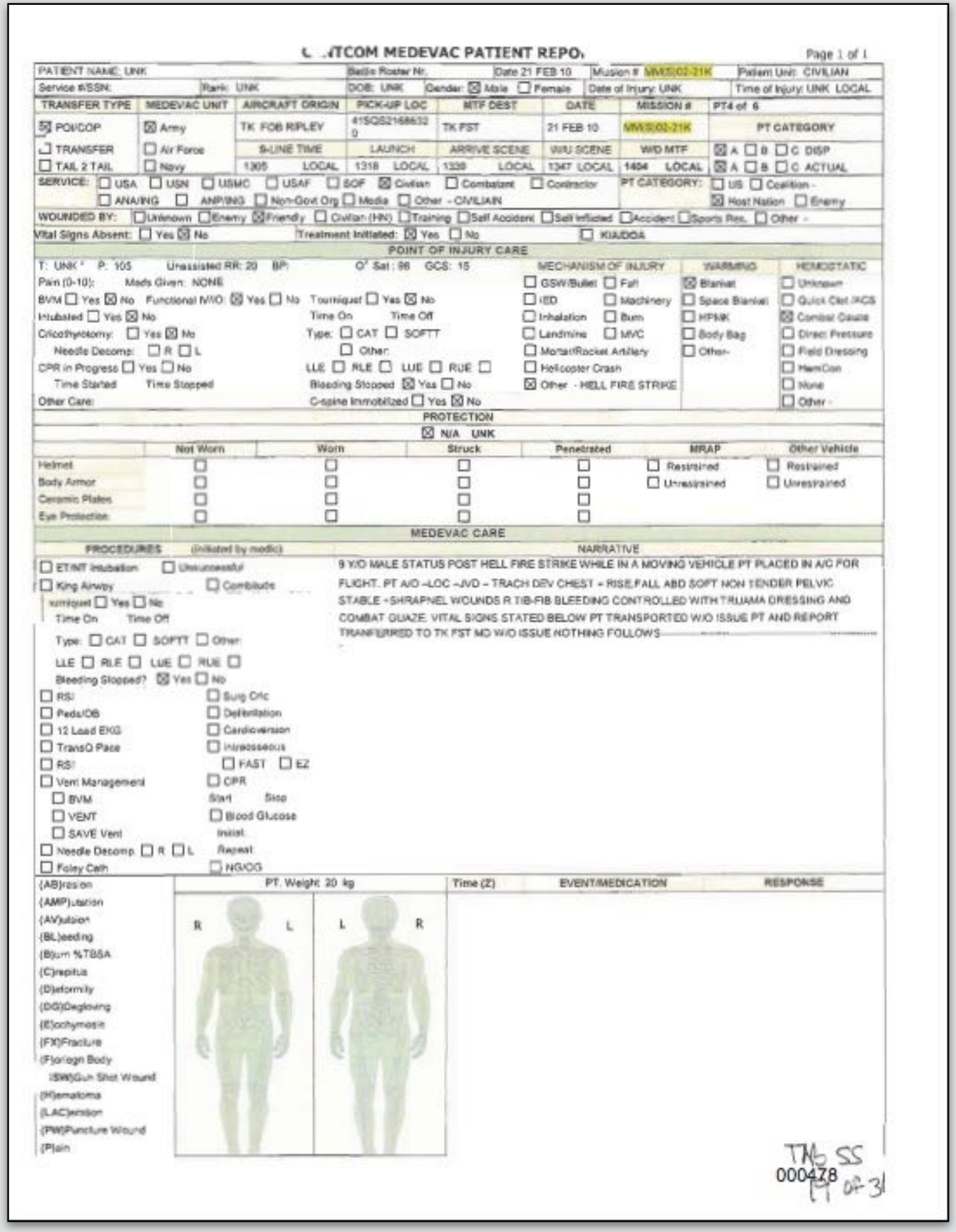
The US Special Forces detachment arrived at the engagement site by helicopter at 1237D – four hours after the strike - and at 1305D sent an urgent 9-Liner for MEDEVAC.

Two military helicopters **landed at 1339D** and took the injured to two military hospitals at Tarin Kowt, where they **arrived at 1405 D**.

En route the casualties became **the objects of a biomedical gaze** that rendered their bodies as a series of visible wounds and vital signs that were distributed among the boxes of standard MEDEVAC report forms

At that stage none of the injured was identified by name; six of the cases – as they had become – were recorded as having been injured by 'friendly' forces, but five of them mark 'wounded by' as 'unknown'.

These are necessarily **dispassionate abstractions of mutilated, pain-bearing and traumatised bodies.**



...ITCOM MEDEVAC PATIENT REPO...

Page 1 of 1

PATIENT NAME: UNK | Battle Roster Nr. | Date 21 FEB 10 | Mission #: MWSI/02-21K | Patient Unit: CIVILIAN

Service #/SSN: | Rank: UNK | DOB: UNK | Gender: ☒ Male ☐ Female | Date of Injury: UNK | Time of Injury: UNK LOCAL

TRANSFER TYPE	MEDEVAC UNIT	AIRCRAFT ORIGIN	PICK-UP LOC	MTF DEST	DATE	MISSION #	PT# of 6
☒ PO/COP	☒ Army	TK FOB RIPLEY	41SQS2168632 0	TK FST	21 FEB 10	MWSI/02-21K	PT CATEGORY
☐ TRANSFER	☐ Air Force	9-LINE TIME	LAUNCH	ARRIVE SCENE	W/U SCENE	W/D MTF	☒ A ☐ B ☐ C DISP
☐ TAIL 2 TAIL	☐ Navy	1305 LOCAL	1318 LOCAL	1339 LOCAL	1347 LOCAL	1404 LOCAL	☒ A ☐ B ☐ C ACTUAL

SERVICE: ☐ USA ☐ USN ☐ USMC ☐ USAF ☐ SOF ☒ Civilian ☐ Combatant ☐ Contractor ☐ ANA/ING ☐ ANP/ING ☐ Non-Govt Org ☐ Media ☐ Other - CIVILIAN

PT CATEGORY: ☐ US ☐ Coalition - ☒ Host Nation ☐ Enemy

WOUNDED BY: ☐ Unknown ☐ Enemy ☒ Friendly ☐ Civilian (HN) ☐ Training ☐ Self Accident ☐ Self Inflicted ☐ Accident ☐ Sports Rec. ☐ Other -

Vital Signs Absent: ☐ Yes ☒ No | Treatment Initiated: ☒ Yes ☐ No | ☐ KIA/DOA

POINT OF INJURY CARE

T: UNK° P: 105 Unassisted RR: 20 BP: O² Sat: 98 GCS: 15

Pain (0-10): Meds Given: NONE

BVM ☐ Yes ☒ No Functional IV/IO: ☒ Yes ☐ No Tourniquet ☐ Yes ☒ No

Intubated ☐ Yes ☒ No Time On Time Off

Cricothyrotomy: ☐ Yes ☒ No Type: ☐ CAT ☐ SOFTT

Needle Decomp: ☐ R ☐ L ☐ Other:

CPR in Progress ☐ Yes ☐ No LLE ☐ RLE ☐ LUE ☐ RUE ☐

Time Started Time Stopped Bleeding Stopped ☒ Yes ☐ No

Other Care: C-spine Immobilized ☐ Yes ☒ No

MECHANISM OF INJURY: ☐ GSW/Bullet ☐ Fall ☐ IED ☐ Machinery ☐ Inhalation ☐ Burn ☐ Landmine ☐ MVC ☐ Mortar/Rocket Artillery ☐ Helicopter Crash ☒ Other - HELL FIRE STRIKE

WARMING: ☒ Blanket ☐ Space Blanket ☐ HPMK ☐ Body Bag ☐ Other-

HEMOSTATIC: ☐ Unknown ☐ Quick Clot /ACS ☒ Combat Gauze ☐ Direct Pressure ☐ Field Dressing ☐ HemCon ☐ None ☐ Other -

PROTECTION

☒ N/A ☐ UNK

	Not Worn	Worn	Struck	Penetrated	MRAP	Other Vehicle
Helmet	☐	☐	☐	☐	☐ Restrained ☐ Unrestrained	☐ Restrained ☐ Unrestrained
Body Armor	☐	☐	☐	☐		
Ceramic Plates	☐	☐	☐	☐		
Eye Protection	☐	☐	☐	☐		

MEDEVAC CARE

PROCEDURES (initiated by medic)

☐ ET/NT Intubation ☐ Unsuccessful

☐ King Airway ☐ Combitube

Tourniquet ☐ Yes ☐ No

Time On Time Off

Type: ☐ CAT ☐ SOFTT ☐ Other

LLE ☐ RLE ☐ LUE ☐ RUE ☐

Bleeding Stopped? ☒ Yes ☐ No

☐ RSI ☐ Surg Cric

☐ Peds/OB ☐ Defibrillation

☐ 12 Lead EKG ☐ Cardioversion

☐ TransQ Pace ☐ Intraosseous

☐ RSI ☐ FAST ☐ EZ

☐ Vent Management ☐ CPR

☐ BVM Start Stop

☐ VENT ☐ Blood Glucose

☐ SAVE Vent Initial

☐ Needle Decomp ☐ R ☐ L Repeat

☐ Foley Cath ☐ NG/OG

NARRATIVE

9 Y/O MALE STATUS POST HELL FIRE STRIKE WHILE IN A MOVING VEHICLE PT PLACED IN A/C FOR FLIGHT. PT A/O –LOC –JVD – TRACH DEV CHEST + RISE,FALL ABD SOFT NON TENDER PELVIC STABLE +SHRAPNEL WOUNDS R TIB-FIB BLEEDING CONTROLLED WITH TRUAMA DRESSING AND COMBAT GUAZE. VITAL SIGNS STATED BELOW PT TRANSPORTED W/O ISSUE PT AND REPORT TRANFERRED TO TK FST MD W/O ISSUE NOTHING FOLLOWS

(AB)rasion
(AMP)utation
(AV)ulsion
(BL)eeding
(B)urn %TBSA
(C)repitus
(D)eformity
(DG)Degloving
(E)cchymosis
(FX)Fracture
(F)oriegn Body
(GSW)Gun Shot Wound
(H)ematoma
(LAC)eration
(PW)Puncture Wound
(P)ain

PT. Weight: 20 kg

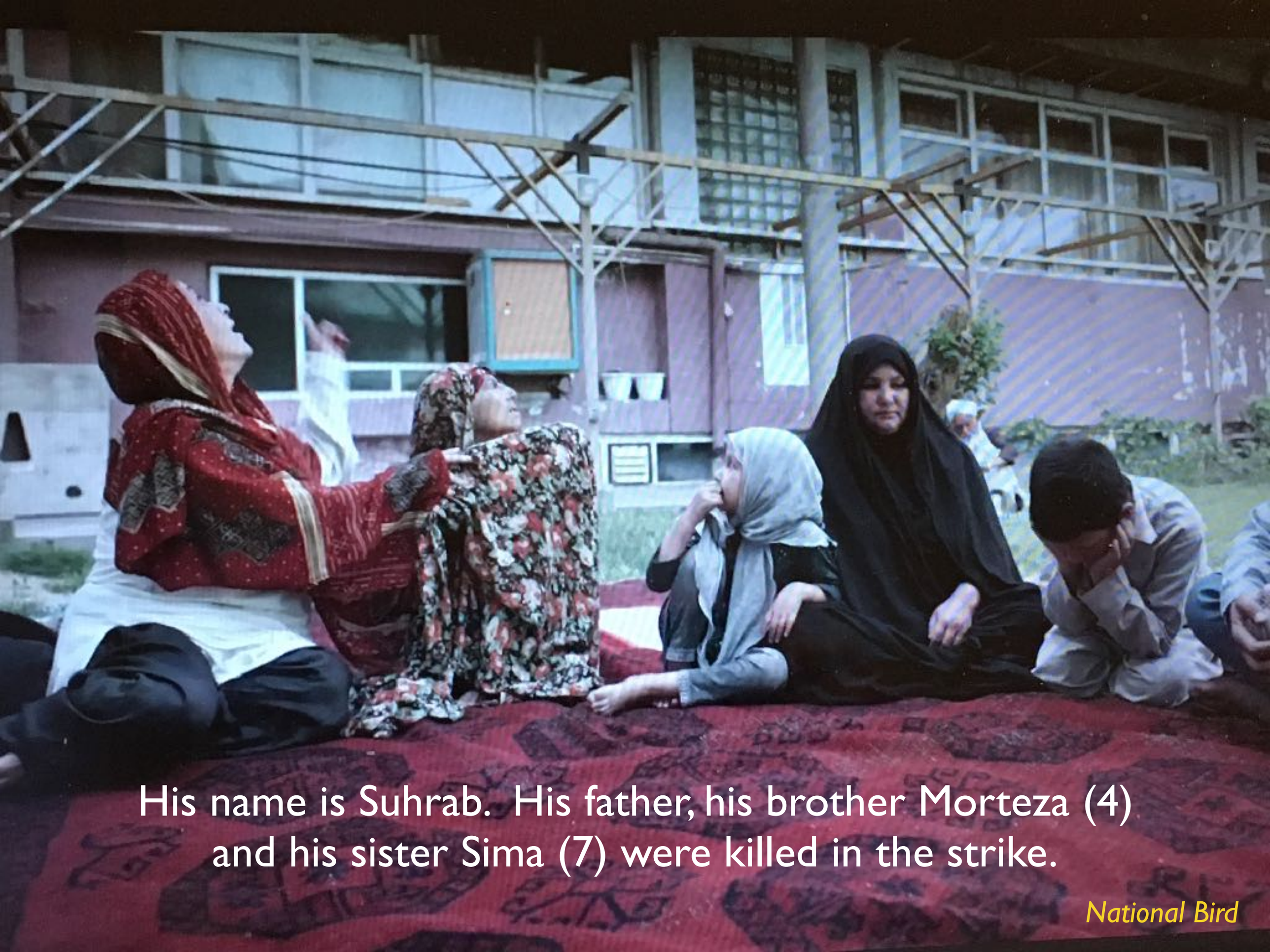
Time (Z)	EVENT/MEDICATION	RESPONSE

TM 55
000478
9 of 31

Role 2 Military Hospital
Tarin Kowt
Royal Netherlands Army

Doctor [Dutch LTC]: **This is the kid that lost the leg, the left leg**.
MG McHale: So he's probably about five or six years old?
Doctor: Yes, five years, that's what they reckon. **Under the circumstances he's doing alright**. He's eating, he's hungry. He's sleeping right now but if you talk to him he's doing alright.

1 March 2010



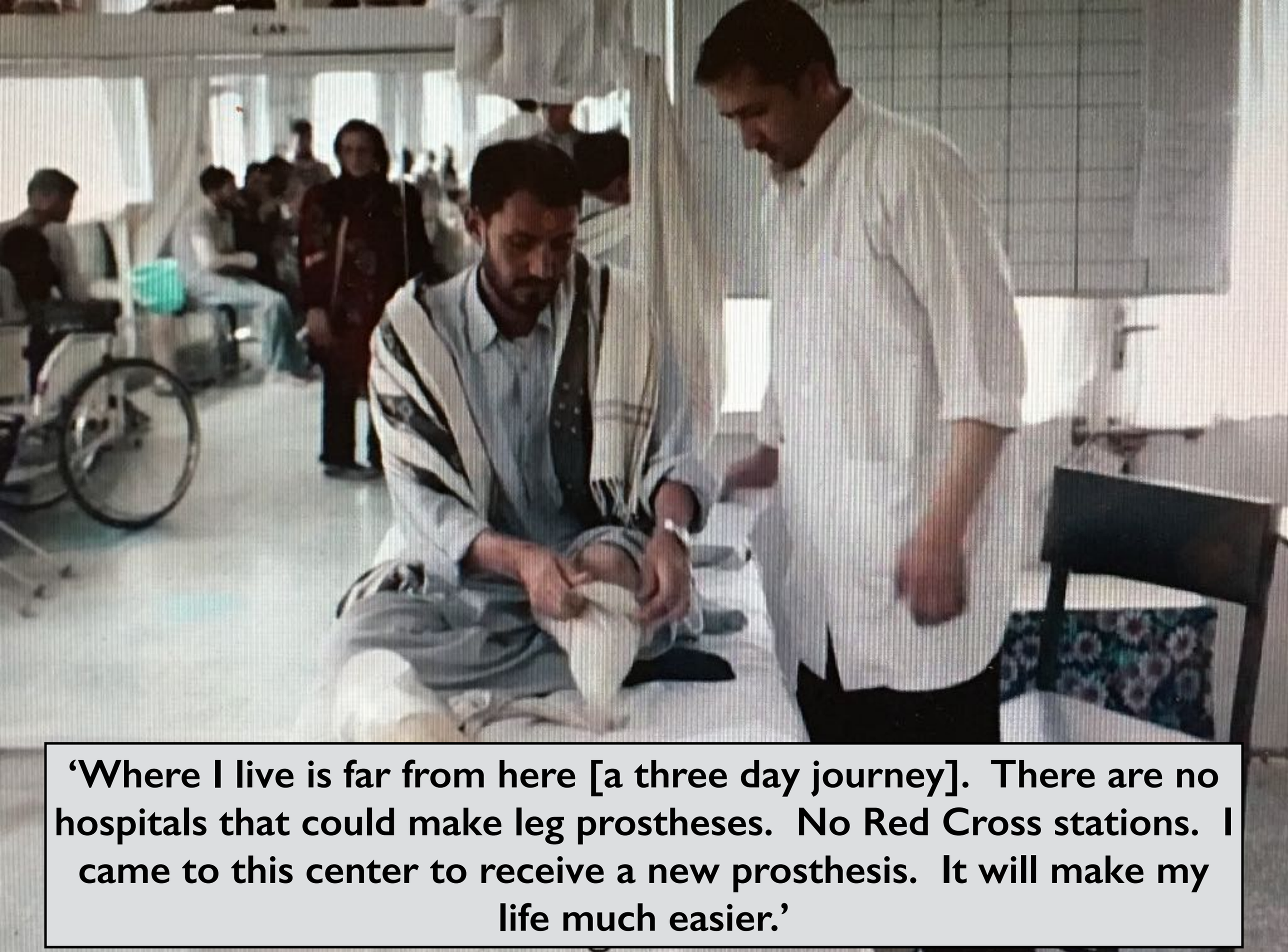
His name is Suhrab. His father, his brother Morteza (4)
and his sister Sima (7) were killed in the strike.

National Bird

Doctor: His leg was smashed so we had to amputate on the first night. I tell you **the biggest thing in this community will be managing the sequentially increasing size prosthesis, and they will need a lot of backup.** In the States or Australia it would be easy to come back to the clinic but here in Afghanistan that's not going to be that straightforward. We'll get him suited up initially, but he'll need to come back every so often as he grows…

Tarin Kowt Provincial Hospital

By 18 March *ten of the injured were still being treated, but they had* ***all been transferred to the local hospital in Tarin Kowt****, where they continued to receive follow-up care from the US Forward Surgical Team. By then Suhrab was ready to be released but* ***his family declined further military assistance and elected to 'make their own arrangements' for a prosthesis to be fitted at the Orthopaedic Centre in Kabul*** *run by the International Committee of the Red Cross.*



‘Where I live is far from here [a three day journey]. There are no hospitals that could make leg prostheses. No Red Cross stations. I came to this center to receive a new prosthesis. It will make my life much easier.’

PMS
abul
Male
outations
Files
From
5501
To
5600

PMS
Kabul
Male
Amputations
Files
From
55601
To
55700

PMS
Kabul
Male
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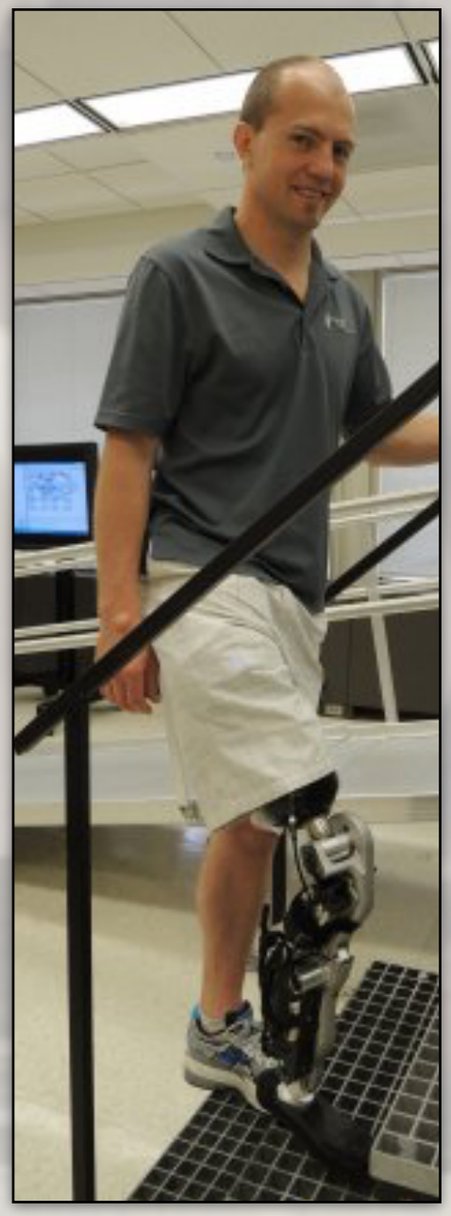
5580
To
5590



The prosthetics of military violence

Syria, 2011-2018

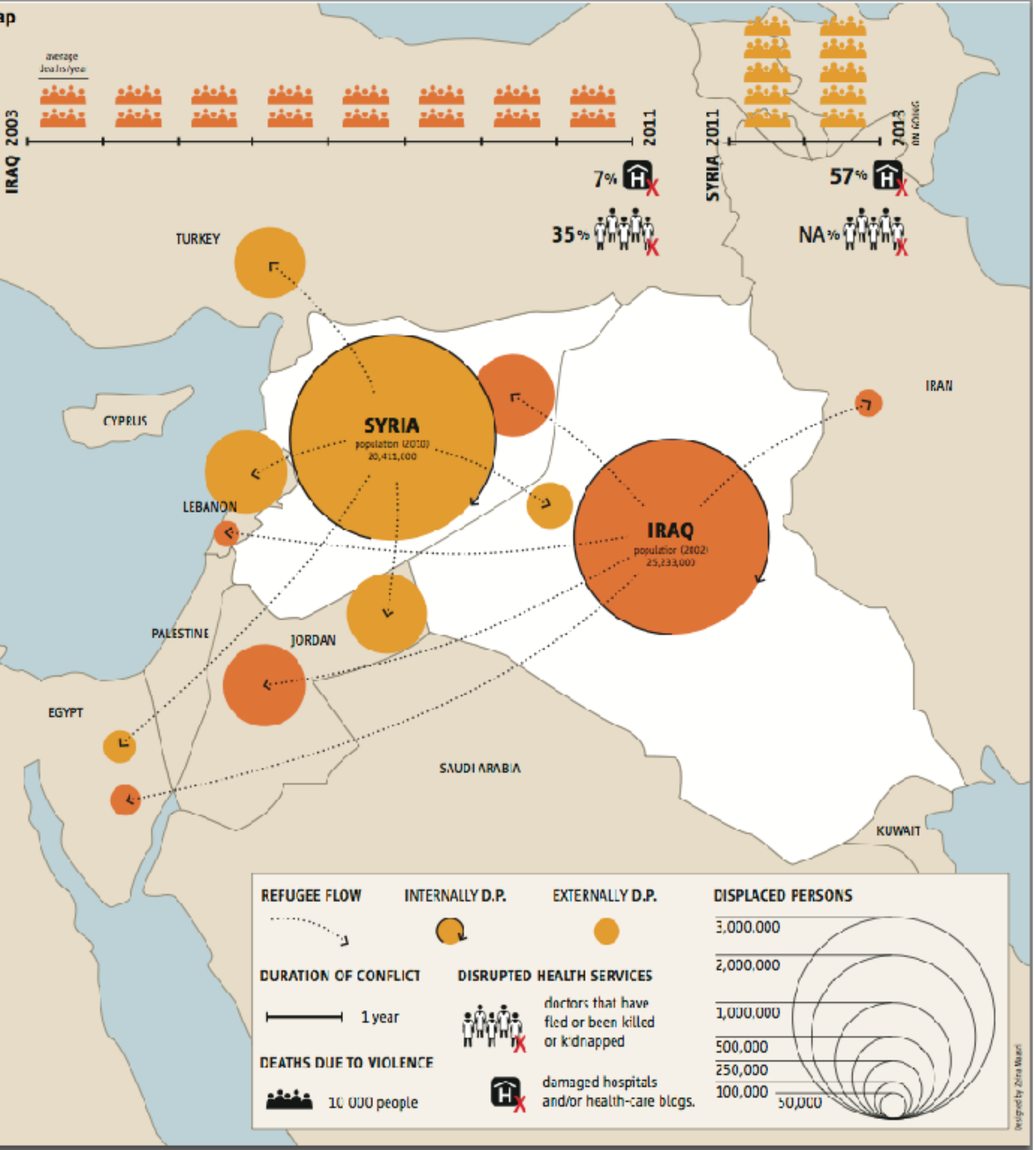
Field hospital in Douma, East Ghouta, 2015/Mohammed Badra

‘Unimaginable injuries’

‘In the beginning, **we saw new injuries that we did not know how to treat.** Fortunately, at the beginning of the revolution and when we began working in field hospitals, there was more freedom of movement. In 2012 and 2013, there was no such thing as “barrel bombs” and there was no violent shelling from airplanes, so many visiting foreign doctors came…

‘But even so, they told us that **they were seeing injuries that they had never seen before** in books or textbooks or in the hospitals where they worked in their home countries. Unfortunately, reality forces you to learn.

Dr. Rami Kalazi, neurosurgeon, East Aleppo



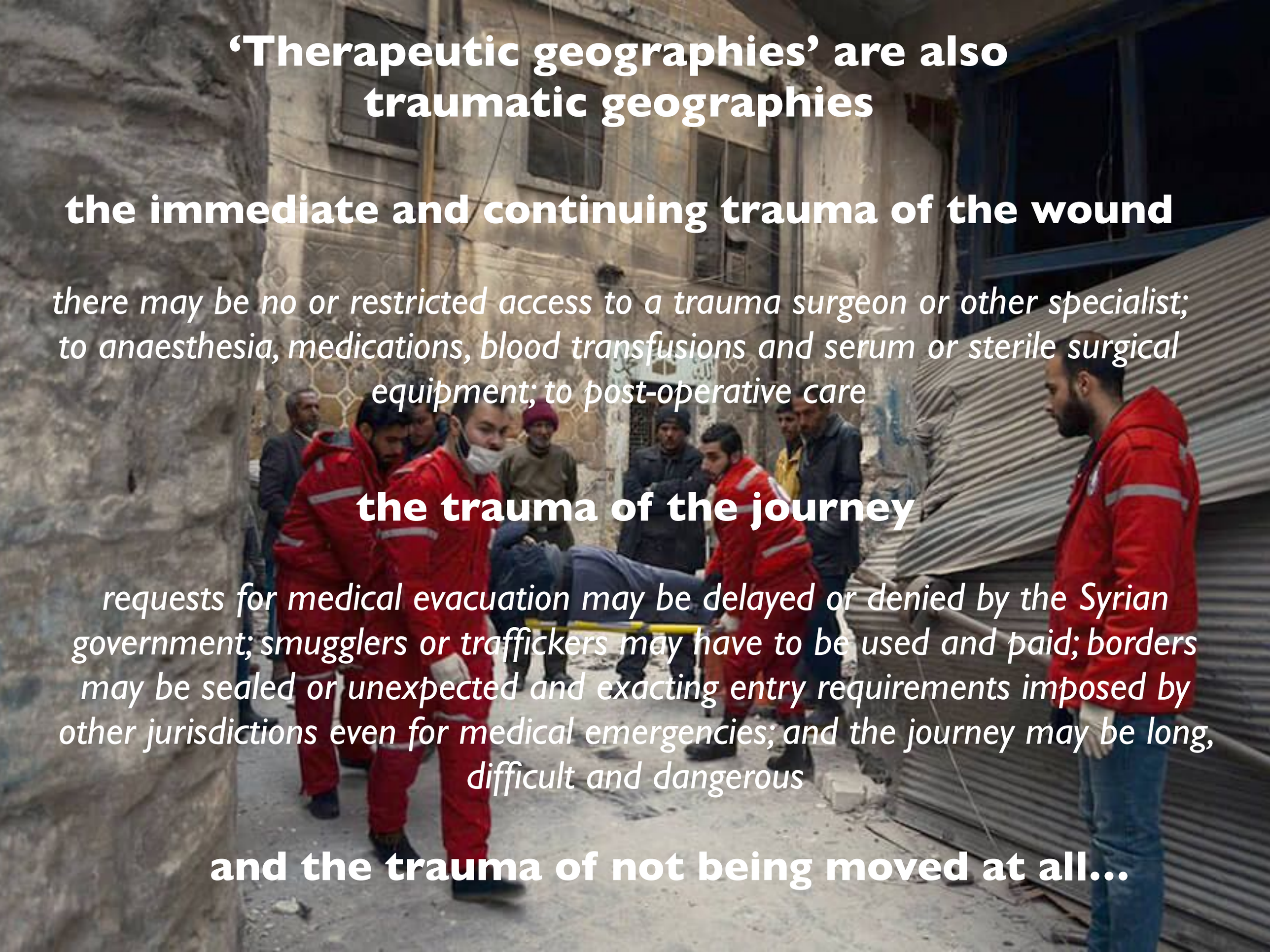
'Therapeutic geographies—the geographic reorganisation of health care within and across borders under conditions of war.'

Omar Dewachi, Mac Skelton, Vinh-Kim Nguyen, Fouad M Fouad, Ghassan Abu Sitta, Zeina Maasri, Rita Giacaman, 'Changing therapeutic geographies of the Iraqi and Syrian wars', The Lancet, 20 January 2014

They emphasise the **militarisation** of health care – as both target and vector of violence – and its **re-territorialisation**: the provision of health care in states outside the war zones.

'In addition to refugees, increasing numbers of Iraqis and now Syrians travel temporarily to Jordan and Lebanon to be treated for wounds and chronic medical disorders.'

Their focus is on those who have raised the funds for treatment or who have been subsidised by their governments.



‘Therapeutic geographies’ are also traumatic geographies

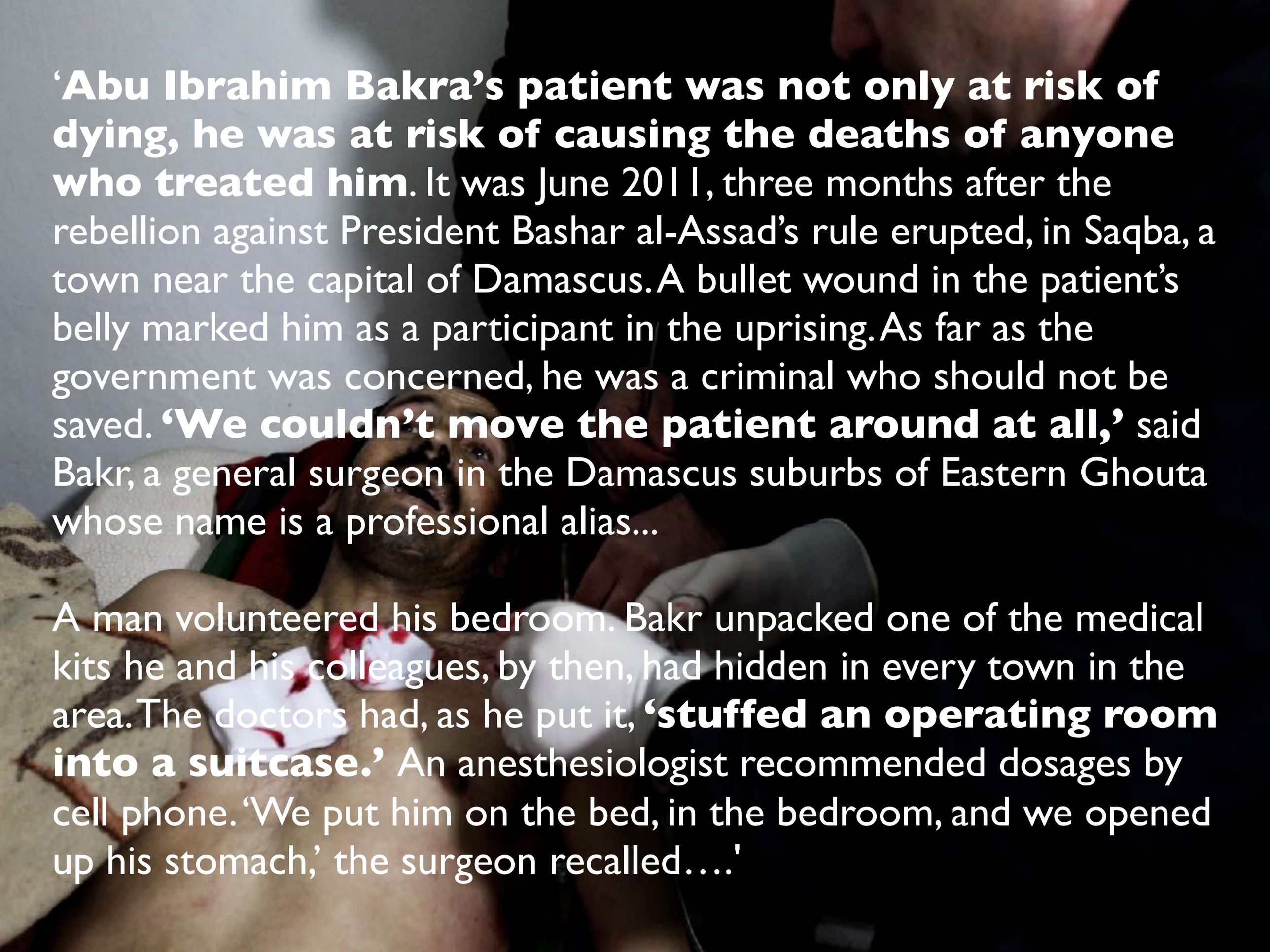
the immediate and continuing trauma of the wound

there may be no or restricted access to a trauma surgeon or other specialist; to anaesthesia, medications, blood transfusions and serum or sterile surgical equipment; to post-operative care

the trauma of the journey

requests for medical evacuation may be delayed or denied by the Syrian government; smugglers or traffickers may have to be used and paid; borders may be sealed or unexpected and exacting entry requirements imposed by other jurisdictions even for medical emergencies; and the journey may be long, difficult and dangerous

and the trauma of not being moved at all…



‘**Abu Ibrahim Bakra’s patient was not only at risk of dying, he was at risk of causing the deaths of anyone who treated him**. It was June 2011, three months after the rebellion against President Bashar al-Assad’s rule erupted, in Saqba, a town near the capital of Damascus. A bullet wound in the patient’s belly marked him as a participant in the uprising. As far as the government was concerned, he was a criminal who should not be saved. **‘We couldn’t move the patient around at all,’** said Bakr, a general surgeon in the Damascus suburbs of Eastern Ghouta whose name is a professional alias...

A man volunteered his bedroom. Bakr unpacked one of the medical kits he and his colleagues, by then, had hidden in every town in the area. The doctors had, as he put it, **‘stuffed an operating room into a suitcase.’** An anesthesiologist recommended dosages by cell phone. ‘We put him on the bed, in the bedroom, and we opened up his stomach,’ the surgeon recalled….'

Homs, Karm Al-Zaytoun; January 2012: Man wounded by a loyalist sniper is evacuated in a truck to a field clinic; he did not survive his injuries (Mani).

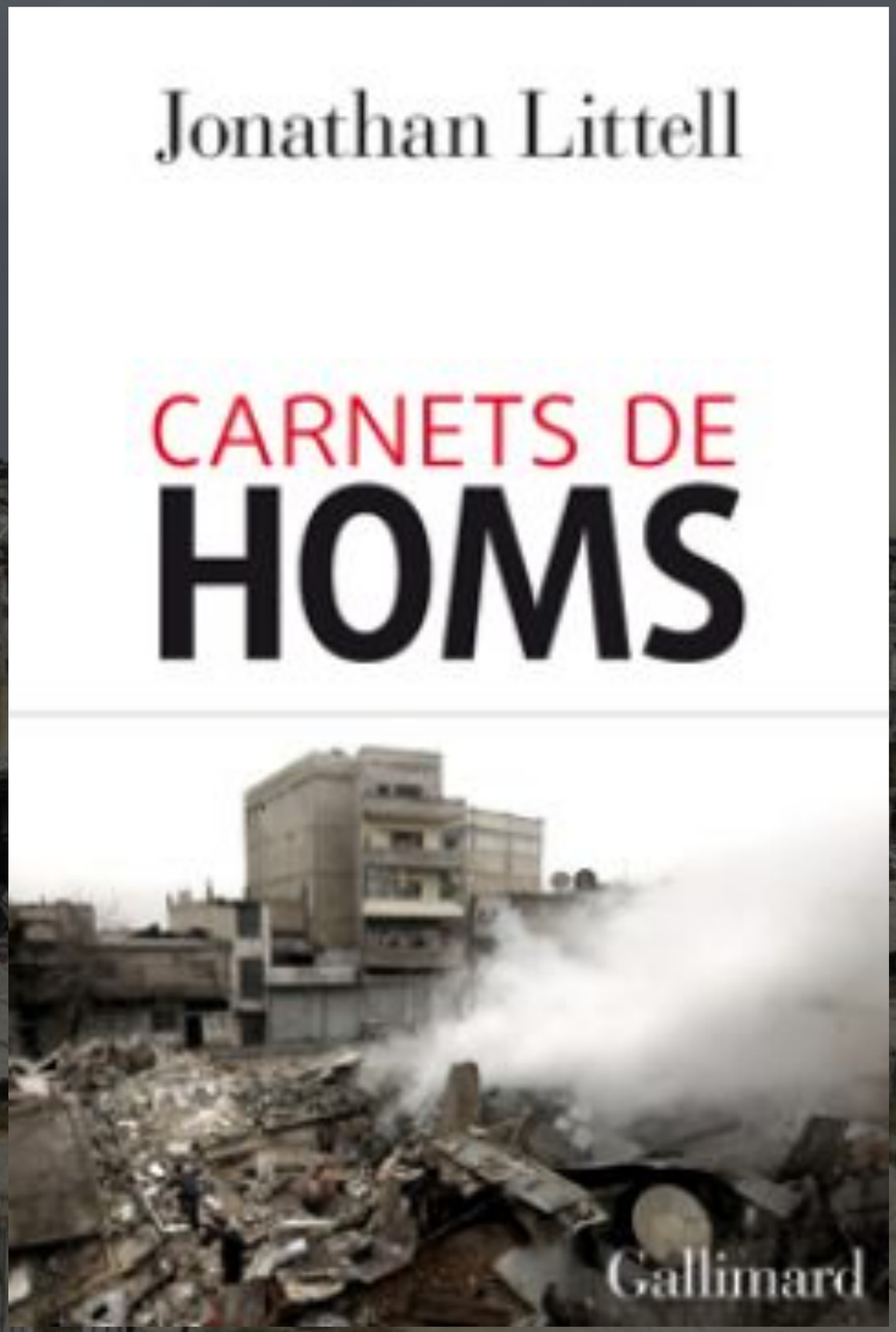
Improvised ('field') hospitals

'Working in a field hospital is like death.'

General practitioner quoted in 'Syrian medical voices from the ground'

‘**Abu Nizur is a general practitioner, but he has learned a little surgery on the job**. “See one, do one.” He can do operations of the abdomen, basic things. The *mukhabarat* are looking for him, but haven’t bothered his family. He is not paid, but the people and his family help him. He is often so overworked that he doesn’t even ask the names of his patients, and keeps no records. **Some days he treats up to twenty patients, and he is alone.** The Army often aims at the head or chest, and some wounded die from lack of care: “Sometimes we see the patient die in front of us, and we can’t do anything.” He can’t do the necessary surgery, or evacuate them to Lebanon. **The border is very hard to cross. Sometimes you have to wait an hour or two, sometimes it’s closed. Some patients die on the border itself, others are brought back to the [medical] tent and die there. What’s more it takes four hours from the tent to Tripoli, which is often too long.’**

18 January 2012



The geopolitics of trauma

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A geopolitics of trauma: Refugee administration and protracted uncertainty in Turkey

Jenna M. Loyd, Patricia Ehrkamp ✉, Anna J. Secor

'...we suggest that refugee migrations, rather than being a linear trajectory from unsafe to safe spaces, are embodied, nonlinear and spatially folded.'

The geopolitics of trauma: Lebanon

Volunteers from the Lebanese Red Cross Society carry a war wounded Syrian from the border community of Wadi Khaled to a hospital in Tripoli, 21 October 2013

Clandestine casualty evacuation

‘The elderly Lebanese doctor gets a text message: "Your bag of eggplants is ready."

He jumps in his jeep and races into the foothills on the Syrian border, searching for the wounded protester he knows is waiting for his help. "Sometimes I get a call to treat a stomach ache, but find a Syrian smuggled in with a bullet in his side. I see at least one of them a day now," says Dr. Mahmoud…

‘Almost daily, Mahmoud sloshes through the muddied roads in his impoverished border town toward a safe house hidden among the crumbling cement homes that wind along the mountains. **This time, the doctor finds Ahmed, shot in the leg.** Ahmed dragged himself over snow-frosted foothills and down into Lebanon’s Bekaa Valley. He hid in the underbrush as Syrian forces searched for him. **It took all night to make the 7-km (4.3 mile) journey from his nearby Syrian village, Qusair.’**

‘Syria's wounded make dangerous trek to refuge in Lebanon’
Reuters, 14 December 2011

Blocking escape routes

From November 2011 Syrian troops laid anti-personnel mines along the border with Lebanon

In 2012 the Syrian Arab Air Force started bombing bridges and mountain roads used by those trying to escape into Lebanon.

In March 2012 the Syrian Arab Air Force bombed the al-Adra bridge near Qusayr 3km from the border, which was used by refugees and the wounded fleeing to Lebanon.

In June 2013 the International Committee of the Red Cross negotiated a short-lived agreement to evacuate wounded civilians from Qusayr which had been recaptured by the Syrian Arab Army and Hezbollah. The ICRC hoped to evacuate 800 casualties, and in the first week 130 were transferred to hospitals in Lebanon.

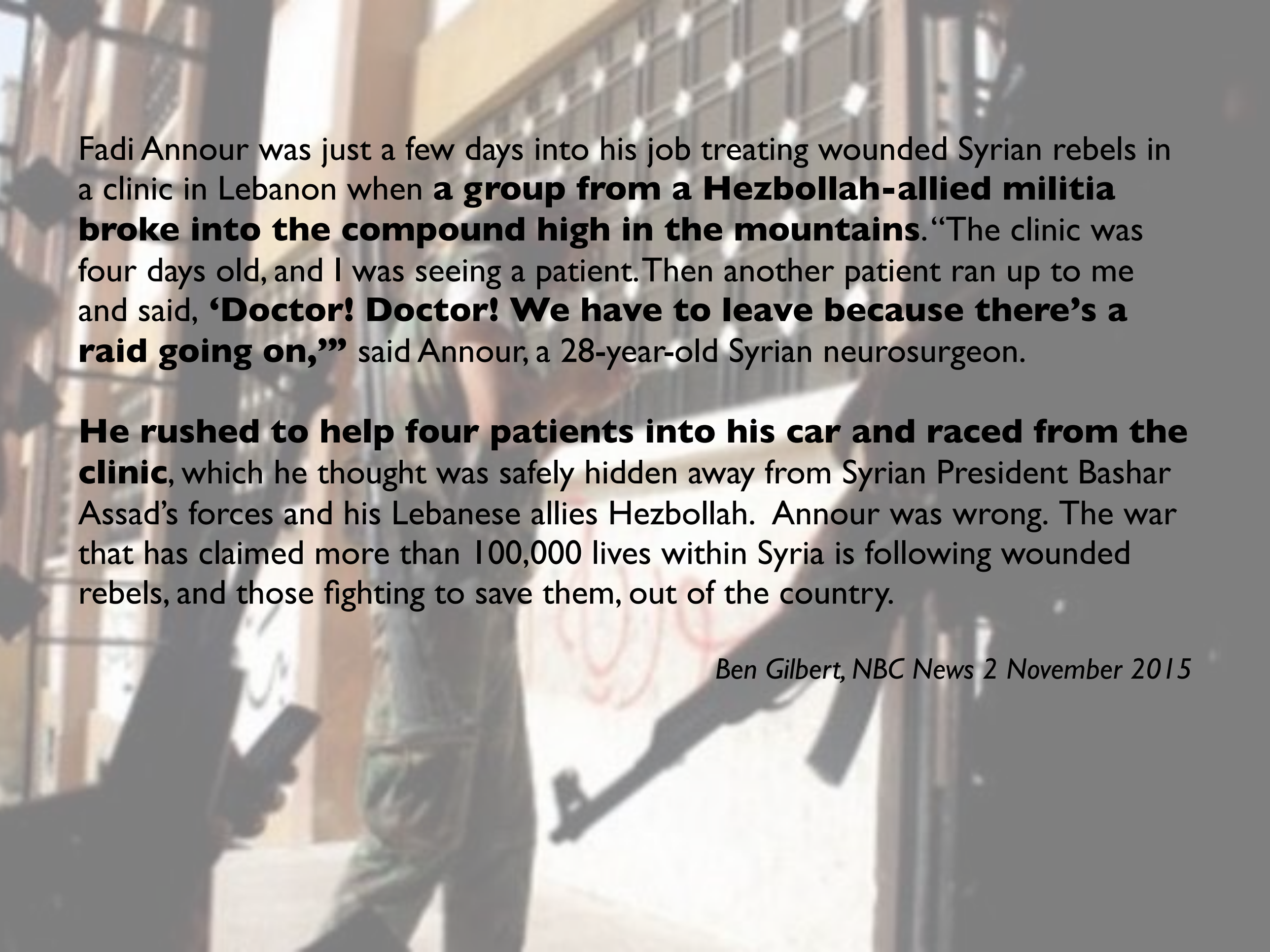
‘Injured from al-Qusayr battle struggle to get medical care’, IRIN 13 June 2013

"They can't transfer them to [any] Lebanese city. The Syrian rebels are afraid of reprisals against them inside Lebanon, so they are directed to cities which support the [Syrian] opposition.”

35 casualties were transferred to al-Minieh, a small town north of Tripoli, where an abandoned hospital was reopened by the Syrian Relief Committee linked to the Free Syrian Army (FSA). ‘Some say they were injured while trying to get bread, but all the patients were men of fighting age.’

Bekaa Valley
Lebanon

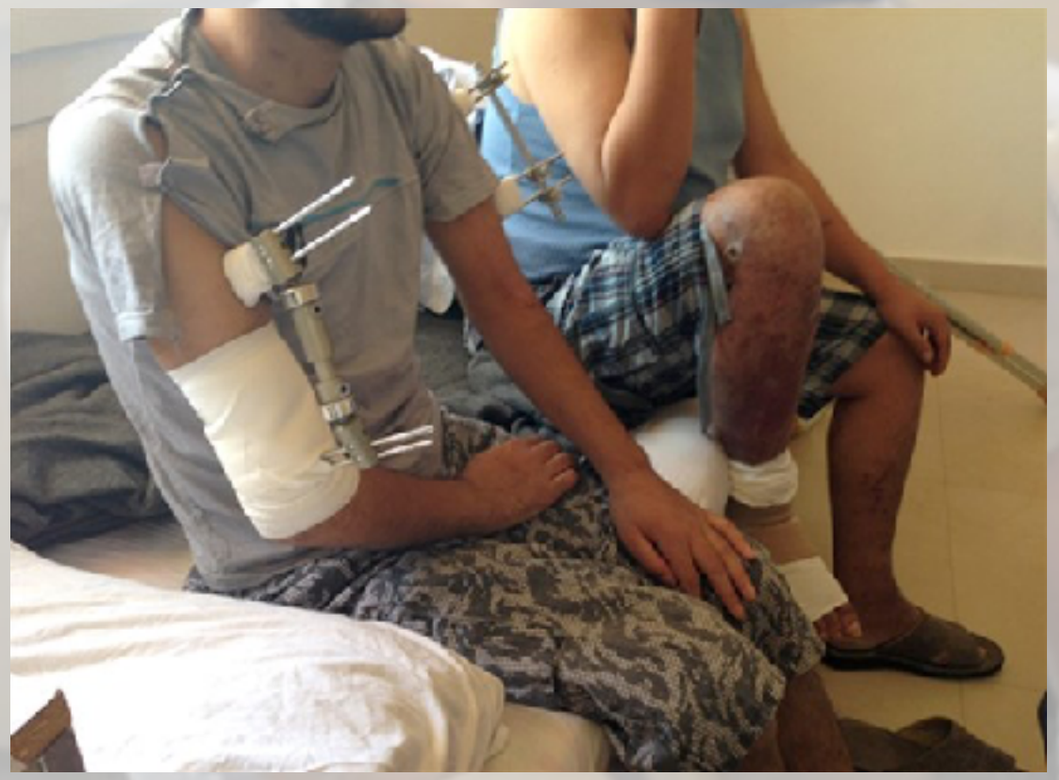
Raed Rafel, 'Hidden Clinic: Where Wounded Syrian Rebels Recover' October 2013)



Fadi Annour was just a few days into his job treating wounded Syrian rebels in a clinic in Lebanon when **a group from a Hezbollah-allied militia broke into the compound high in the mountains**. "The clinic was four days old, and I was seeing a patient. Then another patient ran up to me and said, **'Doctor! Doctor! We have to leave because there's a raid going on,'"** said Annour, a 28-year-old Syrian neurosurgeon.

He rushed to help four patients into his car and raced from the clinic, which he thought was safely hidden away from Syrian President Bashar Assad's forces and his Lebanese allies Hezbollah. Annour was wrong. The war that has claimed more than 100,000 lives within Syria is following wounded rebels, and those fighting to save them, out of the country.

Ben Gilbert, NBC News 2 November 2015



‘The location of Annour’s new clinic, set up by the opposition’s Syrian National Coalition to treat opposition fighters, is a stark example of just how enmeshed Syria is with its tiny neighbor Lebanon. The field hospital sits in a pro-Syrian opposition town a few miles from the Syria-Lebanon border, and right in the middle of the Hezbollah-controlled Bekaa Valley.

The clinic’s new location is not entirely safe, according to Annour, the neurosurgeon. **Two months ago, armed men attacked an ambulance transporting a patient to surgery and kidnapped him,** he said….

Since then, the Lebanese Red Cross has refused to transport the clinic’s patients in ambulances through certain Hezbollah-dominated areas without an army escort. And private cars carrying patients through those areas have been shot at…

For the most part, though, Hezbollah and their Syrian opposition enemies coexist inside Lebanon. “It’s a strange situation,” Nizar said. “But Hezbollah doesn’t want to bring the fight to Lebanon. They’ve said that if you want to fight us, come to Syria.”

‘It’s a familiar story to Dr. Kassem al-Zein, a Syrian national who runs a field clinic in Arsal and said several of his patients had been beaten at an informal checkpoint in the Labweh area before reaching the hospital.’

‘While patients with manifest injuries are mostly allowed to pass without much hassle, Zein said, those who appeared only lightly wounded or had internal injuries were often harassed at the checkpoint. “All the patients who can move can be subject to a severe beating ... at the Labweh checkpoint.”’

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“‘Several of the patients said that some of the armed people shouted at them, and others said they were beaten. **They [the gunmen] say, ‘Where is the injury? I want to see the injury.’”**

As soon as possible most of the wounded are moved out of the largely Shi'a Bekaa Valley – a stronghold of Hezbollah which is actively supporting the Assad regime – and transferred by the Red Cross to Tripoli, a Sunni-dominated city supportive of the uprising.

Image: Didier Revol/ICRC/21 October 2013

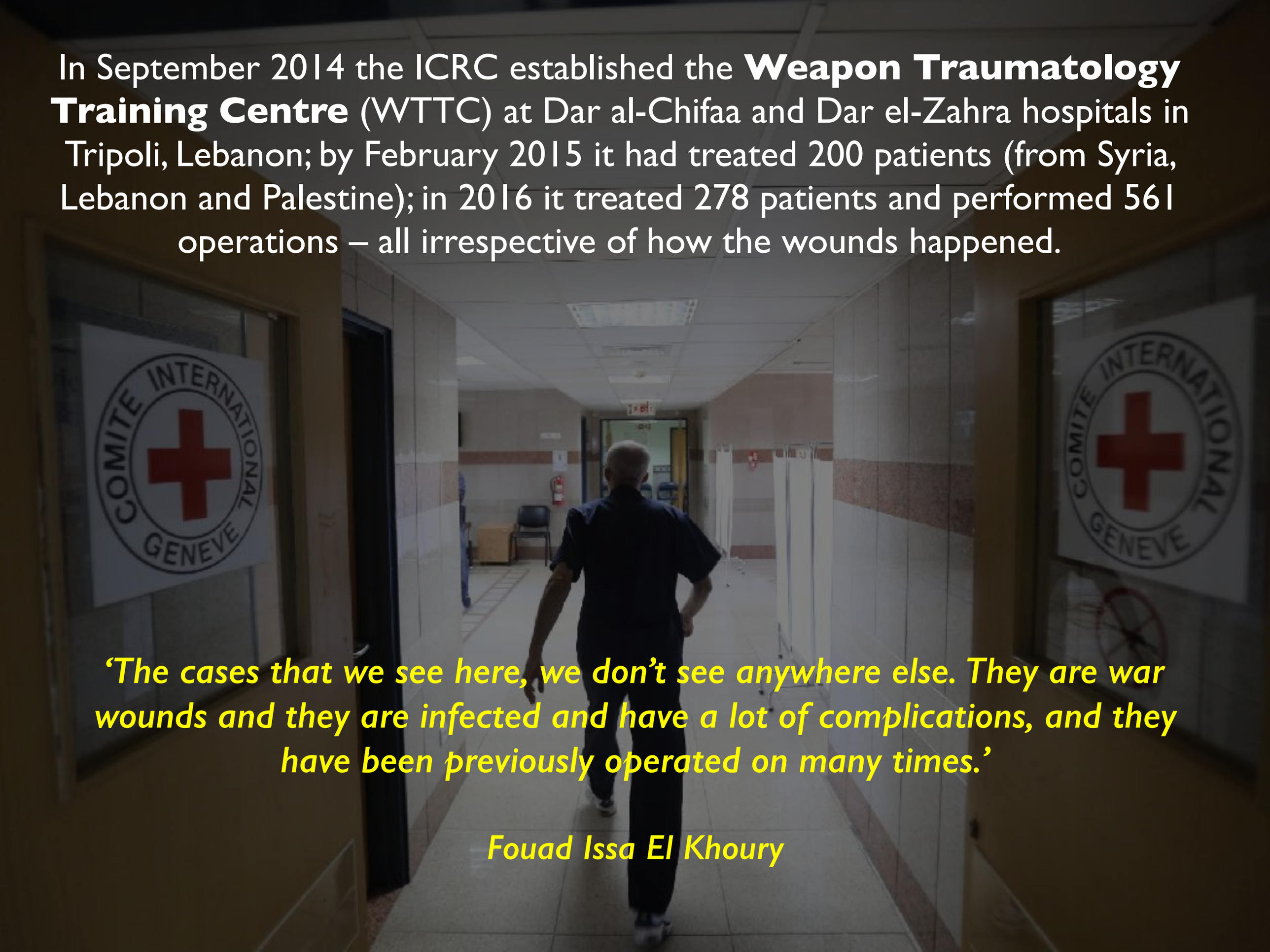
But secondary health-care in Lebanon is largely privatised and expensive, and there were reports of some hospitals ejecting Syrian patients who had not paid their bills, removing their splints and confiscating their records and X-rays.

In the early days of the uprising 'Lebanon's public hospitals treat[ed] wounded Syrians, but [would] only let them stay there for four days.'

"'For a serious injury, it's not enough. We need help treating these people for months," said Mazen, a pale and scrawny 24-year-old who graduated in Homs last spring. He spent his first months as a doctor treating gunshot wounds. Mazen brings Reuters to an abandoned hospital wing in Tripoli where he has set up a clinic, with the help of secret donors, to treat those who will need months to heal. Their families can't be told where they are.'

Erika Solomon, 'Syria's wounded make perilous trek for medical care',
Reuters 13 December 2011

In September 2014 the ICRC established the **Weapon Traumatology Training Centre** (WTTC) at Dar al-Chifaa and Dar el-Zahra hospitals in Tripoli, Lebanon; by February 2015 it had treated 200 patients (from Syria, Lebanon and Palestine); in 2016 it treated 278 patients and performed 561 operations – all irrespective of how the wounds happened.



'The cases that we see here, we don't see anywhere else. They are war wounds and they are infected and have a lot of complications, and they have been previously operated on many times.'

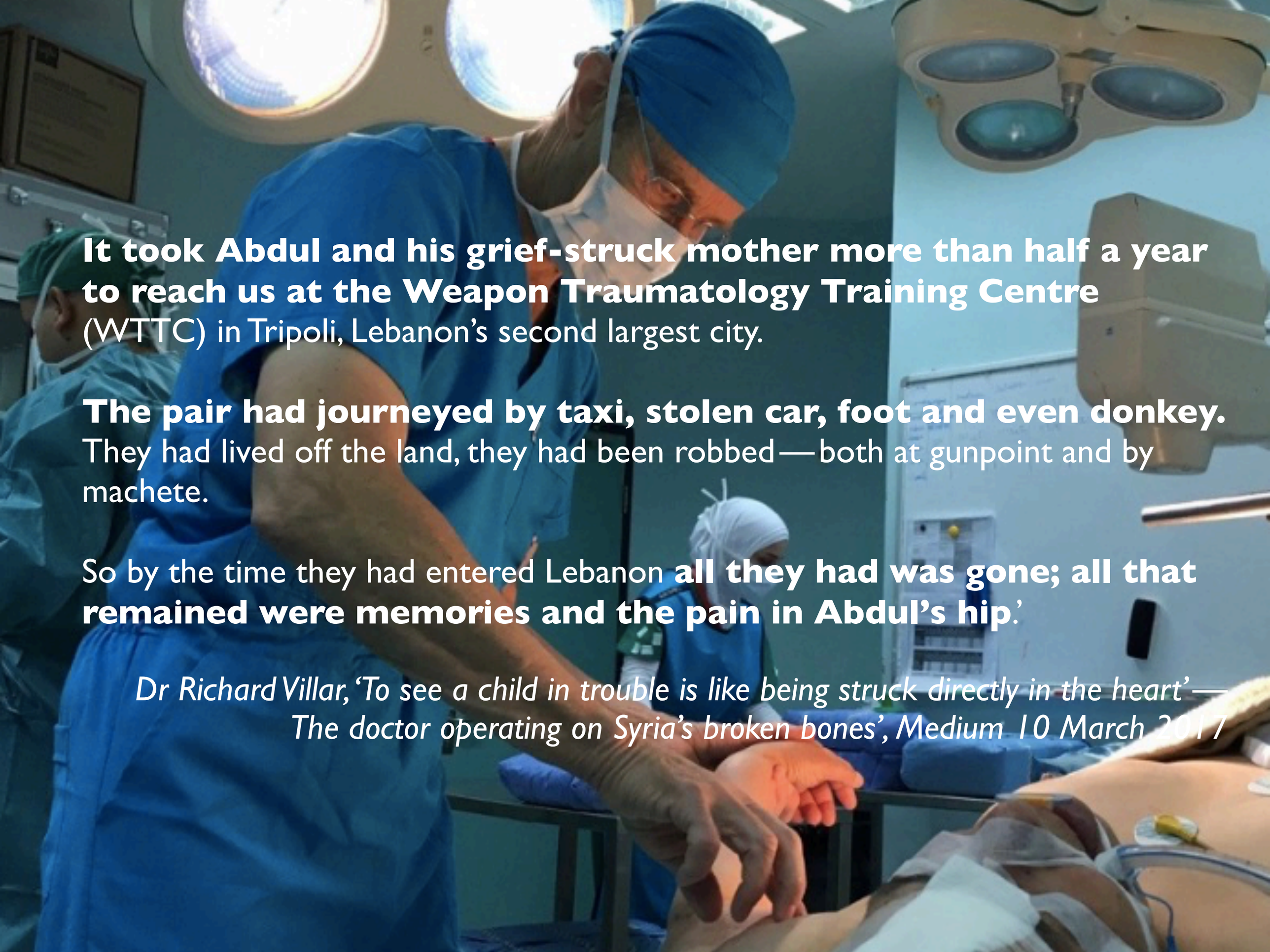
Fouad Issa El Khoury

‘The [mortar] shell killed his father, brother, two sisters, and completely destroyed his house. . . .

Abdul had been fortunate to escape with his life. **A single piece of shrapnel, no more than two centimetres square, had entered his left side. It passed through his intestine, perforating it seven times, and lodged in his right hip.**
The joint had been shattered into a thousand pieces—at least it looked like a thousand on the half-torn and faded X-ray that he offered me in explanation.

As an orthopaedic surgeon, my area of expertise is bones, not bellies. Abdul’s belly had been looked at **in a field hospital in Syria, a hospital where two young Syrian doctors, neither much older than their patient and neither a fully-trained surgeon, had done their best to patch-up Abdul’s gut.**

Abdul had been their 40th patient that day. Forty individuals on the sorry conveyor belt of misery that forms the staple diet of a field hospital. I say hospital, but it could be located in a tent, or a cellar, maybe the back of a burned-out bus.



It took Abdul and his grief-struck mother more than half a year to reach us at the Weapon Traumatology Training Centre (WTTC) in Tripoli, Lebanon's second largest city.

The pair had journeyed by taxi, stolen car, foot and even donkey. They had lived off the land, they had been robbed—both at gunpoint and by machete.

So by the time they had entered Lebanon **all they had was gone; all that remained were memories and the pain in Abdul's hip**.'

Dr Richard Villar, 'To see a child in trouble is like being struck directly in the heart'—The doctor operating on Syria's broken bones', Medium 10 March 2017

'Many amputations take place in a field hospital or makeshift clinic. **"These are emergency amputations, so it's not an orthopedic surgeon, it's a general surgeon or a dentist who is performing this**," [Henri] Bonnin [of Handicap International] said. "It's done in a severe emergency to save a patient's life." Under such conditions, **many doctors cut the bone straight across, not at an angle as they should to create a better stump. ... If the stump is flat instead of cylindrical, patients need a second or third surgery** – a painful procedure – to correct the problem and allow for a prosthesis.'

'Ahmed', Bab al-Hawa, February 2013/George Butler

‘**We’re dealing with patients who have already gone through several surgeries, and many of them were not conducted properly,’** explained Paul Ley, an orthopaedic surgeon with the ICRC based at the centre in Tripoli. ‘Doctors [in the warzones] tend to use plates and fixations to deal with weapon wounds and are not trained in war surgery, so it ends up causing a lot of long-term issues.’

He cited the recent case of a Syrian man who had been injured in clashes, and during the course of treatment, a metal rod was inserted into his thigh, running the length of his leg. **‘The rod itself was encased in cement. It really looked as if it was done in the back of a garage,’** Ley said. Suffering from extreme pain, the young man fled to Lebanon and sought medical assistance. **‘We had to amputate the whole leg as a result.’**

Nour Samha, ‘Syria's wounded seek rehabilitation in Lebanon’
al-Jazeera 2 September 2015

The geopolitics of trauma: Turkey

A man injured by barrel bombs in Aleppo is helped into a Turkish ambulance on call at Bab al-Salama hospital in Syria near the border.

Much of the funding for the construction of **Al-Amal ['Hope'] Hospital (Reyhanli)** in 2013 came from Qatar, and in March 2014 the Ministry of Health in the Syrian interim government allocated 100,000 USD to support the hospital.

The hospital has 30 beds, 10 intensive care rooms, 11 consulting rooms, three operation theatres, two X-ray rooms, one laboratory, an emergency room and a number of specialist clinics.

Maya Hautefeuille, 'Healing on the Syria-Turkey border', Al Jazeera 2 January 2016

'Urgent cases are granted entry across the border into Turkey. In a series of transfers at designated points along the border, Syrian and Turkish medical teams coordinate ambulances to shuttle the wounded to Turkish state hospitals.

'From there, Syrians who require longer-term treatment are turned over to postoperative recovery centers in Turkish border towns, including Reyhanli, Sanliurfa and Kilis. Known as "houses of healing", they are operated by Syrians with support from international NGOs.'

‘Every month, dozens of Syrian amputees - both fighters and civilians alike - can be fitted with upper and lower limbs in this clinic in Reyhanli. The limbs are manufactured locally in Turkey, and although they cost hundreds of dollars, the clinic provides them free of charge to the amputees.’

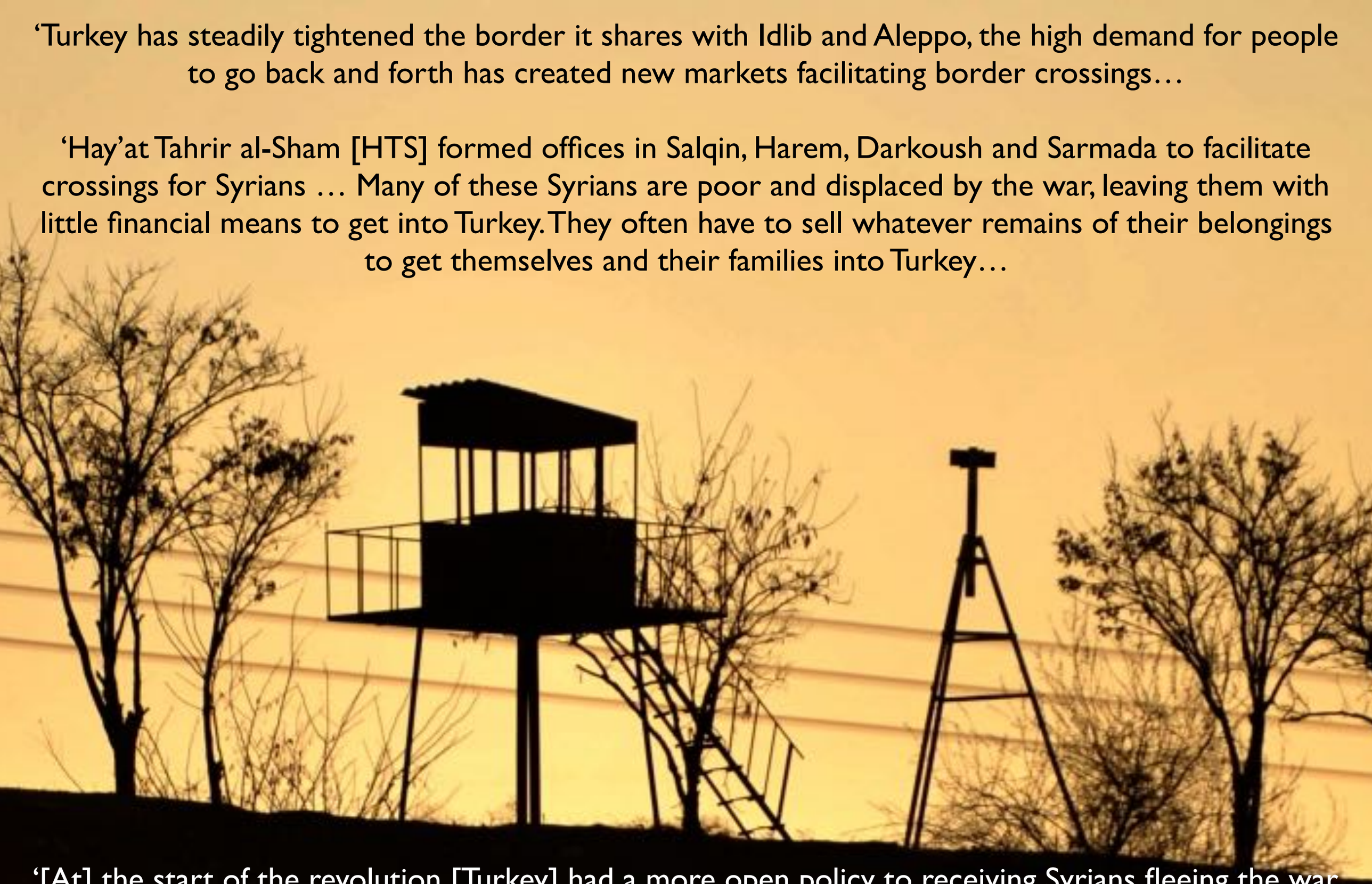
Maya Hautefeuille, ‘Healing on the Syria-Turkey border’, Al Jazeera 2 January 2016

Precarious journeys

In December 2016 a new ‘humanitarian pause’ agreed with Russia and the Syrian government allowed more than 100 ambulances to be deployed by the Red Cross and the Red Crescent from Turkey; 200 critical patients were ferried from eastern Aleppo to hospitals in rural Aleppo, Idlib or Turkey – but the mission was abruptly terminated 24 hours after it had started.

‘Turkey has steadily tightened the border it shares with Idlib and Aleppo, the high demand for people to go back and forth has created new markets facilitating border crossings…

‘Hay’at Tahrir al-Sham [HTS] formed offices in Salqin, Harem, Darkoush and Sarmada to facilitate crossings for Syrians … Many of these Syrians are poor and displaced by the war, leaving them with little financial means to get into Turkey. They often have to sell whatever remains of their belongings to get themselves and their families into Turkey…



‘[At] the start of the revolution [Turkey] had a more open policy to receiving Syrians fleeing the war, but over the past two years that had been turned on its head. As the border has gotten tighter, money has played more of a role in getting people across the border [by paying HTS fixers, bribing border guards &c]’

In June 2016 Turkey completed the construction of a wall across its border with Syria – it also increased its involvement in the war and intensified its campaign against Kurdish rebels

The physical layer includes modular concrete walls topped with razor wire, manned and unmanned towers and patrol tracks. An electronic layer includes close-up surveillance systems, thermal cameras, land surveillance radar, remote-controlled weapons systems, and seismic and acoustic sensors.

The geopolitics of trauma: Jordan

‘An exception to Jordan’s closed borders are Syrians with war-related injuries…. Since 2012, the Jordanian authorities have allowed war-wounded Syrians to access life-saving treatment through the north-western Tel Shihab informal border crossing to hospitals in Jordan…

Once brought to the Syria-Jordan border, the war-wounded are initially screened by the Jordanian Border Guard Force and the Royal Medical Service who determine whether they require emergency life-saving treatment, and that they are not a security threat… The injured person **must also have ID** which is a pre-requisite for entering Jordan regardless of the conditions faced by the person fleeing Syria.’

- ‘In March 2015, a man aged 27 with an open fracture due to a blast injury was initially denied entry because he lacked ID; he was eventually allowed in eight hours later after his parents managed to get his passport.’

- ‘In July 2015 at least 14 severely injured individuals, including five children, were brought to the border after aerial attacks [suffering from] complex facial or multiple shrapnel injuries. None of them were allowed to enter. Four of those wounded reportedly died while waiting at the border, one of them was a girl aged three.’

- ‘In August 2015 a two-and-a-half-year-old girl who had suffered head injuries due to a barrel bomb attack four days previously was denied entry because her condition was not considered critical by the Jordanian authorities.’

LIVING ON THE MARGINS

SYRIAN REFUGEES IN JORDAN STRUGGLE TO ACCESS HEALTH CARE

AMNESTY INTERNATIONAL

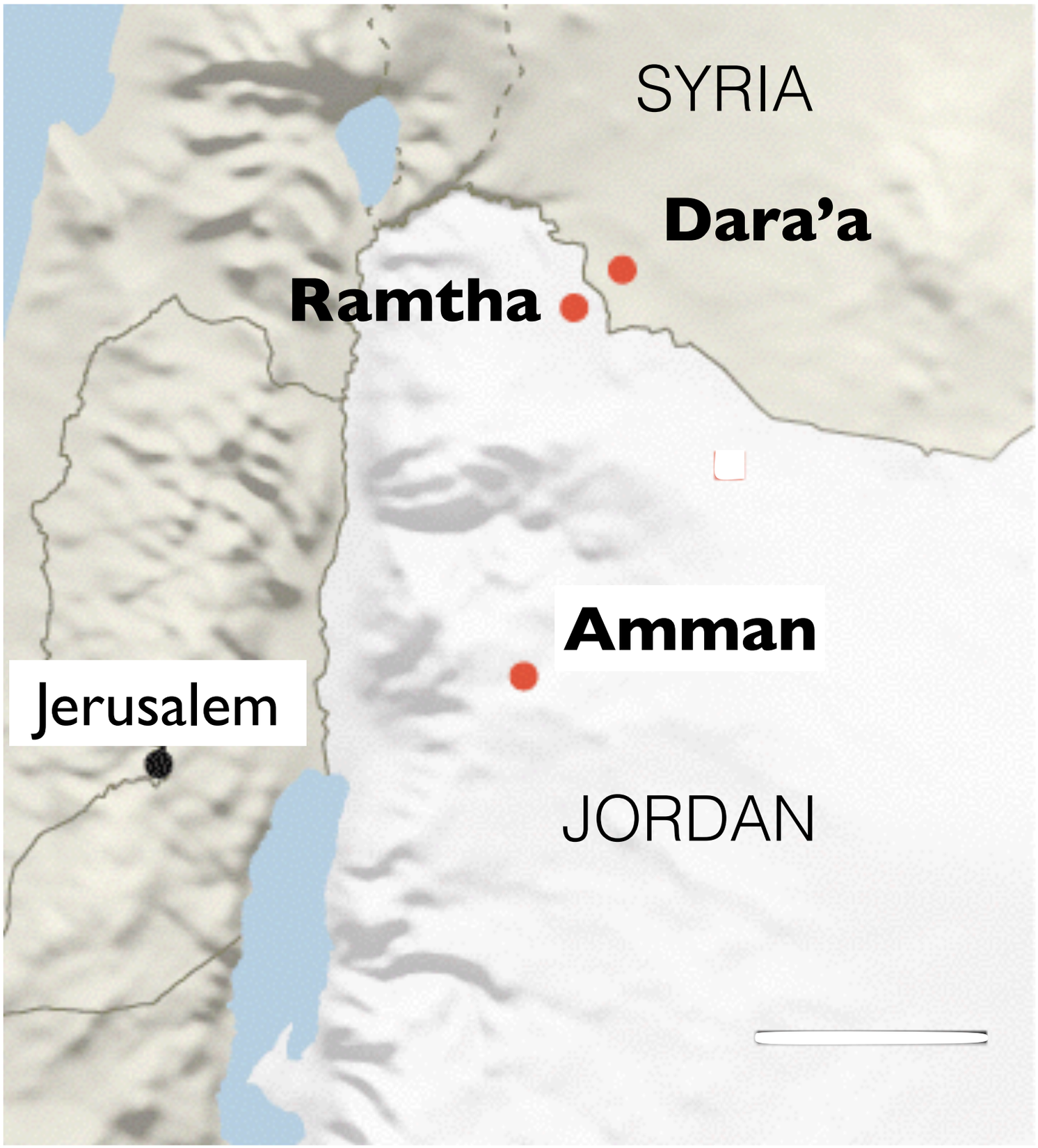
Denis Bosnic

Many of the wounded permitted to cross the border were taken to Ramtha Hospital, supported by MSF since 2013:

"Almost 75 per cent of patients received in Ramtha had sustained blast injuries with complex polytrauma," says Shoaib Muhammed, MSF's Medical Coordinator in Jordan. "One of our biggest challenges was the limited number of Intensive care unit (ICU) beds available in Ramtha. As the dynamics of the conflict changed, we also started seeing more head, spinal and neuro-injuries in need of specialised care that could not be offered in southern Syria," he said.

The patients' wounds made the short journey across the border from Syria potentially life-threatening.

In 2006 MSF established a **Reconstructive Surgery Programme** in Amman to treat war-wounded Iraqis, but it was soon admitting additional patients from Gaza, Libya, Syria and Yemen. **In 2015, the RSP moved into an independent eight-floor hospital in Amman.** It specialises in treating war wounds inflicted by bomb blasts, bullet wounds and burns; the surgical team includes four orthopedic surgeons, one maxillofacial surgeon and one plastic surgeon (all from the region) who in the first 10 years performed more than 11,000 surgeries on over 4,500 patients. On average five to six operations are performed everyday at the RSP.



'**Mohammad Smarat** sat gazing at the few plants sprouting outside the entrance of the white stone hospital here, recalling how he had collapsed in a sea of green fields after getting shot.

He had been helping farmers pick tomatoes near his home in **Dara'a**, Syria, when a stray bullet shattered his left hip joint.

Mr. Smarat arrived at the Jordanian border after doctors at a field hospital in his hometown said he needed surgery that they could not perform. He was taken by car to the border, where a Jordanian ambulance transported him to the hospital in **Ramtha**. There, a metal rod was inserted in his side where his hip bone was shattered, as a temporary measure, before he was moved to the hospital in **Amman.**

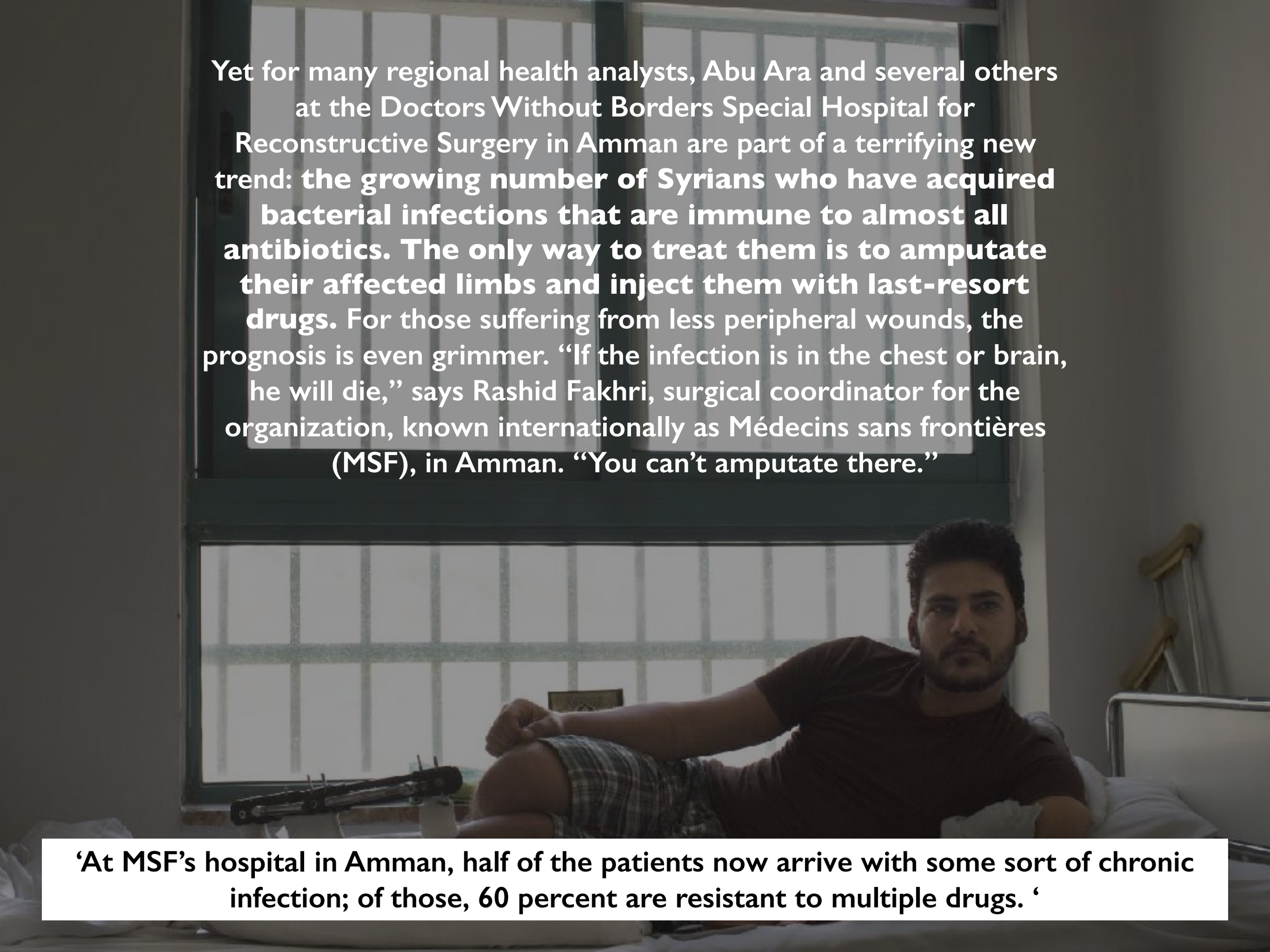
‘The hospital here is clean and shiny, a far cry from the crowded and grimy facility in Ramtha, and Mr. Smarat spent a month and a half here in relative comfort before returning to Syria on Sept. 14…

‘Elsewhere in the hospital, four young Syrian men lay in their beds with shrapnel wounds in their legs and arms caused by barrel bombs, doctors said. Most of the recent arrivals at the hospital had injuries caused by bombs.’

Rana Sweis, ‘Hospitals Devastated in Syria, War-Wounded Seek Treatment in Jordan’, New York Times 26 September 2015

‘Mohammed Abu Ara is the face of a grave new threat, but propped up on his bed in an airy segregated hospital ward in Jordan, there’s not a hint of menace about him. With his left arm cut off above the elbow and one of his legs encased in a metal splint, he looks like thousands of others whose lives have been shredded by the violence of the Syrian civil war.’

Yet for many regional health analysts, Abu Ara and several others at the Doctors Without Borders Special Hospital for Reconstructive Surgery in Amman are part of a terrifying new trend: **the growing number of Syrians who have acquired bacterial infections that are immune to almost all antibiotics. The only way to treat them is to amputate their affected limbs and inject them with last-resort drugs.** For those suffering from less peripheral wounds, the prognosis is even grimmer. “If the infection is in the chest or brain, he will die,” says Rashid Fakhri, surgical coordinator for the organization, known internationally as Médecins sans frontières (MSF), in Amman. “You can’t amputate there.”



‘At MSF’s hospital in Amman, half of the patients now arrive with some sort of chronic infection; of those, 60 percent are resistant to multiple drugs. ‘

The issue of antimicrobial resistance (AMR) predates the war – bound up with the overprescription and under-regulation of antibiotics and a lack of specialists in microbiology and infectious diseases – but multi-authored scientific studies have confirmed that the war has seriously aggravated the crisis through the nature of the weapons deployed, driving contaminants deep into the body, a shortage of specialist trauma surgeons, and the insanitary conditions of field hospitals in rebel-occupied areas and the recycling of inadequately sterilised materials and medical implements.

International Journal of Infectious Diseases 73 (2018) 1–6

Contents lists available at ScienceDirect

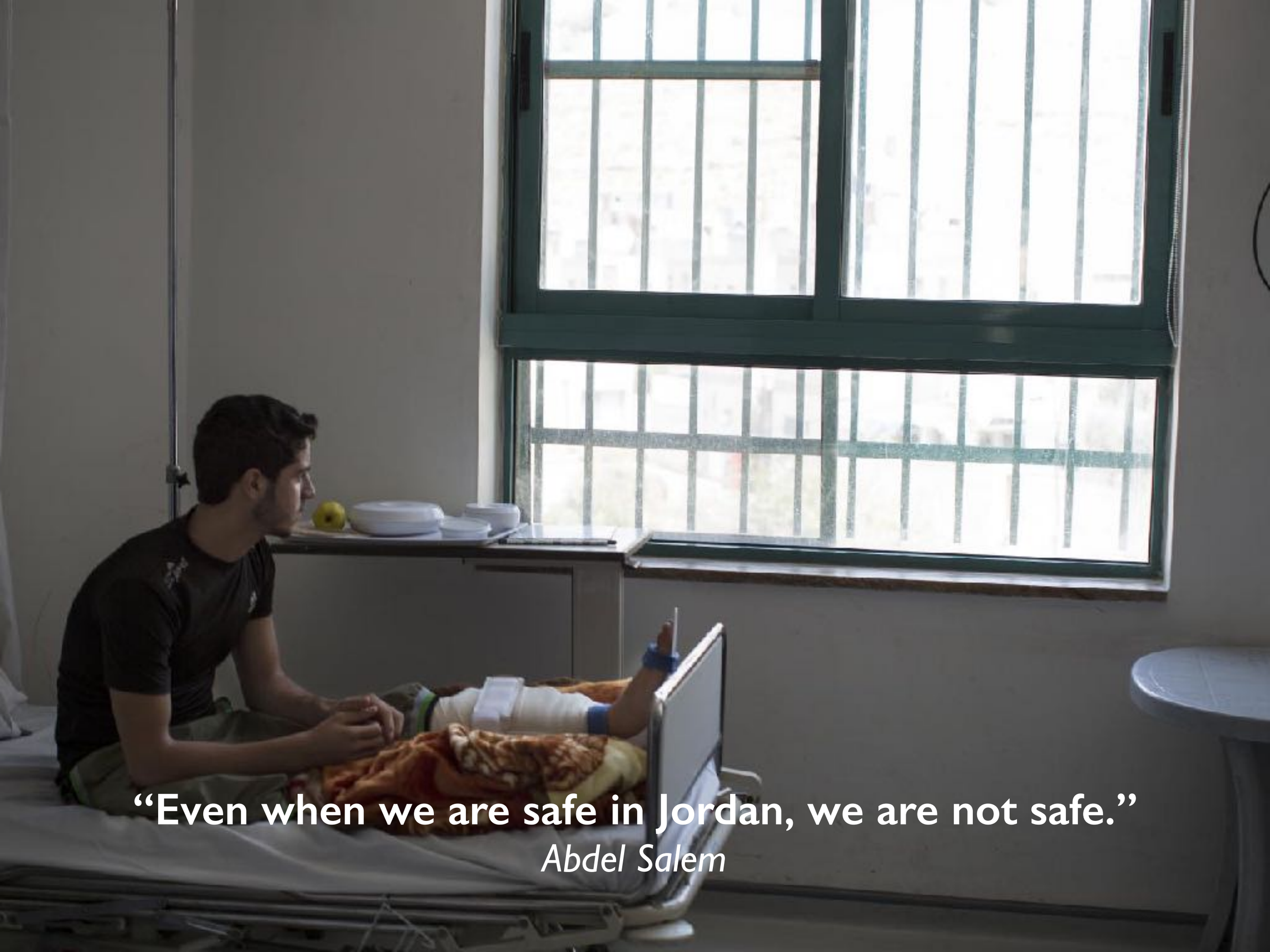
International Journal of Infectious Diseases

journal homepage: www.elsevier.com/locate/ijid

Review

Antimicrobial resistance in the context of the Syrian conflict: Drivers before and after the onset of conflict and key recommendations

Aula Abbara[a,*], Timothy M. Rawson[b], Nabil Karah[c], Wael El-Amin[d], James Hatcher[a], Bachir Tajaldin[e], Osman Dar[f], Omar Dewachi[g], Ghassan Abu Sitta[g], Bernt Eric Uhlin[c], Annie Sparrow[h]



“Even when we are safe in Jordan, we are not safe.”

Abdel Salem

The geopolitics of trauma: Israel

Increasing numbers of injured and ill Syrians blocked at the border with Lebanon have turned to another militarised border – with Israel on the Golan Heights.

‘Sgt. Aviya, a medic from the Golan Brigade, provides medical care to injured Syrians almost daily. “It starts with receiving a phone call, usually late at night, of wounded people on the way to the fence,” she says. “From there, on the way to a meeting point near the fence, we get ready for treatment and try to understand – or guess – what’s waiting for us and what to prepare for.”’

https://www.idf.il/en/minisites/operation-good-neighbor/the-stories-of-the-syrian-victims-and-the-israeli-soldiers-who-treat-them/

‘They arrive with assorted fractures and shrapnel wounds.

“**They know that there are specific places which they can reach and where we wait for them**,” says Tomer Kolar, the Israeli army’s chief medical officer for the sector.

“**There is no ambulance on the other side. Sometimes they arrive in the back of a truck or by car, but on the Hermon they come with donkeys. When they arrive in the middle of winter, in the snow, they are sometimes in an extremely serious condition.**”’

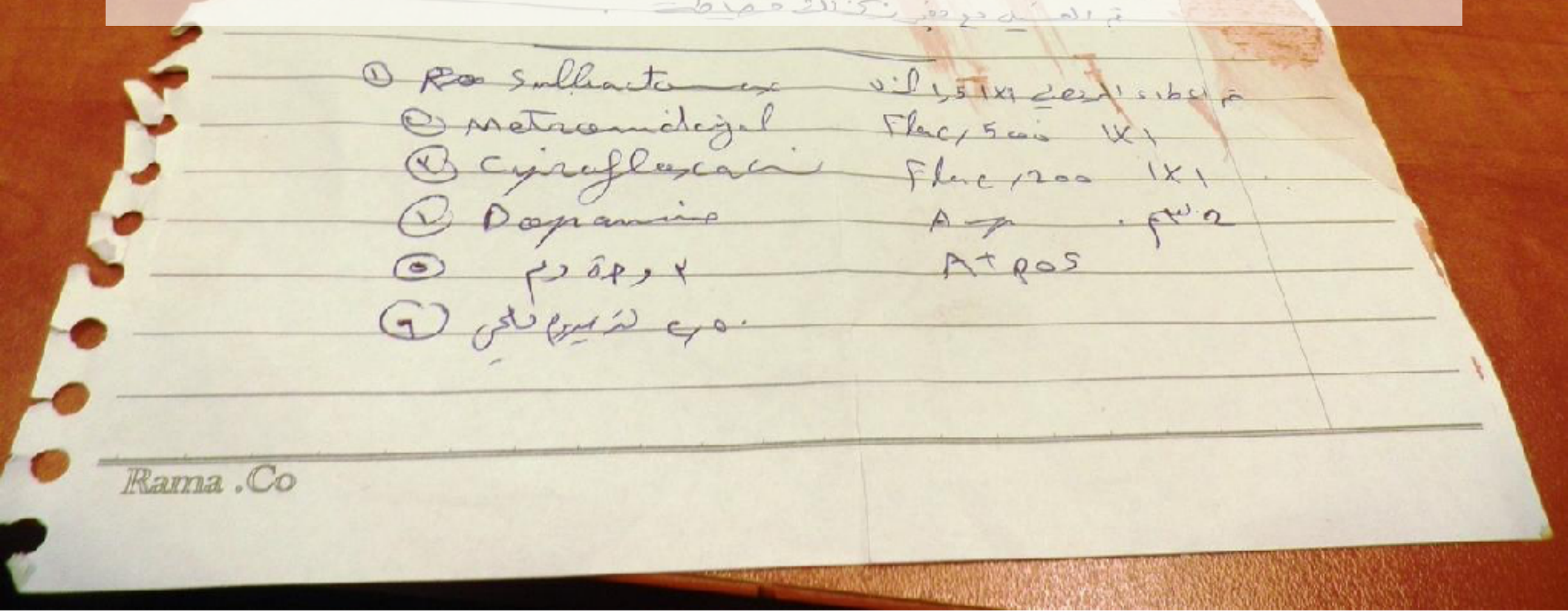
The wounded Syrians received emergency medical treatment en route in an IDF ambulance or at an Israeli field hospital at Mazor Ladach on the Golan Heights

'Operation Good Neighbour'

Nearly 75 per cent of them are taken to the Galilee Medical Centre in Nahariya near the border with Lebanon and most of the rest to the Ziv Medical Center in Safed

‘Fuchs and his trauma room team were unprepared for the severity and complexity of the injuries… Ziv's Syrian patients come with an added challenge for Fuchs and his team: trying to figure out what happened. Two unconscious patients have come in with blood-stained notes pinned to their blankets, but most have entailed pure guesswork…’

Sara Elizabeth Williams, ‘Inside the Hospital Where Israeli Doctors Treat Syrian Patients’
VICE News 25 July 2015



"I've only lost two limbs where I treated the patient and tried to salvage the limb but had to amputate"… Solomon's record – a handful of amputations in a sea of unlikely reattachments – stands in stark contrast to the trend in Jordan,.. Amputations are so common in Jordan's overworked, underfunded health sector that they are seen as the likely, if not necessary, outcome of a serious limb injury. Salvaging a damaged limb takes tremendous medical expertise and many expensive hours of complicated, staff-heavy surgery.

These medical interventions are not disinterested – they are part of a strategy to secure Israel's hold over the Golan Heights and to hobble the advance of Iran and Hezbollah towards the border – and they provoke anxieties of a different kind in many of the patients about their reception of their 'narrative of wounding' when they return from treatment in Israel.

Siege medicine and trauma geographies

The **State of Emergency** *that had been in force in Syria since 1962 was ended on 21 April 2012 and on 2 July a new* **Counter-Terrorism Law** *came into force that* **criminalised all medical aid to the opposition**

The same law declared that all medical facilities operating in opposition-held areas without permission were illegal – and by implication transformed them into targets of military violence.

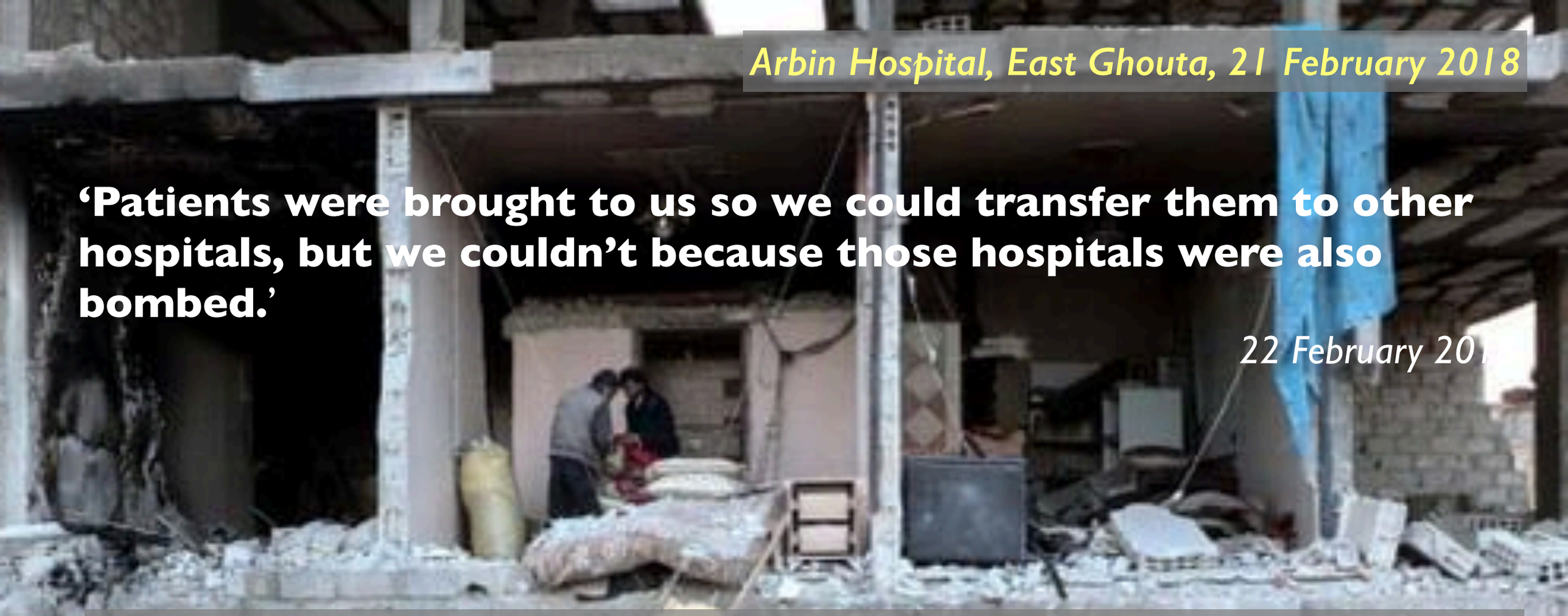
'Since 2011 … **medical activities that are not under their control are considered by the government of Syria as illegal and consequently as legitimate targets**… This decision explains the repeated threat, arrest, torture and killing of doctors … and their direct families in addition to the systematic targeting of networks in charge of supplying underground medical activities in besieged zones.'

MSF official to Kareem Shaheen, 'MSF stops sharing Syria hospital locations after "deliberate" attacks', Guardian, 18 February 2016

Hospitals bombed

Al Quds hospital in Eastern Aleppo was hit by two air strikes on **27 April 2016** that killed 55 people (among them two specialists including **Dr Muhammad Waseem Maaz**, Al Quds's full-time pediatrician) and severely damaged the hospital. When it partially reopened 20 days later its capacity was reduced from 34 to 12 beds.

‘The last field hospital in Bab al-Amr was bombed on Monday, he said. “We lost 10 people when we tried to evacuate it,… This morning five people were killed. Since Friday more than 400 have died, and many more are under rubble… We are using kitchen knives for surgery. All the field hospitals have been targeted. We are relying on domestic medicine cabinets to treat the injured. We don't have any blood for donations, or oxygen.’”



Arbin Hospital, East Ghouta, 21 February 2018

‘Patients were brought to us so we could transfer them to other hospitals, but we couldn’t because those hospitals were also bombed.’

22 February 201

‘Her hospital has been converted from a five-floor building, but nowadays they can only use the basement, as they feel that may offer some protection in the case of a shell or bomb strike. **In their basement they have set up several operating theaters but the nearest intensive care unit is several kilometers away and the road is too dangerous**…. blood transfusion is one of the biggest problems. **The central blood bank is just seven kilometers away, but with the intense bombing and shelling it might as well be 70. They cannot get there.** In her hospital, this doctor can only do the most basic checks prior to transfusion, and they are running out of blood bags.’

15 March 2018

‘Whether it is for food, medicine or fuel, we can only go through a muddy and difficult path accessible only by foot, donkey or with small boats across Lake Houleh. We only have one path for supplies, but we call it the death path because there are snipers; **whatever reaches us is covered in the blood of the people who have risked their lives to get it here**.’

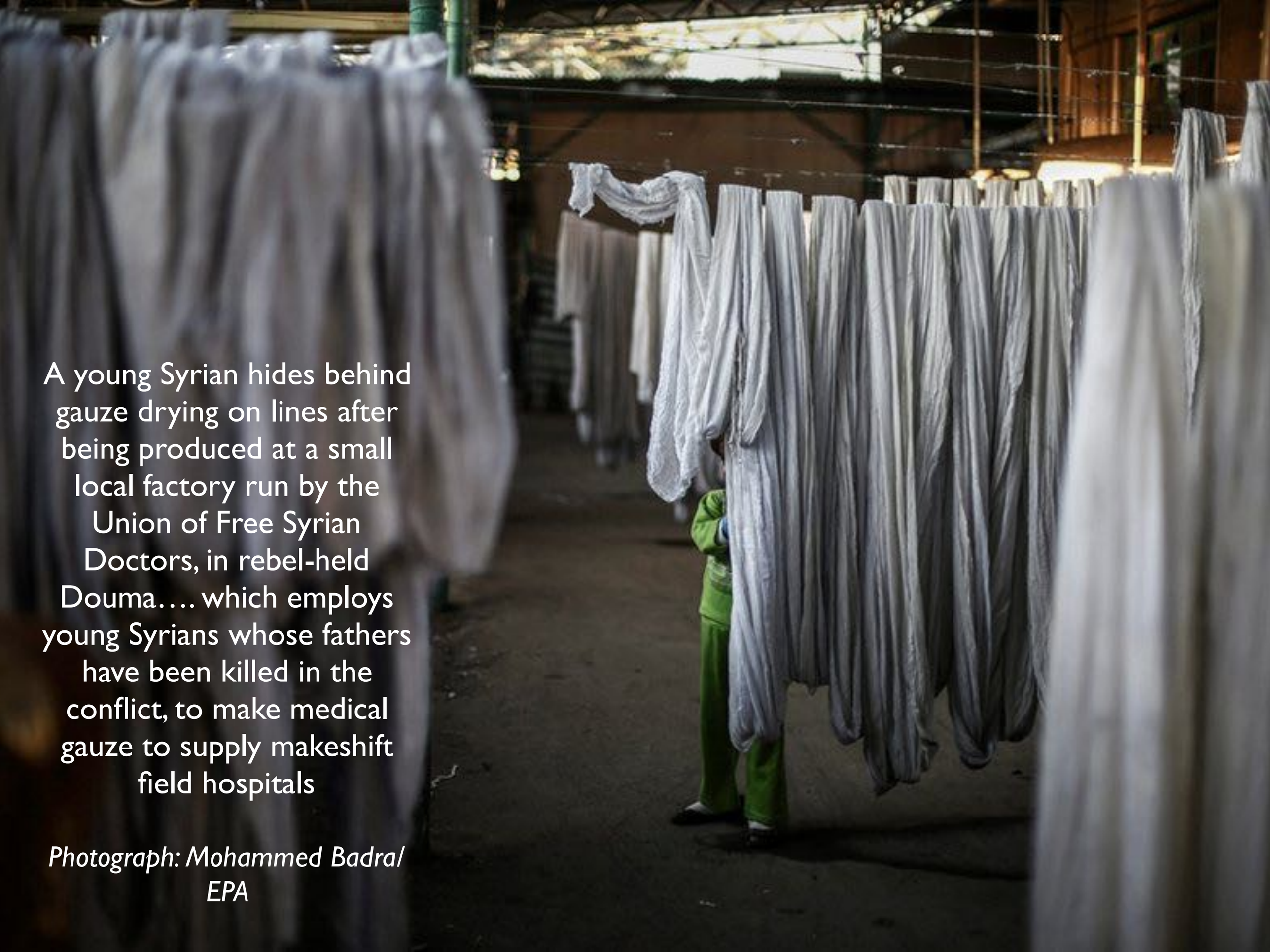
Dr A., Director of an MSF-supported field hospital at Al Houleh

Precarious supply-chains

Gauze is considered synonymous with war surgery, and often a supplier is not willing to take the risk of being arrested or shut down for supplying a besieged area.

“It is precious, dangerous, incriminating. There are secret outlets supplying us with gauze.”

(MSF-supported Doctor, Homs)



A young Syrian hides behind gauze drying on lines after being produced at a small local factory run by the Union of Free Syrian Doctors, in rebel-held Douma…. which employs young Syrians whose fathers have been killed in the conflict, to make medical gauze to supply makeshift field hospitals

Photograph: Mohammed Badra/ EPA

Humanitarian aid convoys

Category of Medical Aid	Specific Medicines and Medical Supplies
Basic medicine and medical supplies	Antibacterial soap, antibiotics, pain relievers (analgesics and neuropathic pain relievers), multivitamins, diuretics
Standard medical equipment/machines	X-ray units, spectrophotometers, monitoring devices, oxygen concentrators, defibrillators
Medical aid for traumatic injuries	Renewable surgical items (forceps, scissors, gauze, needles, razors, scalpel blades), anesthetics, sterilizers, ventilators, burn kits, IV fluids, antiseptics
Medical aid for chronic and acute illnesses	Antihypertension medication, atropine, insulin, inhalers, dialysis medication and equipment for hemodialysis sessions, anticoagulants, psychotropic medications, pneumonia A and B kits, diarrhea kits, antihistamines, cough suppressants
Aid to treat children and infants	Infant ventilators, inpatient stabilization kits (to treat children with severe acute malnutrition)

As sieges tightened, improvisations became necessary

‘Local’ anaesthetic

‘Zaher began producing a **low-cost anaesthetic** out of ingredients he had available. He tested his formula on 50 patients receiving C-sections and reported the results were on par with the standard version.’

The remaining surgeons have had to learn new skills far beyond their original specialities and outside any comfort zone…

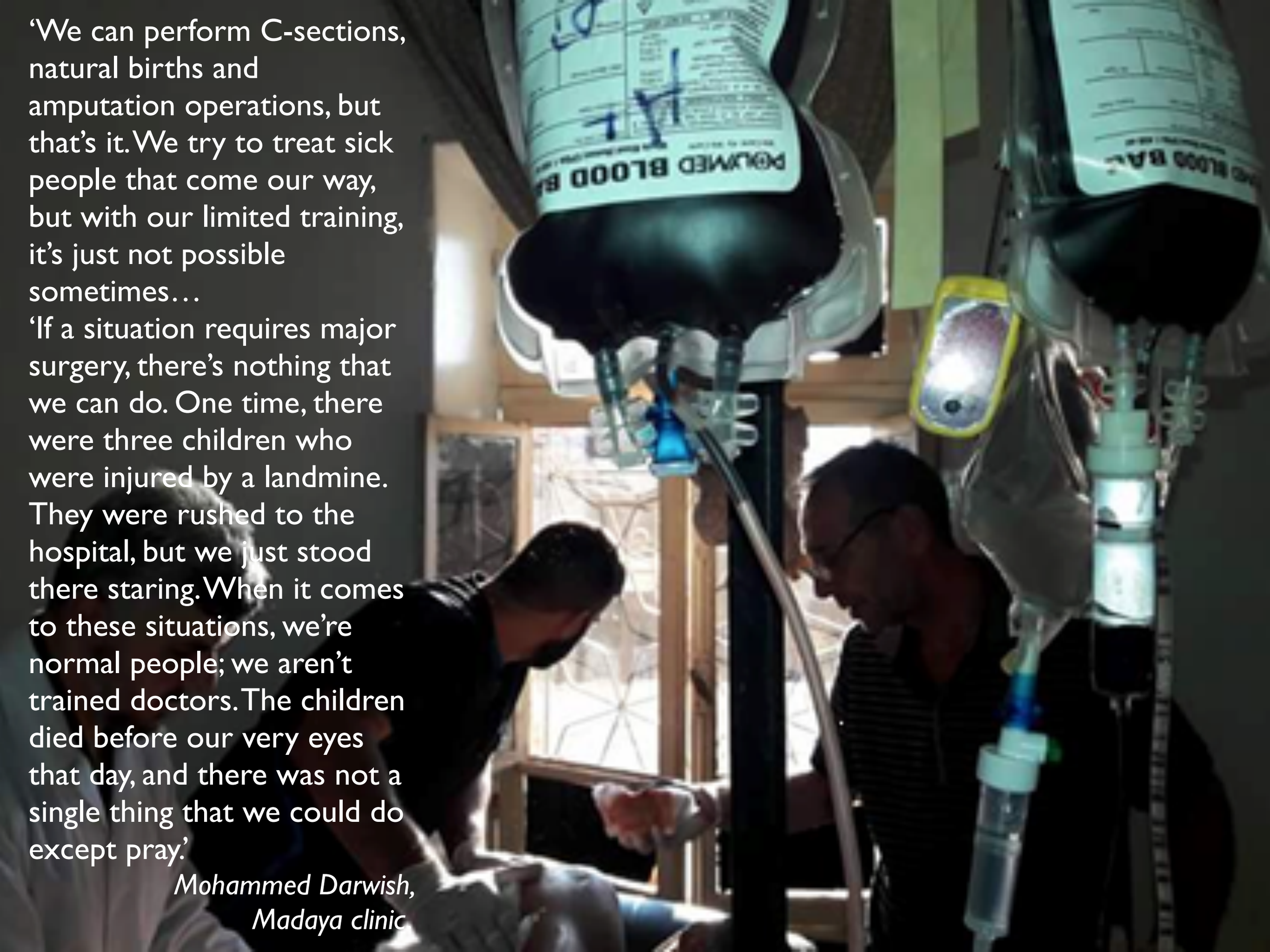
'There was a pregnant woman who was trapped during the time we were under full siege. She was due to deliver soon. All negotiation attempts to get her out failed. **She needed a cesarean operation, but there was no maternity hospital we could get her to, and I had never done this operation before.**

A few days before the expected delivery date, I was trying to get a working internet connection to read up information on doing a C-section. The clock was ticking and my fear and stress started to peak. I wished I could stop time, but the woman's labour started…'

Dr S., a young surgeon who graduated in 2011, working in an MSF-supported field hospital east of Damascus

PBS NEWS HOUR

In 2015 OCHA estimated that more than 40 per cent of pregnant women scheduled C-sections to enable them to deliver their babies at night when the risk of an air strike was lower.



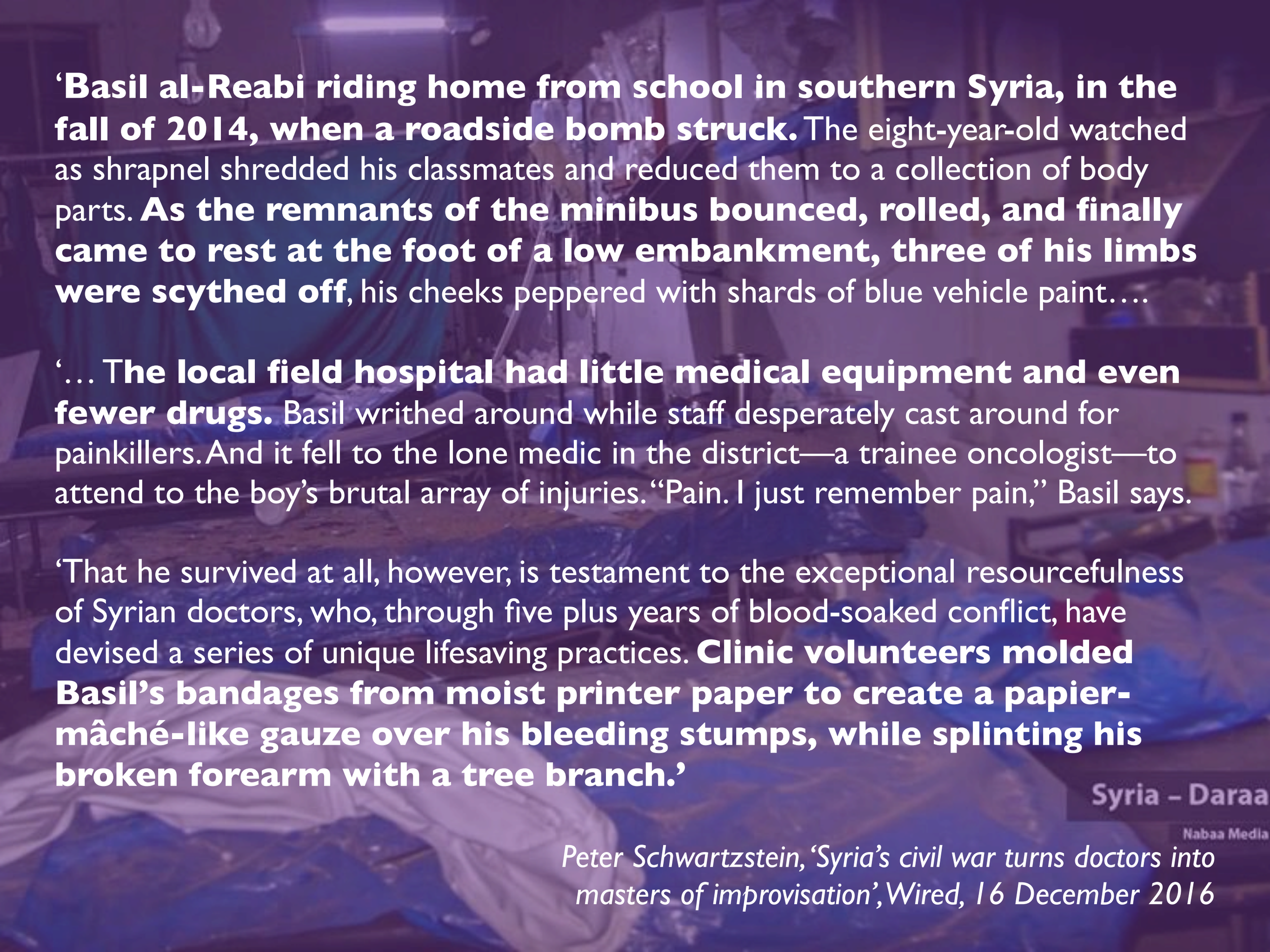
‘We can perform C-sections, natural births and amputation operations, but that’s it. We try to treat sick people that come our way, but with our limited training, it’s just not possible sometimes…

‘If a situation requires major surgery, there’s nothing that we can do. One time, there were three children who were injured by a landmine. They were rushed to the hospital, but we just stood there staring. When it comes to these situations, we’re normal people; we aren’t trained doctors. The children died before our very eyes that day, and there was not a single thing that we could do except pray.’

Mohammed Darwish,
Madaya clinic

David Nott and remote surgery

‘I help direct surgery in M10 Syrian Hospital via phone in the UK. A text from a surgeon friend working in the secret M10 hospital in Aleppo tells me that hundreds have been hurt by cluster bombs as they queued for bread and I spring into action. For the next 48 hours from my home in London, I help direct operations and give medical advice via WhatsApp.’



‘**Basil al-Reabi riding home from school in southern Syria, in the fall of 2014, when a roadside bomb struck.** The eight-year-old watched as shrapnel shredded his classmates and reduced them to a collection of body parts. **As the remnants of the minibus bounced, rolled, and finally came to rest at the foot of a low embankment, three of his limbs were scythed off**, his cheeks peppered with shards of blue vehicle paint.…

‘… T**he local field hospital had little medical equipment and even fewer drugs.** Basil writhed around while staff desperately cast around for painkillers. And it fell to the lone medic in the district—a trainee oncologist—to attend to the boy’s brutal array of injuries. “Pain. I just remember pain,” Basil says.

‘That he survived at all, however, is testament to the exceptional resourcefulness of Syrian doctors, who, through five plus years of blood-soaked conflict, have devised a series of unique lifesaving practices. **Clinic volunteers molded Basil’s bandages from moist printer paper to create a papier-mâché-like gauze over his bleeding stumps, while splinting his broken forearm with a tree branch.’**

Peter Schwartzstein, ‘Syria’s civil war turns doctors into masters of improvisation’, Wired, 16 December 2016

Time runs out…

‘When an 11-year-old boy was shot on his rooftop in the Syrian town of Madaya last week, there were no doctors at the makeshift hospital to treat his wounds. Nor were there painkillers to ease his death. For Muhammad Darwish, a dentistry student on hand to help that day, the boy’s death was the final straw. His two remaining colleagues – one a trainee, the other a vet – felt the same. **And so finally, after four years of struggle and siege, they did the unthinkable: They closed the hospital for good. “We felt so ashamed. But we had nothing. We could do nothing,” Darwish said. “We’re closed.”**

‘The team will now stay at home, responding only to the most serious emergencies. **“We can’t face staying open. If we can diagnose the problem then we don’t have drugs to treat it. If a patient needs to be evacuated, we can’t make it happen,” Darwish said.’**

Louisa Loveluck, ‘This makeshift hospital hung on for 4 years during Syria’s war. Now it’s closing.’ Washington Post, 3 November 2016

"The dose we're currently taking is so low that I can't even stand up on my own two feet"

Khayriyah (58)

"Because of the lack of supplies, our [kidney] patients have to have fewer sessions," said Sadeq, whose centre is the only place offering dialysis in all of Eastern Ghouta. "**Each patient used to have two to three sessions per week. Then it became one a week. And with the delay in receiving the necessary supplies, we were forced to decrease it to one session every 10 days**," he said. "We could save lives if we just had the material."

'When the Douma siege began in 2012, the centre began relying exclusively on equipment and medicine delivered on a fairly regular basis by the United Nations and the International Committee for the Red Cross. But that all stopped in October when government forces tightened their encirclement. Since then, only a single life-saving delivery of "250 dialysis sessions" from the Red Crescent — enough to last the centre for a month — made it through on March 9.'

AFP March 25th, 2017

By September 2017 there were 45 patients in various stages of kidney failure, 17 of whom were receiving dialysis at a drastically reduced rate.

‘We are re-sterilising most of our surgical equipment, from gloves to tubes and even the surgical blades and sutures – even if it’s for a single stitch, and just one centimetre long.’

‘… a surgeon was hard at work extracting medical sutures from a patient. “After we finish with the thread, we wash it and sterilise it again” for use on another patient, says 23-year-old nurse Anas Daher. With the operation over, Daher removes his surgical gloves and, instead of disposing of them, scrubs them with water and soap and tosses them into a red basket full of other pairs. They are taken into an adjacent room, powdered and placed into a sealed jar with sterilisation tablets for 24 hours so they can be used again.’

‘We are working with stitches that were used before, disposable gloves that we wore before, chest drainage that was used on other patients. Most wounds get infected and need bandages, but we are using bandages that we used before.’

Dr Hamid, East Ghouta

Joel Gunter, ‘In Eastern Ghouta, a doctor’s battle: “We will stay until the end”
www.bbc.co.uk 17 March 2018

‘Towards the end of the siege of Aleppo, doctors were conducting amputations on anyone with a serious injury. Due to flesh-eating infections [leishmaniasis: 3,000 cases before the war, 10,000 in 2014] and a lack of basic supplies, they simply didn't have a choice.’

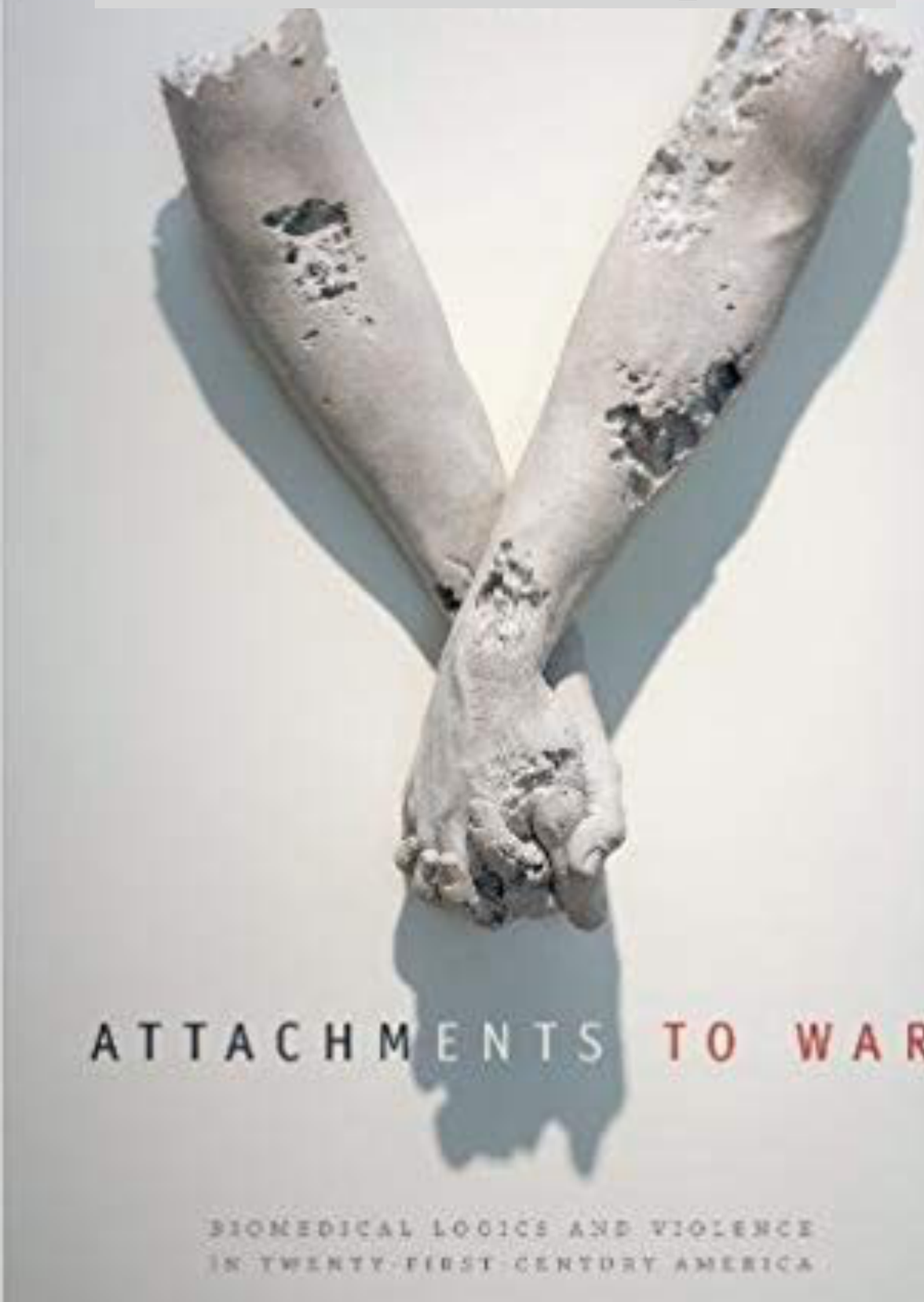
David Nott, 31 December 2016

‘Medical staff described work in [East Ghouta] as a raw and restless battle to save people from death, with little or no room left to rescue limbs, preserve sight, or ward against fatal infections. **Successful treatment has become a binary calculation, they said: life or death.**

This week, a five-year-old boy arrived at Dr Hamid's hospital with multiple trauma wounds and fractures in both his legs and arms. Dr Hamid sutured the boy's wounds and amputated one of his arms and one of his legs at the upper thigh. "That is his future," Dr Hamid said. But the boy is alive, that is a success.

In Eastern Ghouta, a doctor's battle: 'We will stay until the end'
Joel Gunter, www.bbc.co.uk 17 March 2018

'Woundscapes'



‘Elaine Scarry has eloquently pointed out in “Injury and the Structure of War” [that] rhetoric about the pain of wounds has been largely metaphorical, “emptied of human content.” **Landscapes are wounded and cry out “in pain,” but the voices of individual … men and women have been drowned out.’**

Joanna Bourke, ‘Bodily Pain, Combat, and the Politics of Memoirs’, Social History 46 (91) (2013) 43-61: 45

Gregory Whitehead proposed that the task of the 'vulnerologist' is to make the wound speak:

'No wound ever speaks for itself. The only thing that you will find emerging spontaneously from a wound is blood. If you're interested in the deeper significance, then wounds have to be read. They have to be interpreted and deciphered. Vulnerology, or the science of wounds, is the activity of this interpretation… ***[T]hink of the wound as a sign between the individual body and the technological landscape.'***

Display Wounds: Ruminations of a Vulnerologist

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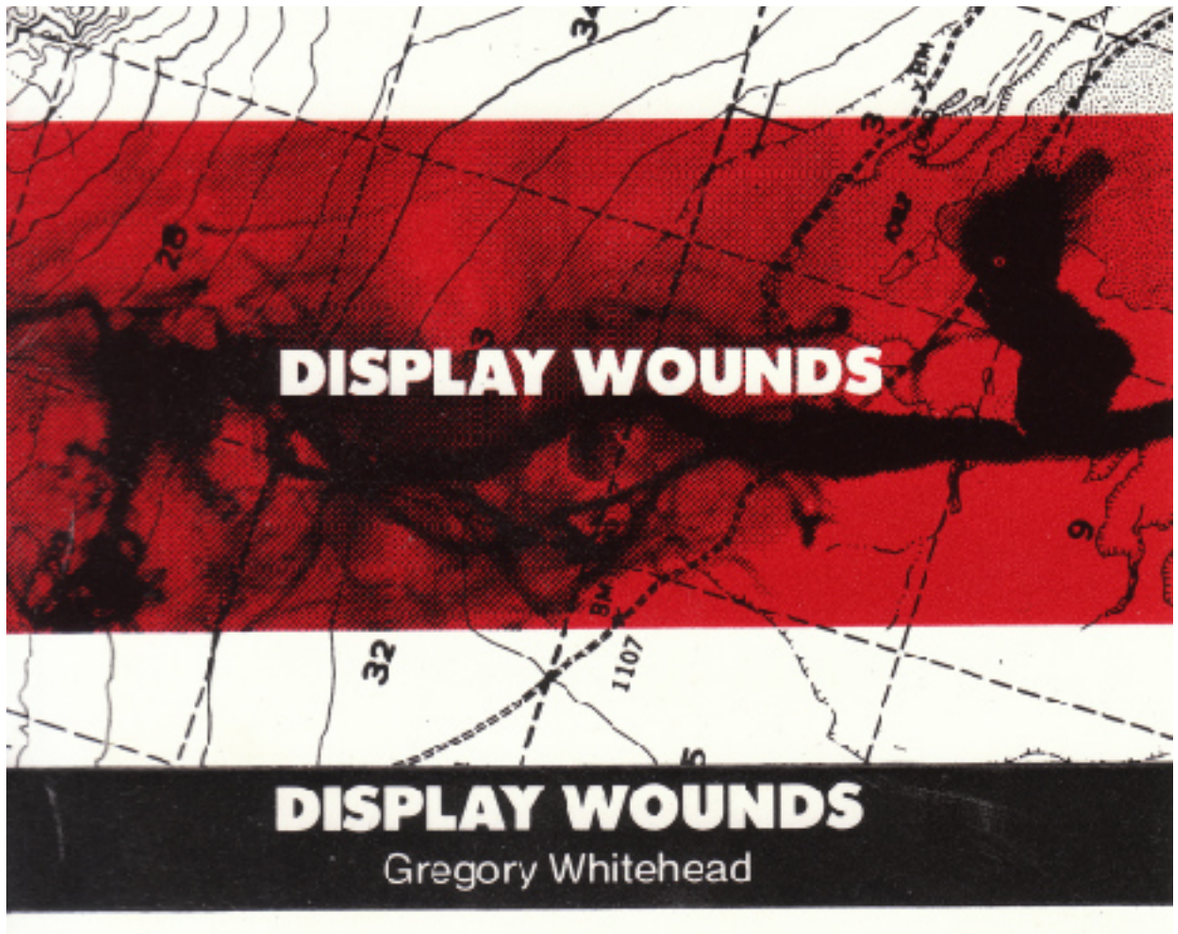
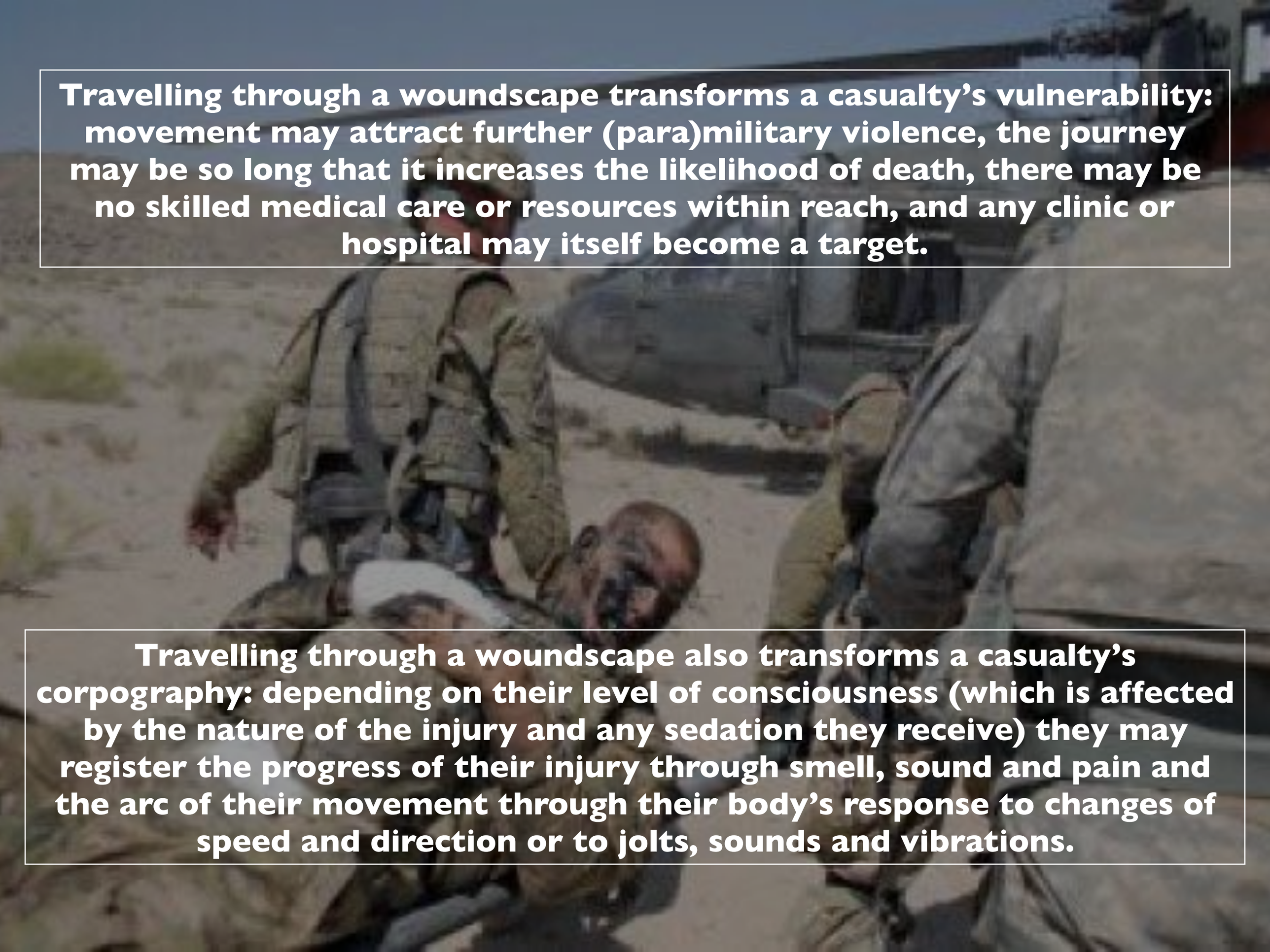


The act of being wounded immediately increases a person's vulnerability: it may be difficult for them to see, breathe or call for help; it may be impossible for them to move unaided; and a penetrating wound makes them vulnerable to catastrophic blood loss or life-threatening infection.

Being wounded transforms the casualty's corpography: it changes the ways in which they are aware of their own body and the landscape that surrounds them; if they are conscious their horizon simultaneously contracts into the place in which, however imperfectly, they sense the extent of their injury (a crater, a ditch, a room) and expands into the fractured space in which they seek to register threat and anticipate medical assistance.

Woundscapes are often racialized and gendered, and marked by notations of privilege and distinction; some of those markings are tied to the wound itself but many derive from the coding (‘reading’) of the body of the casualty.



Travelling through a woundscape transforms a casualty's vulnerability: movement may attract further (para)military violence, the journey may be so long that it increases the likelihood of death, there may be no skilled medical care or resources within reach, and any clinic or hospital may itself become a target.

Travelling through a woundscape also transforms a casualty's corpography: depending on their level of consciousness (which is affected by the nature of the injury and any sedation they receive) they may register the progress of their injury through smell, sound and pain and the arc of their movement through their body's response to changes of speed and direction or to jolts, sounds and vibrations.

Places in the woundscape become waystations on a journey whose shape and terminus are at best unclear and uncertain; they become sites of estranged safety – at once precious and precarious – in which the casualty may register the signs of care (the prick of the needle, the smell of anaesthetic, the feel of clean sheets) but also the signs that all is not well (the re-opening of the wound, pain, 'damage-control surgery', the sight and sound of other patients – and in many cases the continuing sounds and sensations of military violence).

‘Forensic ecologies’

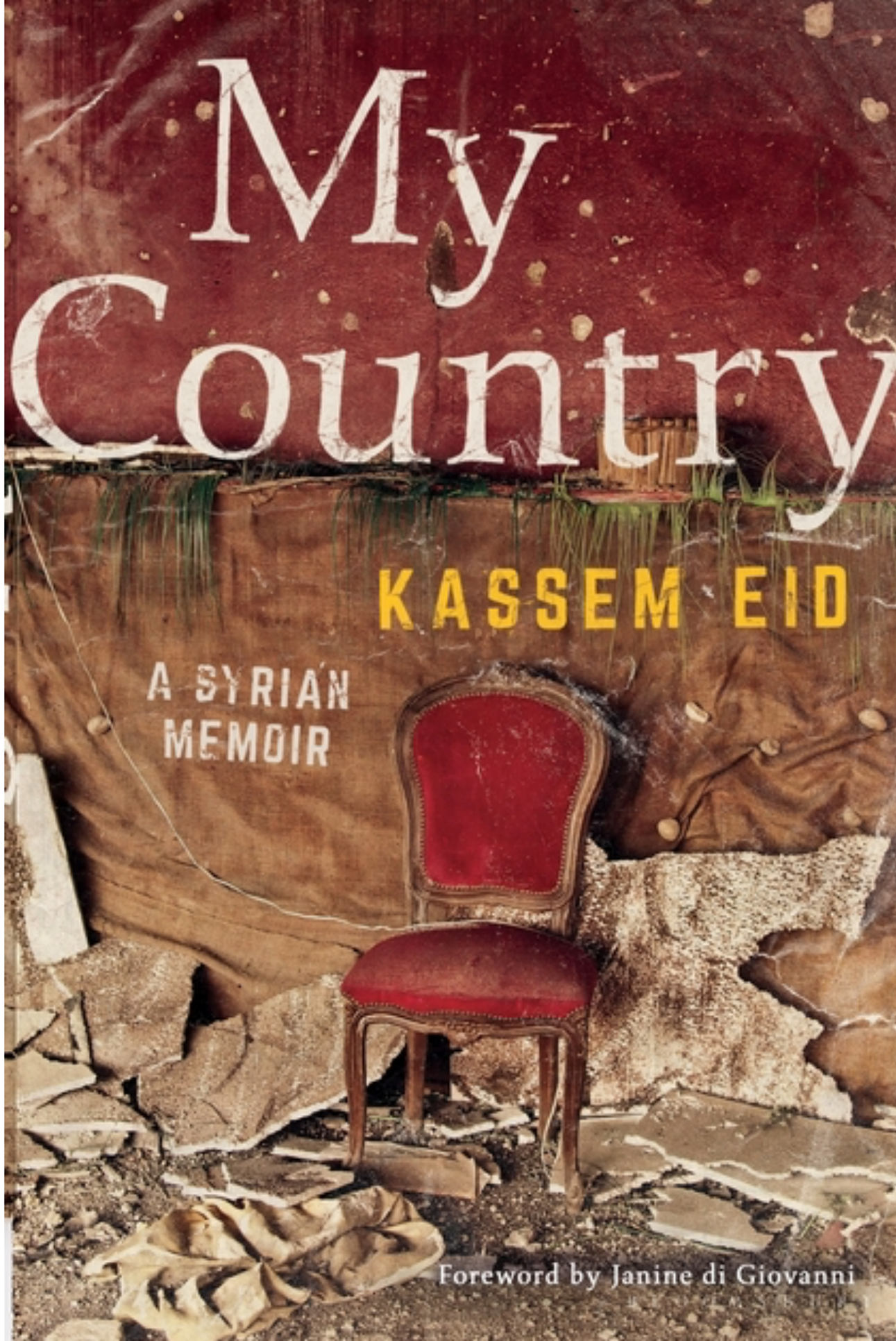
Joseph Pugliese
borderlands 14 (1) (2015)

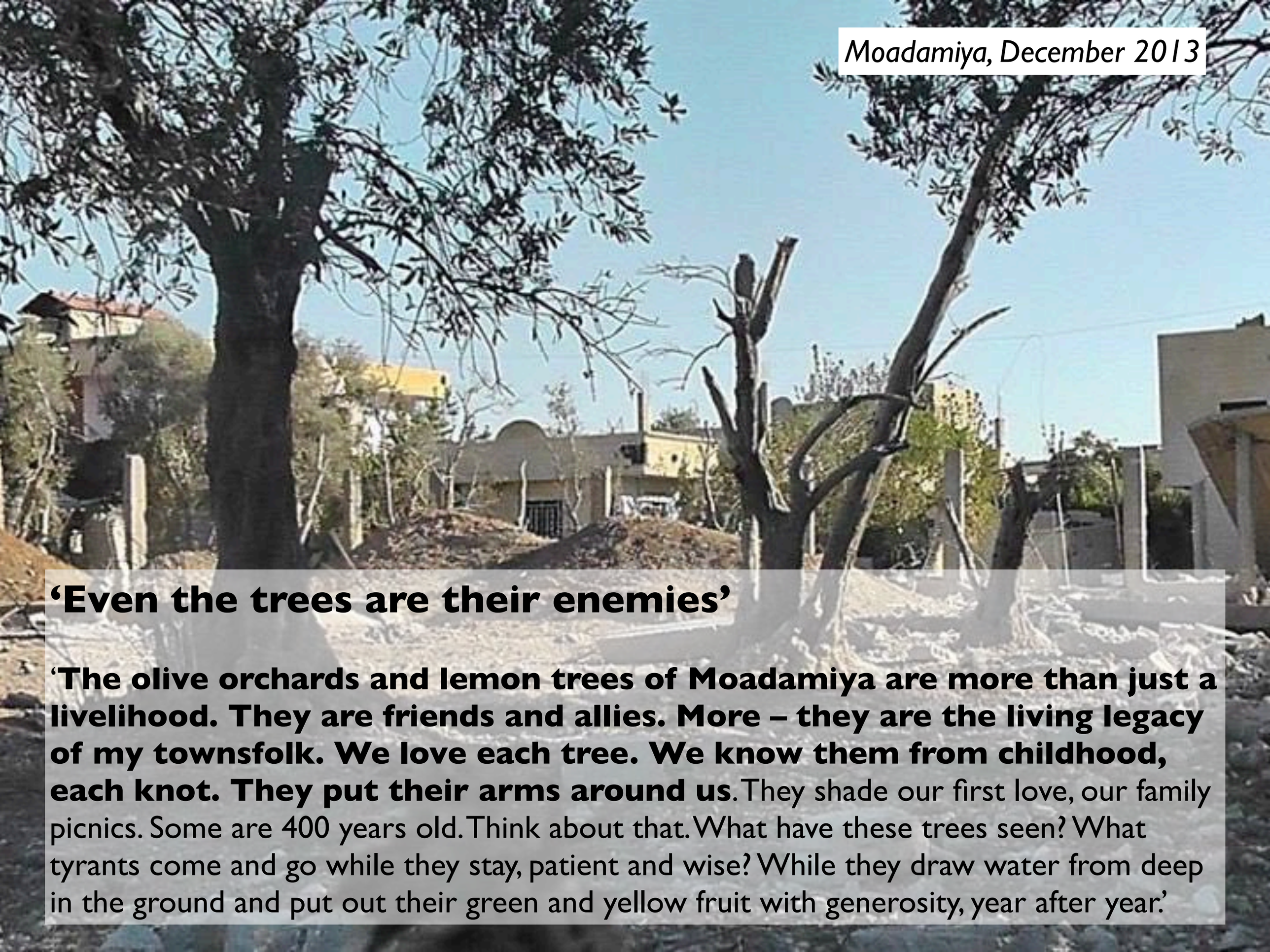
‘My concern is to map the manner in which regimes of suffering produce distributed and relational impacts upon the everyday lives of target subjects, their communities and the larger ecologies that sustain their very lives. **My focus will be on the manner in which suffering, fear and trauma become collective experiences that radiate out of, and beyond, the site-specific human body**. **Once envisioned as a multi-dimensional matrix, suffering can be traced in terms of its wave-like motion through communities and across their ecologies: in its wake, suffering leaves disorientation, trauma and a form of living death**...

‘Forensic ecologies are what emerge after the traumatic impact of explosive violence – for example, a drone missile strike in an agricultural field. In the wake of this blast of explosive violence, the field and its larger ecology begin to seep what Rob Nixon terms “slow violence”.’

Soldiers of the Australian 4th Division passing through Chateau Wood, near Hooge in the Ypres salient, 29 October 1917.(Frank Hurley)

‘I wandered through the streets instead of sleeping that night. I finally took refuge under an olive tree deep in the groves of west Moadamiya. The pale white moonlight streaked in between the leaves and into my burning eyes. **I had never felt so lonely. I was desperate for a hug, but all the people I wanted to hug were beyond my reach. I wept, then, after looking around to make sure that I was really alone, I hugged the olive tree. ‘There’s no one else left to hug,’ I told it.** ‘I used to play on you as a boy and eat your fruit. My baba, my mama, my brothers and all my friends were there. Do you remember those days? We used to have such fun. Now everyone is gone, and only you are left.’

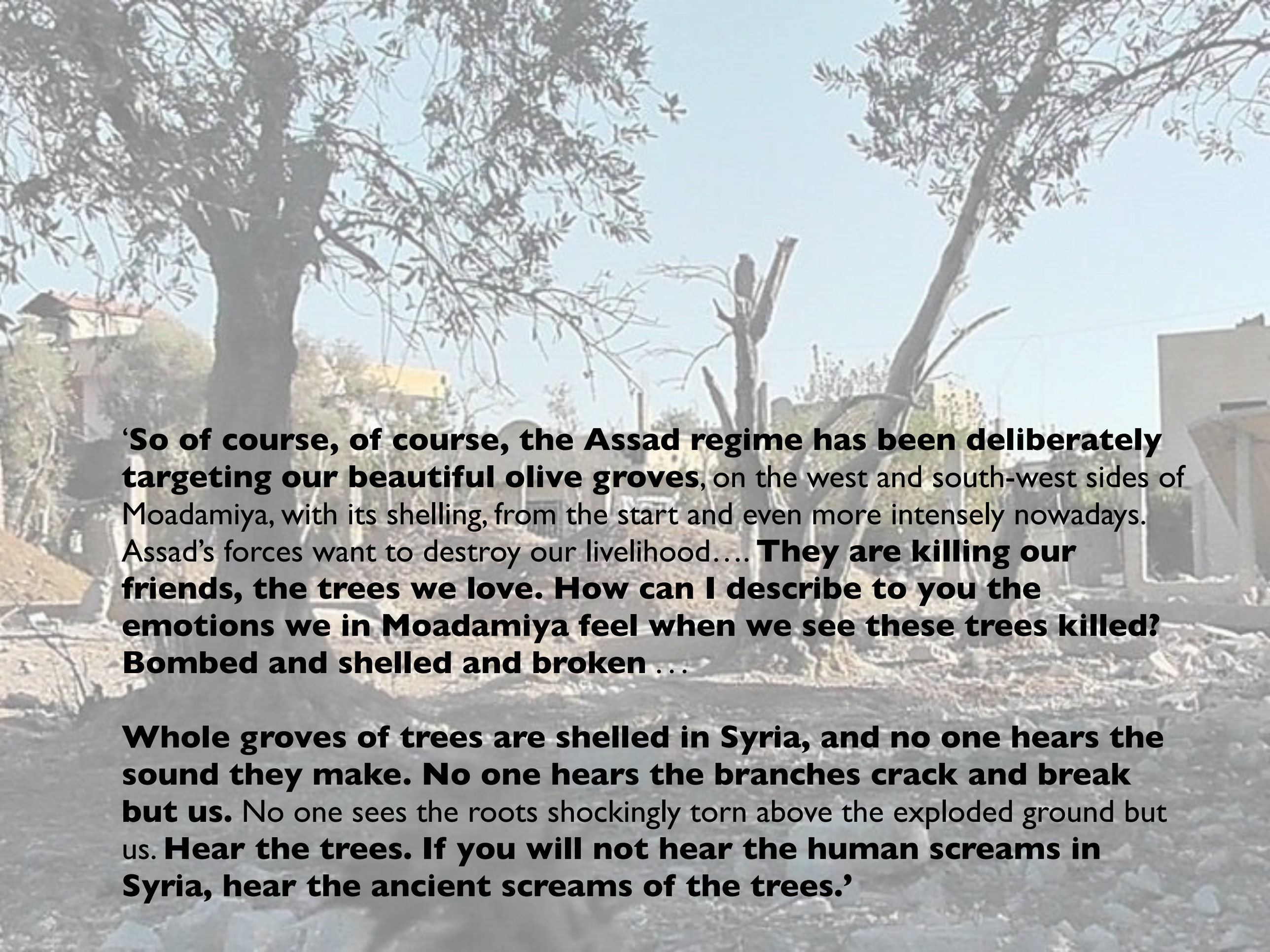




Moadamiya, December 2013

‘Even the trees are their enemies’

‘**The olive orchards and lemon trees of Moadamiya are more than just a livelihood. They are friends and allies. More – they are the living legacy of my townsfolk. We love each tree. We know them from childhood, each knot. They put their arms around us**. They shade our first love, our family picnics. Some are 400 years old. Think about that. What have these trees seen? What tyrants come and go while they stay, patient and wise? While they draw water from deep in the ground and put out their green and yellow fruit with generosity, year after year.’



‘**So of course, of course, the Assad regime has been deliberately targeting our beautiful olive groves**, on the west and south-west sides of Moadamiya, with its shelling, from the start and even more intensely nowadays. Assad’s forces want to destroy our livelihood…. **They are killing our friends, the trees we love. How can I describe to you the emotions we in Moadamiya feel when we see these trees killed? Bombed and shelled and broken** . . .

Whole groves of trees are shelled in Syria, and no one hears the sound they make. No one hears the branches crack and break but us. No one sees the roots shockingly torn above the exploded ground but us. **Hear the trees. If you will not hear the human screams in Syria, hear the ancient screams of the trees.’**