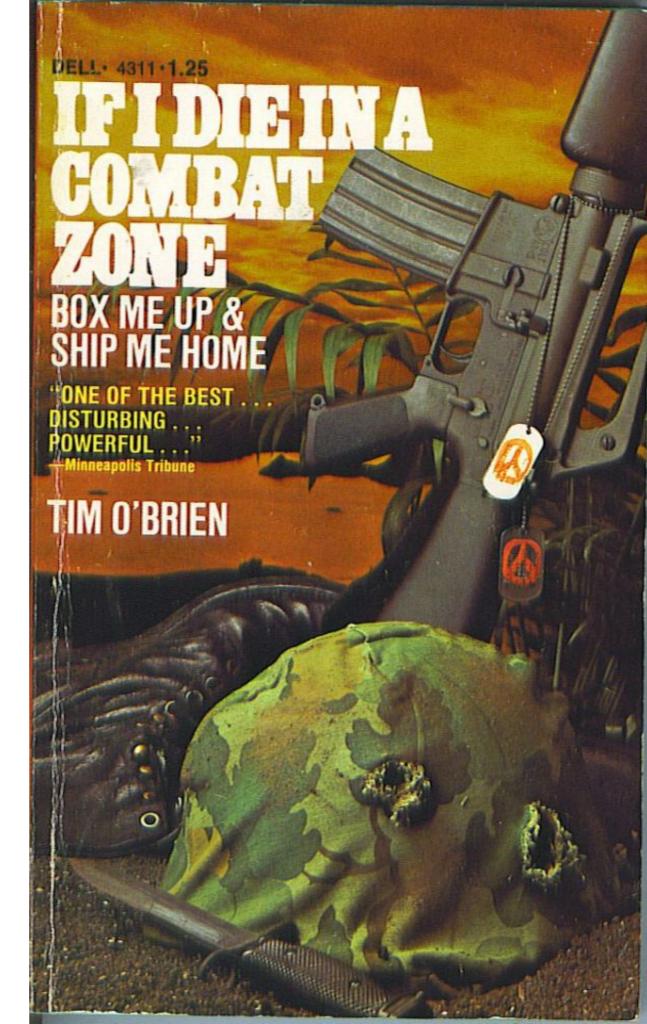


'They carried all they could bear, and then some, including a silent awe for the terrible power of the things they carried.

They carried the sky. The whole atmosphere, they carried it, the humidity, the monsoons, the stink of fungus and decay, all of it, they carried gravity.

There was the single abiding certainty that they would never be at a loss for things to carry.'

'We walked along. Forward with the left leg, plant the foot, lock the knee, arch the ankle. Push the leg into the paddy, stiffen the spine. Let the war rest there atop the left leg: the rucksack, the radio, the hand grenades, the magazines of golden ammo, the rifle, the steel helmet, the jingling dog-tags, the body's own fat and water and meat, the whole contingent of warring artefacts and flesh. Let it all perch there, rocking on top of the left leg, fastened and tied and anchored by latches and zippers and snaps and nylon cord. Packhorse for the soul.'



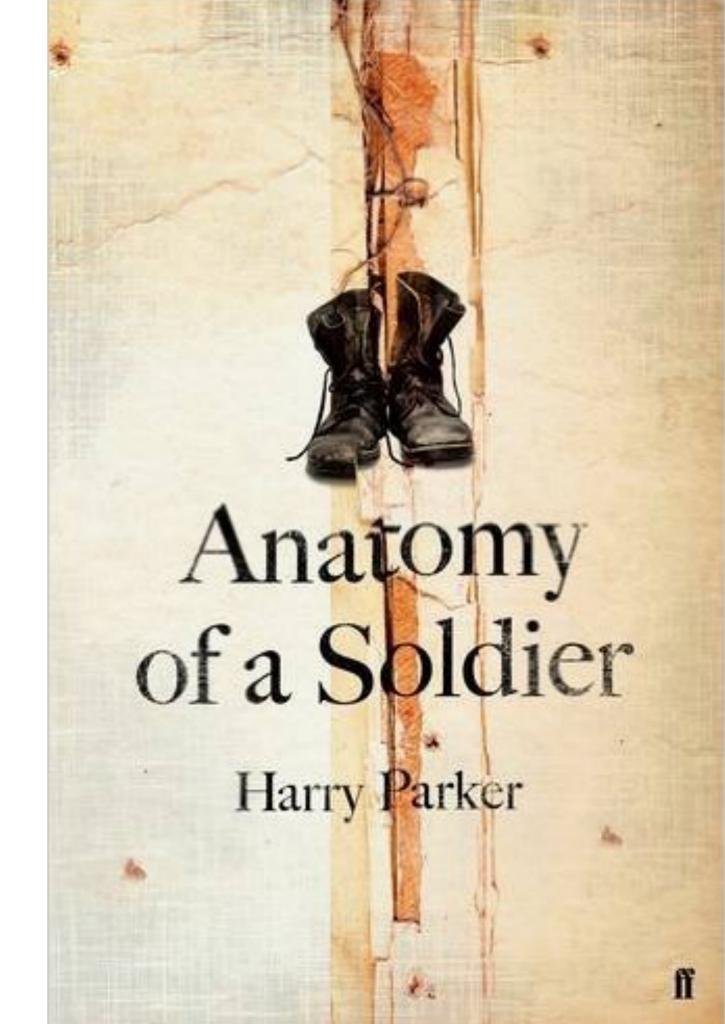


Somme, 1916 Thom Atkinson, Soldiers' Inventories





The novel tells the story of Captain Tom Barnes, a British army officer who steps on an IED while on patrol in Afghanistan; he is airlifted to the Role 3 hospital at Camp Bastion and then evacuated to Britain; he loses both his legs, the first to the effects of the blast and the second to infection.



Common readside EDs include artiflery and mortar round(s) or bulk. explosives placed near the road at the designated kill point.



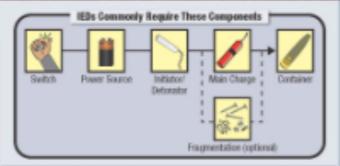
They may be hastily camouflaged with dirt, rocks, trash or items that are common along the road. These devices can either be command detonated by wire, by a remote control device or a combination of both.



Placing an artiflery round next to the road with blasting cap and det cord is a common factic.



A spool of wire, battery and a remote control device are indicators of a firing observation point.



SWITCH

The ED is triggored by a switch signal (e.g. a pressure plate, (mobile phone, command wire, timer),

Two-way radies Limp-range cordiess phones.

Car alarms Wireless drorbells Cell phones Motion sersors Light (photo) sensors Commond wire

Time types Keyless entry lobs Pressure plate switches. Wirdess gange-door openers Remote controls from tays.

Victim-Operated EDs (VOEDs) - Booty Trup Detonation. Simple pull-pin devices or more complex devices using pressure plates and/or collapsing circuits are designed to go off when the loop (ball) wire is out.







DISTURB SUSPICIOUS ITEMS

Vehicle-Borne EDs (VBEDs) come in all shapes, colors and sizes. from simple passenger cars to large delivery or sewage trucks. Sedans are most often used.

VBIEDs have increasingly contained larger amounts of explosives with charges ranging from 100 to 1,000 lbs. Charges have included items such as mortar rounds, rocket motors, rocket warheads, PE4 and artillery rounds.

A frequently seen technique is to have multiple vehicles involved. The lead vehicle is used as a decoy or barrier buster. Once it has stopped, Coalition Forces move in to clear or inspect it, and the VEVED vehicle approaches the crowd and detonates.

Service members must stay alert to signs and indicators to prevent. the VBED from reaching its destination. Fake markings and plates, official symbols in the wrong location, drivers that are not familiar with vehicle controls, drivers that seem to be agitated or lost, vehicles parked on the wrong side of the road or a vehicle with the heed raised indicate a possible VBIED affack.



IED INDICATORS

Colors - Enemy may provide clare unwittingly: red det cord visible, color of ED not covered completely, concrete doesn't match surrounding area, etc. Frenhly disturbed dirt will be darker in color flook for color changes in the dirt).

Signs - Placed in location not normally present or new signs posted.

Markings - On the side of the road, use of tires, piled rocks, ribbon, tape, etc., identify ED location or are used as aiming reference.

Shapes - Outlines that are not normal in nature.

Changes in Traffic Patterns - Lack of people and/or whicle traffic in a normally busy area.

Graffiti - Indicating some type of warning. to locals. Interpreters usually needed.



Other IED Indicators -

- · Vehicles following convoy for a long distance and then pulling off the side of the road.
- . Dead animals along the madways.
- Freshly dug holes or povement patching along or in the roadway for possible future ED emplacement.
- · New dirt/grave! piles.
- . Obstacles in roadway used to channel the convoy.
- Personnel on averpasses.
- . Signals with flares/city lights (turned off/on) as cominy approaches.
- People videotoping ordinary activities or



Be Extra Cautious At Choke Points

Vehicle breakdowns or vehicle entering road, causing you to modify your movements.

Bridges, one-way roads, braffic jams, sharp turns, etc. If something causes the convoy to stop, watch the flunks for EDs.

TED COMPONENTS

The switch signal is typically powered by batteries.

9-will butterion topod or connected together D-Cells wind together

6-volt and 12-volt meter vehicle batteries

POWER SOURCE

INITIATOR/DETONATOR

The signal is sent to an initiator (e.g. blasting cap, det cont) that contains capitalise to set off the main explosive charge.

Blasting caps and dat cards are the most currencely used initiators for IEDs.



MAIN CHARGE

The initiator detonates the main charge (most commonly, a home-made or bulk explosive).

The enemy once depended upon military ordnance for EDs, but lack of supply has resulted in production and use of home-made or bulk explosives (HME/EE). HME/EE can be made from combinations of fertilizers.

and many common chemicals. found in the home, workplace and farm, or can be purchased locally.

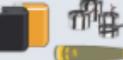




Any type of jug, artiflery shell, metal or plantic container that is commenty used to hold explosive charges.

Ammo Case Tiped cooking pols Jerry cans Artillery shell Pinetic bog





TED EMPLACEMENT

ED cornorflaged with various types of logs to resemble garbage along the roadways or IED buried in the roadbed.



Decay IED placed out in the open to slow or strp convoys in the kill zone of the actual device concealed along the route of travel.

IEDs thrown from overpasses or from the roadside in front of approaching vehicles or in the middle of convoys.

Emplaced in potholes (covered with dirt).

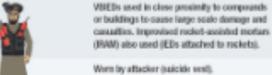


Emploced along MSRs and ASRs (sometimes behind guardrails).

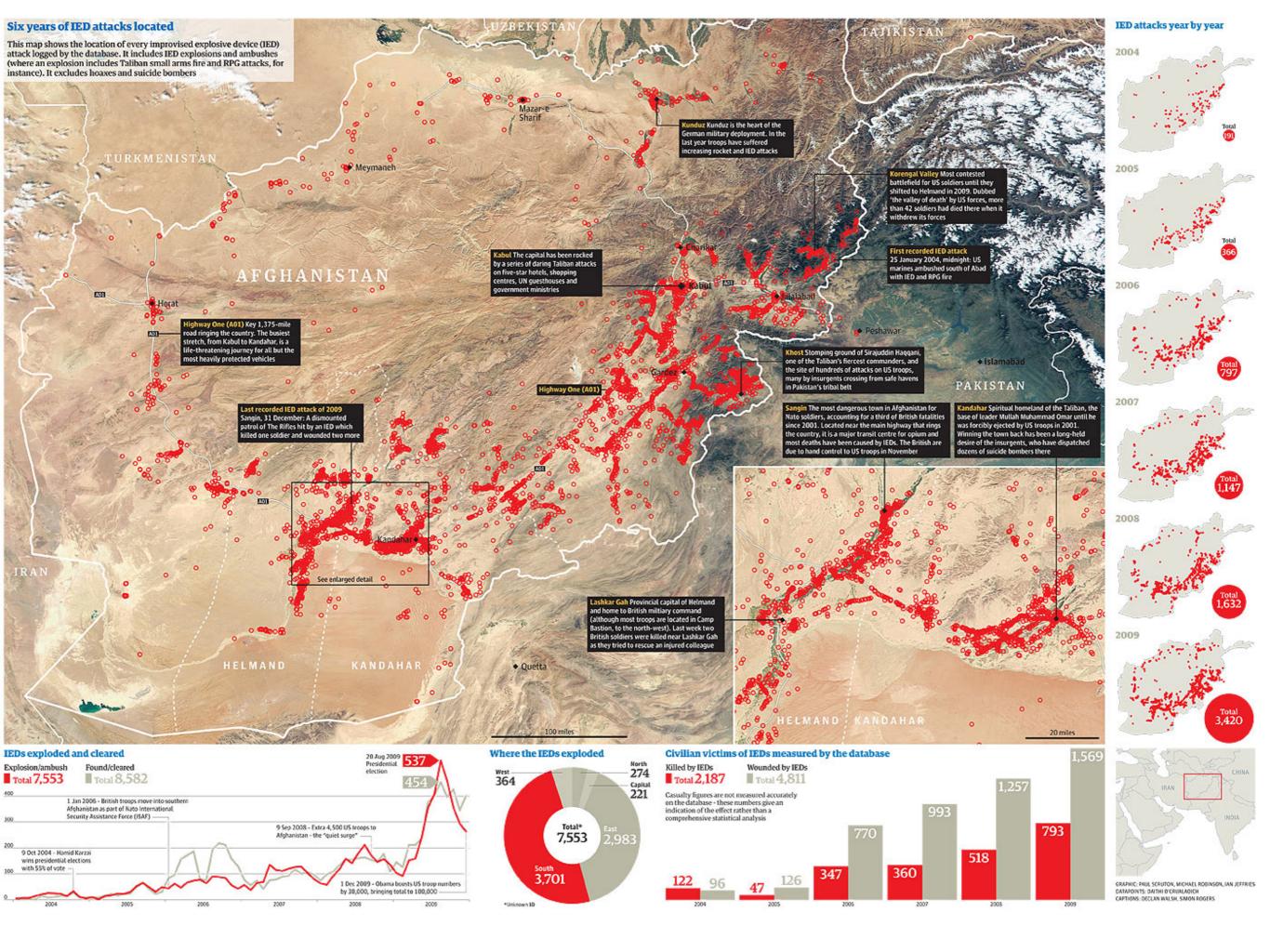


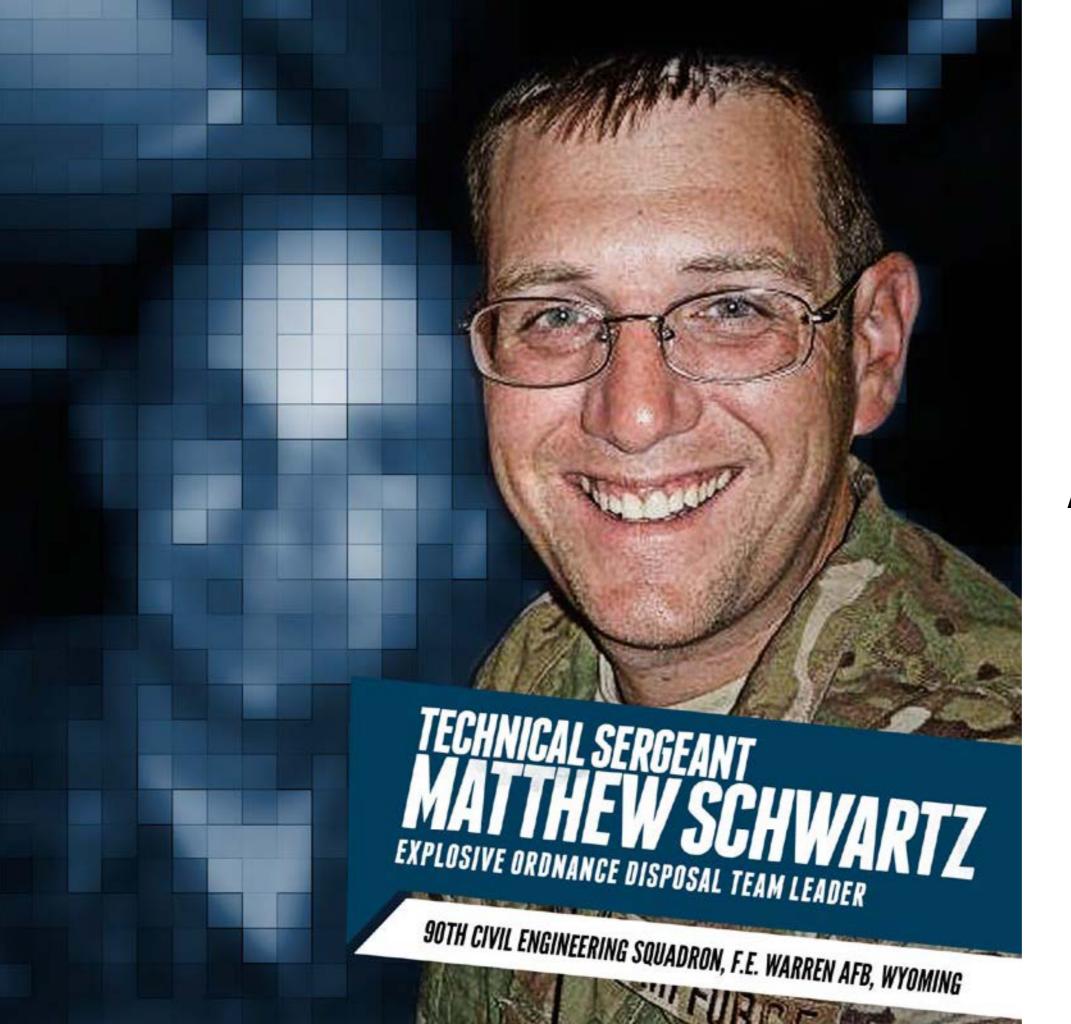


IEDs often used to distract the attention of Condition Forces and create a lift zone for subsequent attacks by RPG/SA fire.



Ells can be disquised to look like any object and to function through a multitude of actions. An EO is only limited by the bomber's imagination and capabilities. EDs are unpredictable and estremely bazardous to all.





Matthew Schwartz Musa Q'Alah, Helmand 5 January 2012

"A brilliant, moving, and troubling portrait of modern American warfare."

—PHIL KLAY, author of the National Book Award-winning Redeployment



An Elegy for a Fallen Comrade, and the Hunt for His Killer

BRIAN CASTNER

author of The Long Walk

'I did an investigation. In EOD, you always work as a team, and so I started with my teammates. I talked to the maimed, the too often forgotten survivors of both the random and deliberate bombs, and the medics who treated them. I talked to the detectives, the intelligence analysts and interrogators, who work the forensics and build the profile of the bomber. I talked to the hunters and killers who finish the job. I collected evidence from all of them...'



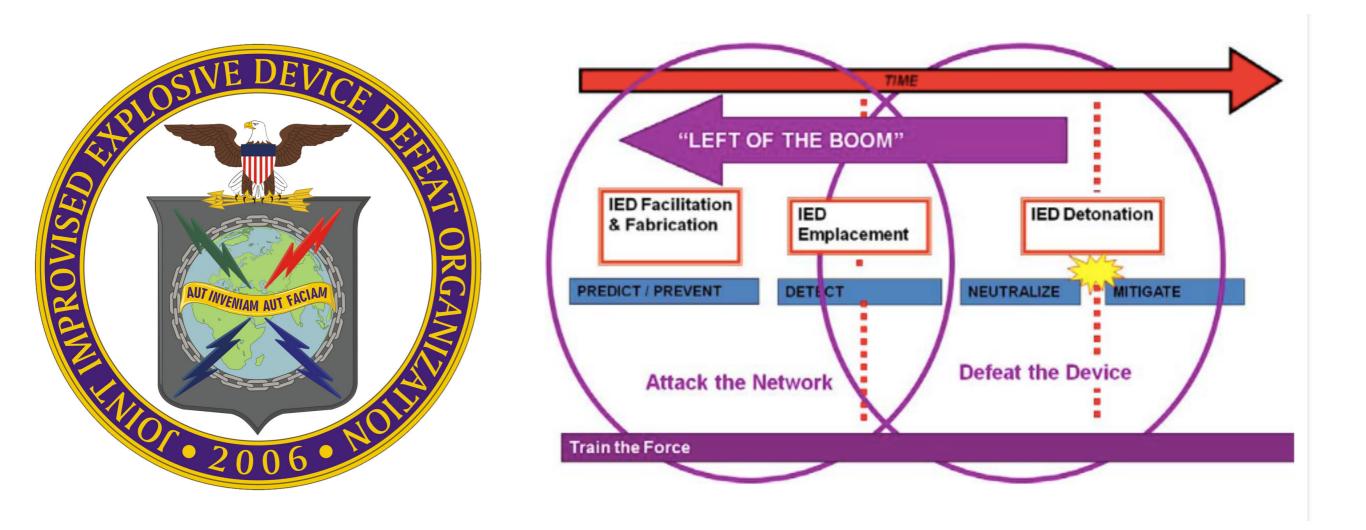
UNCLASSIFIED F3EAD for C-IED Operations



Find, Fix, Finish, Exploit, Analyze, Disseminate

Attack the Network – Defeat the Device – Train the Force

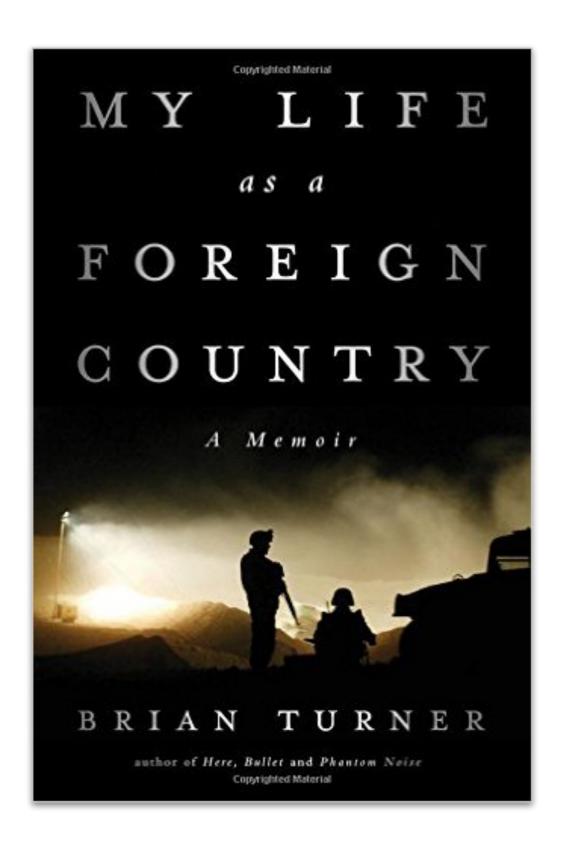




'...imagine the chain of events that led to the placement of that IED. Someone had to put it under the bridge. Someone had to build it in a secret factory. Someone had to purchase the circuit board. Someone had to raise the money to buy the materials. Further and further left of boom we go. If we could interrupt the chain, if we could stop the Engineer from designing new bombs or teaching others to make them, then the device would never get out to the roadside in the first place. And so this is how we would come to know the Engineer, by his bombs and the little they left behind.'



'While the briefing revolves around triggermen and bomb makers, call signs and radio frequencies, 9-line medevac requests and medical assets, the soldiers outside prepare a terrain model in the hardpan between hooches. Colored lengths of yarn mark phase lines for the raid. Torn pieces of cardboard from an MRE package serve as houses, arranged to resemble a suburban street. And the men laugh and joke with one another while they create the model. They don't talk about the people who live in the target house, third cardboard square from the left. They don't talk about the men eating dinner in that house now, the children who run in through the front door, the sound of their laughter as they turn and run upstairs, their mother calling to them from another room. They just place a small cardboard square on the dirt....They are giants standing over the model of someone else's life.



'He straightened and held me in one hand. "Right, orders for tomorrow's operation," he said....

"Is everyone happy with the model?" he said.

There were a few silent nods from the watching men.

"Just to orientate you again. This is our current location." He pointed me at a tiny block of wood near the centre of the grid that had PB43 written on it in peeling blue paint. It was the largest of a hundred little wooden squares placed carefully across the earth and numbered in black. "This is Route Hammer." He moved my end along a piece of orange ribbon that was pinned into the dirt. "And this blue ribbon represents the river that runs past Howshal Nalay." I swept along the ribbon over a denser group of wooden blocks. "These red markers are the IED finds in the last three months, so there's quite a few on Hammer." I hovered over red pinheads...

He started describing the plan and used me to direct their attention to different parts of the square...

He told them how they would spread out between block L42 and the green string. Two other platoons would move through them and secure the orange ribbon farther up. Then he swept me over the zones they were most likely to be attacked from... I hovered over where the orange ribbon was crossed by white tape.

I had done it all before: secured sections of the ribbon, dominated areas of dirt, reassured little labels, ambushed red markers and attacked through clusters of wooden blocks. I had destroyed as my end was pushed down hard and twisted into the ground. I'd drawn lines in the sand that were fire-support positions and traced casualty evacuation routes through miniature fields. I was master of the model.'



'My serial number is 6545-01-522... A black marker wrote BA5799 O POS on me and I was placed in the left thigh pocket of BA5799's combat trousers... At 0618 on 15 August, when I was sliding along BA5799's thigh, I was lifted into the sky and turned over. And suddenly I was in the light... I was pulled open by panicked fingers and covered in the thick liquid... I was wound tighter, gripping his thigh... I clung to him as we flew low across the fields and glinting irrigation ditches...'

Object-fragments (I)

On patrol

a boot; a day-sack; a helmet ('My overhanging rim cut his vision as a black horizontal blur and my chinstrap bounced up against his stubble as he pounded onto each stride'); night vision goggles ('My green light reflected off the glassy bulge of his retina'); a radio ('His breathing deepened under the weight of the kit and condensation formed on the gauze of my microphone... I continued to play transmissions in BA5799's ear as the other stations in the network pushed farther up the road'); a bullet ('I flew in a flat arc towards my terminal event'); an aerial photograph ('He took me out and traced his finger across my surface... in the operations room a small blue sticker labelled B30 was moved across a map pinned to the wall. That map was identical to me'); and his identity tags ('I had dropped around your neck and my discs rested on the green canvas stretcher stained with your blood').

Object-fragments (II)

After the blast from the IED and a helicopter evacuation, the medical apparatus:

a tube inserted into his throat at Camp Bastion's trauma centre ('I was part of a system now; I was inside you...'); a surgical saw ('He held me like a weapon, and down at the end of my barrel was my flat stainlesssteel blade... My blade-end cut through the bone, flashing splinters and dust from the thin trench I gouged out'); a plasma bag ('I hung over you... I was empty; my plastic walls had collapsed together and red showed only around my seals. The rest of the blood I'd carried since a young man donated it after a lecture, joking with a mate in the queue, was now in you'); a catheter; a wheelchair; his series of prosthetics ('You pressed your stump into me and we became one for the first time... Slowly you outgrew all my parts and the man switched them over until I only existed as separate components in a cupboard and you'd progressed to a high-activity leg and a carbon-fibre socket').

The IED

'I waited in the blackness. The mud around me dried and solidified in the heat and I was encased in earth. There was a daily rise and fall of temperature, but otherwise nothing. Eventually I felt vibrations — the rhythm of walking — that were faint at first but then converged towards me. A weight pressed down. The dry mud above me flexed, cracked down and pushed my metal strips together. A circuit was created that filled my wires instantly. I was alive.'

Zygote fungus

'I lived in the soil. My spores existed everywhere in the decomposing vegetable matter of the baked earth. Something happened that meant I was suddenly inside you... I was inside your leg, deep among flesh that was torn and churned. I lived there for a week and wanted to take root, but it wasn't easy... I struggled to survive. Except they missed a small haematoma that had formed around a collection of mud in your calf... You degraded and I survived... I made you feverish and feasted unseen on your insides...'

Breathing tube

'A man fed a laryngoscope into your mouth and another lifted your head back. Your tongue was held open and I was pushed into you. Your mouth had dirt it and a blade of grass. I slid past the laryngoscope that directed me into you. I scraped down through you, grazing your voice box, past your glottis, down through your trachea, until I reached the top of your lungs. One of them was smaller and collapsed. A nurse inflated my balloon cuff that puffed out and held me inside you. A Tpiece was firmly rocked onto where I protruded from your mouth and then connected to a mechanical ventilator. I was part of a system now. I was inside you, at the edge of your lungs. Oxygen-rich air pulsed through me and I started breathing for you'

His first prosthetics:

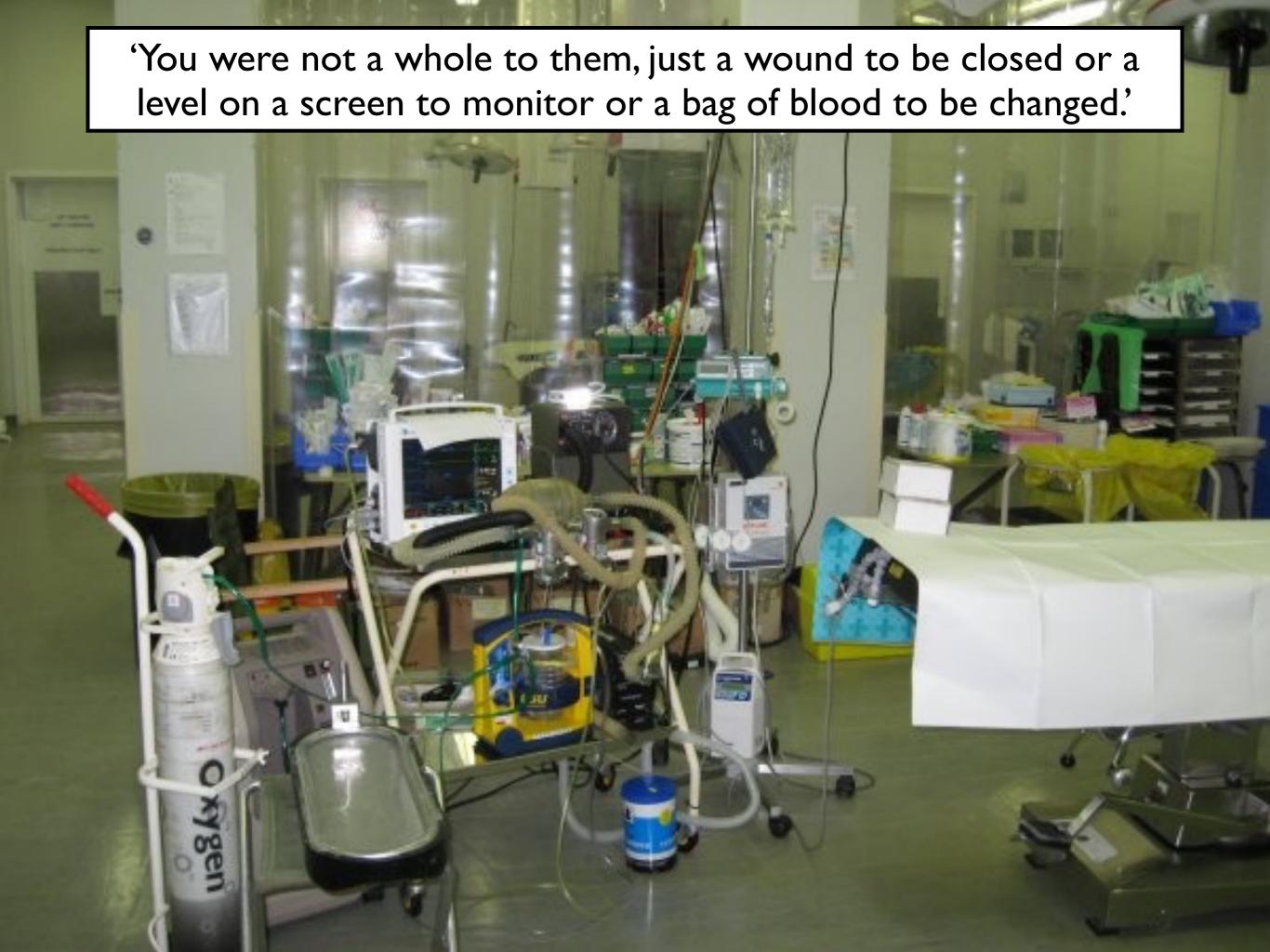
You improved on me but you became thinner. The pressure I exerted on you, and the weight you lost from the energy I used, made your stump shrink. I could no longer support you properly.'

And the new ones:

'Your hand caressed my grey surface and felt around the hydraulic piston under my knee joint... You'd been waiting for me but were nervous about what I might do for you...'



The body as object-space







IED: 18 July 2009: Nad-e-Ali, Helmand

'I never quite knew the full story because obviously I was eyes shut, gritting teeth.... I thought I was conscious for all of it, but then I 0 days later someone told me, "We had to start your heart five times... In hospital you're propped up by drugs, it's quite unreal..."





'In the rehabilitation centre I finish tying my laces. I no longer have to put myself in danger, but I am still dependent on equipment. Now it forms part of my anatomy and gives me independence.'



'The objects took away an element of sentimentality... They're not sentient [but] they move around the world obviously differently to a human... I was trying to get away from me.... [to] all the objects that were in his orbit.'

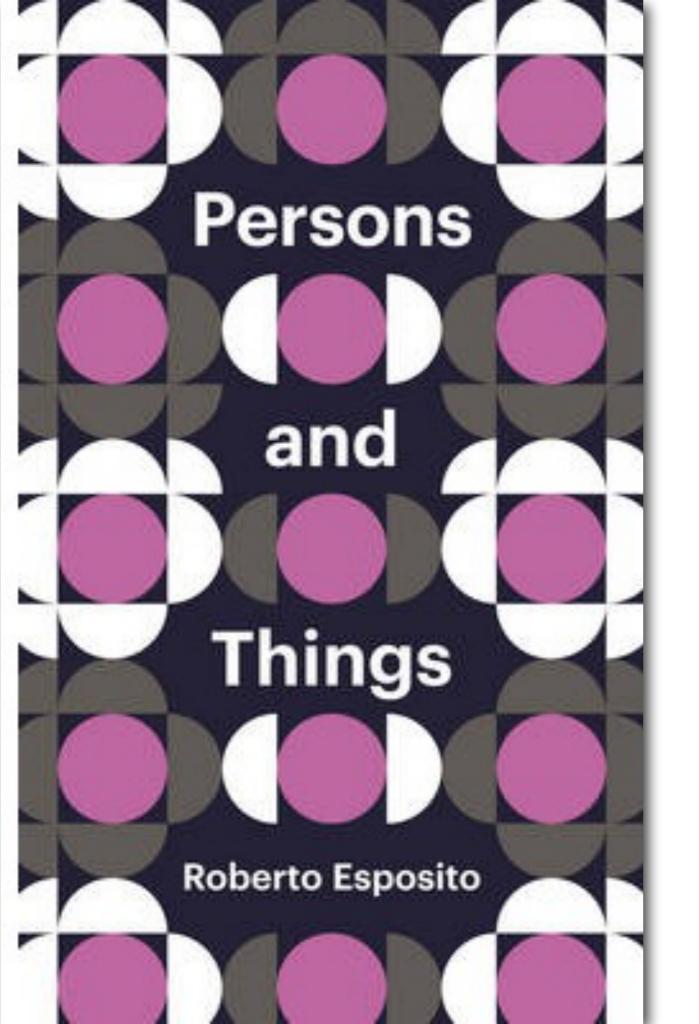
Harry Parker Channel 4 News, 1 March 2016

Object-fragments III

a **drone** providing close air support ('I banked around the area and my sensor zoomed out again and I could see the enemy in relation to the soldiers who needed me'); the **components of the IED** ('They cut open a bag and weighed fertiliser on old mechanical scales. They soaked cloth in petrol. Fumes slipped around the table and one of the men sneezed. They mixed the cloth with the fertiliser and then wrapped this part of me in a plastic sheet and then more tightly with black tape'); the **bicycle** used by the insurgents who constructed and buried it; the **wheelbarrow** used by the father of a dead Afghan to take his body to the patrol base to demand and explanation.

The objects observe, record, act.

Virtually every object-fragment that is proximate to Barnes is impregnated with his body: its feel – its very fleshiness – its sweat, its smell, its touch.



'In the dichotomous model that has long opposed the world of things to the world of persons, during the era of its decline, a crack appears to be showing. The more our technological objects, with the knowhow that has made them serviceable, embody a sort of subjective life, the less we can squash them into an exclusively servile function. At the same time, through the use of biotechnologies, people who at one time appeared as individual monads may now house inside themselves elements that come from other bodies and even inorganic materials. The human body has thus become the flow channel and the operator ... of a relation that is less and less reducible to a binary logic...

'Because the human body does not coincide with the person or the thing, it opens up a perspective that is external to the fracture that one projects on the other.'

ANATOMY OF A SOLDIER



A NOVEL

HARRY PARKER

The planning of later modern war continues to treat the battlespace as an object-space and the soldier as an object whose actions animate military violence.

Those actions are now effected through many more 'objects – both 'the things that they carry' and the things that carry them – that are designed to connect bodies to or insulate them from other bodies.

Those connections require the battlespace and its occupants to be apprehended and sensed through technically mediated cartographies (vision) and corpographies (sound, touch, smell).

Those connections are imperfect and vulnerable: this is not seamless network war.

The execution of military violence entails the activation, rupture and repair of those connections — a discontinuous process of assembly, disassembly and reassembly that includes the body.

'Bodiless war' and the liveliness and deadliness of things

"...what connects human beings and things is the body.

Outside the connection that the body ensures, the two
elements are destined to detach from each other in a way
that necessarily makes one subordinate to the other. Only
from the point of view of the body do they rediscover the
original link that was severed by the great division: "the body
unites us directly with the things through its own
ontogenesis," since things are nothing but "the prolongation
of my body and my body is the prolongation of the world."

Roberto Esposito, Persons and Things