

Extract from:

**Tank; the Progress of a Monstrous War Machine,**

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2. Fort Knox: Cybertanks and the Army After Next – from chapter 20

To visit the Armor Centre in Fort Knox, you fly to Louisville and then follow the highway past thin, road-stretched towns you can drive through without ever reaching. This is dry Bible country with a mall or two, a few stranded-looking Bavarian restaurants and a dismal brick bungalow called the Endtime House of Prayer Church. It's a land where the radio pumps out country songs that rhyme 'negligee' with 'walk away', while tele-evangelists rhapsodize about 'Going all the way with Jesus', and tank soldiers sit behind their wire, reading magazines with names like Full Strut and looking forward to the weekend when they will hunt wild turkeys in the Kentucky woods.

There is nothing to match the federal gold depository, which stands on ground rented from the military, just off Bullion Boulevard and only a narrow golf course away from America's tanks. The first military notice at the main entrance notifies drivers that, under federal law, it is illegal to carry fire arms beyond this point. Immediately beyond that stand two massive tanks, mounted on plinths on each side of the road, and adorned with letters welcoming you to the US Army Armor Centre – 'Home of Cavalry and Armor'.

The focus never slips within this 170 square mile installation. The post newspaper is called Inside the Turret. Bumper stickers on civilian cars say 'Drive Defensively. Drive a Tank' and senior tank officers punctuate their deliberations with little phrases like 'Boom Boom' and express appropriate personal philosophies too: 'If you shoot straight with people, they'll probably shoot straight with you'.

The Commanding General, Major General Lon E. Maggart, had even named his meeting room, 'The Tank'. It was a small room, with a table, low slung chairs and the usual trophies and memorabilia on the walls – pictures and drawings from the glorious past, the swagger stick of the captured commander of Iraq's 110th Brigade, and a slightly sultry photograph of Princess Diana – an icon of alliance presented by the British Liaison Officer, and displayed by more than one senior officer at Fort Knox.

General Maggart was, in Sullivan's phrase, 'first through the wire' into Iraq during Desert Storm. As commander of the First Brigade of 1st Mechanized Infantry Division – 'The Big Red One' – he had also taken part in a carefully rehearsed manoeuvre new to tank warfare. Having attached teeth-like ploughs to their Abrams M1A1s, his men had driven along the Iraqi trenches, one tank on either side and each pair preceded by a Bradley which straddled the 3.5 ft wide trench and fired into the Iraqi soldiers as the sand was pressed down on them. The First Division buried an estimated 650 Iraqi conscripts alive. Designed to 'Terrorize' the Iraqis into surrendering, the manoeuvre was later reported as contrary to US Army doctrine, which calls for troops to leave their armoured vehicles to clear out trenches.

Shortly after the war, Maggart was reported as observing that, though it sounded 'pretty nasty', burying the Iraqis that way had been better than endangering American troops. The International Red Cross raised questions and the Iraqis demanded that these 'repugnant' war crimes be investigated by the UN. When I asked Maggart about these objections, he dismissed them with a few words. 'Much ado about nothing', he said tersely, explaining that the Iraqis had been warned, and adding that if being crushed in a collapsing trench is bad, 'What about being burned in a tank?'

By naming his meeting room 'The Tank' Maggart had designated it a place of close team work, mentoring and leader-development. He had also declared it a future-oriented 'think tank' dedicated to breaking through into the digitized future. Maggart knew that, as an intrinsically conservative organisation, the US Army had in the past spent too long learning to fight the last war; and it was here that he and his battle-tested senior staff – the 'heavy hitters' as he calls them – gathered in order to suspend convention and, in that most characteristic of Force XXI phrases, 'think outside the box'.

Like the training protocol that J. F. C. Fuller had devised for the Royal Tank Corps at Bermicourt during the First World War, the point of this new dispensation was to pitch intellect against habit, and project yourself far into the future. Maggart's preferred destination was the year 2015, which put him neatly between Force XXI and a shadowy formation known as 'the Army after Next'. Having propelled themselves forward to that year, his officers were encouraged to look back at the twentieth century, primitive, cramped and prehistoric as it will already seem, and ask themselves how do we get here from there?

Such is the new kind of officer at Fort Knox. The word 'visionary' is frequently used, and not just by those who excuse themselves from the new climate, by claiming to be 'plain earthy' and more concerned with the nuts and bolts of basic training. The tank officer of the digital age is a man of 'concepts', a paradigm-shifter whose kit includes a theory of history that would make the most grandiose of Hegelian philosophers seem cramped and unimaginative.

These men reach back into the mists of time to talk about the still evolving 'dialectic of the arrow and the shield'. They will expound enthusiastically about Heinz Guderian's achievements, and pay tribute, far more handsomely than their colleagues in the British army, to Basil Liddell Hart, J. F. C. Fuller and Percy Hobart, the prewar British 'apostles of mobility' who informed Guderian's thinking.

They will cite The Communist Manifesto to suggest the improvements that can follow when workers apply critical thinking to their own enterprises; and they will also break off in mid-flight, as General Maggart does, to announce himself convinced that 'digitization will change the doctrinal base' or to suggest that 'Third Wave warfare' is only really suited to the armies of America and the free world (It will push initiative and decision way down the line, in a manner that could not be tolerated by despotic or totalitarian regimes). As for the undeniable possibility that in the world of 'free silicon', some of the technology of digitized warfare may be acquired by rogue states, Maggart was confident that 'nobody will be able to match our training, even if they get the technology . . .'

The method being used at Fort Knox was simple enough, as Maggart explained. First you develop 'a concept, a theoretical or intellectual base'. Then you experiment with it, first 'using models and simulations', and later 'under field conditions with real men and equipment'. After that, you produce 'a piece of doctrine or doctrinal literature'. As part of his attempt to establish 'the intellectual basis' of this new situation, Maggart had set up an Advanced Warfighting Working Group, an unofficial army gathering that retains close contacts with the Armor Center. The AWWG was joined by a variety of out-of-the-box thinkers – military people, technology experts and also Pamela Jayne Smith of 'MYTHWORKS', a consultancy that normally specialises in providing 'mythic tools' and 'archepaths' for Hollywood actors and screenwriters, and advises would-be 'Alpha-Babes' how to become 'women of mythic Significance'. Maggart had met Smith in 1994, when her company was involved in filming digital army exercises in California, and he brought this exponent of 'applied mythology' into the AWWG to help promote 'divergent

thinking' about the instantaneous interconnectivity offered by digitization, and to produce a new angle on the problem of 'form' and resistance to change.

In her presentations to the AWWG Pamela Jaye Smith also introduced certain principles of the 'Ancient Wisdom', likening the connectivity of the digitized world to the 'net of gems' in oriental philosophy, and outlining an archetypal context for the personality patterns that could be found among present-day warriors. Concerned to 'realign our modern warfighters to their noble heritage', she started in December 1995 with a talk called 'WISE HEART, SHARP SWORD: Warriors, Weapons, and the Battlespace of Tomorrow', in which she announced that 'the world as we know it is falling apart', and then teased out the positive implications of that apocalyptic fact.

She also theorized the 'battle space blob' (a 'graphic interpretation of how the entities in a battle space form and shape themselves around intent and can be altered by same'). Having linked digital technology to a new and still evolving kind of 'group consciousness', Smith traced war back to the Heavens with the help of Lucifer and the Dead Sea Scrolls, and suggested that conflict enters the world through the tension between the Solar Plexus and the Astral Field. Her description of the 'Warrior Path' drew heavily on notions such as karma, Mission ('Protect the Weak and the Innocent', which was not to say the lazy and the stupid), chivalric love, and warrior bonding, the latter-being defined as a higher form of love. Her examples of 'the Worthy Opponent' included Patton and Rommel, but also Darth Vader and Luke Skywalker; and she probed the possibility of 'transferring battle intensity to every day life' before suggesting the future warrior would be like a magician, turning spirit into matter with sudden force, and also battling on Mental Planes for the cause of Divine Law and Order.

Whether or not he ever derived new doctrine from this redefinition of the 'intellectual base' of warfare, Maggart was sufficiently impressed to issue a testimonial describing Smith as 'the George S. Patton of modern military esoteric thinking', adding that 'her thoughtful commentary on leading and leadership is incisive, brilliant and strikes like a spear in the heart of those who claim to be leaders but who remain intellectually bound to age-old concepts which no longer apply to the information age world of high technology military operations.'

J. F. C. Fuller may have belonged to the age of the motorized force rather than the 'distributed-network' model made possible by radio, but he would have understood Maggart's commendation. So too, perhaps, would Aleister Crowley – even though he apparently never considered the possibility, proposed by Pamela Jaye Smith, that a weapon-system like a tank might be an 'incredible entity', or, to use the Sanskrit word, a deva or 'shining one'; and that as such it might be further empowered by the application of sacred geometry, sound, markings and symbols of precisely the sort that 'Magick' had gone in for.

Maggart's senior officials certainly seem to have got the point. As 'notionalizing' futurists, they were likely to pick up a standard piece of military equipment at any moment, and twist it into the strangest of shapes. Take the minefield. For most residents of the late twentieth century, a mine is a dumb explosive device that may be stuck in the ground and then all too easily forgotten until it blows the foot off a passing child. But this is not how it looked to a future-oriented, out of the box, Army after Next Major like William H. Parry III.

As Chief of the Battlefield Synchronization Division at Fort Knox, Parry gazed out from his hypothetical observation post in the future and saw the minefield as a discriminating and highly intelligent instrument. 'We played around with that', he said. 'We played around with it in simulation only. It was not a fielded capability. We gave the mines the capability of being an intelligence collector, which is in fact what these intelligent mines will be able to do. They will

have settings on them that will allow them to be intelligence collectors and report information back to you'. And what might that information be? Major Parry ventured that the message might go as follows: 'I'm a mine, and there is something with the following seismic activity that is occurring out here that leads me to believe, based upon the artificial intelligence circuitry built into me, that it's a T-80 tank. Do you wish for me to fire a top attack munition and kill that tank, or just sit here in a passive mode and report that to you?' He added, almost as an afterthought, that the smart minefield will also 'have the capability' of being switched on and off: 'I put it out there, I turn it on. All of a sudden, I turn the minefield off and I drive through the damn thing'.

Or take the business of 'Focused Dispatch', the subject of an experimental Advanced Warfighting Exercise conducted by the Armor Centre's Mounted Battle Space Battle Lab. Parry explained the point of this experiment as follows: 'I've got a digital tank and I've got a digital artillery piece, and the way that I currently do a call for fire to the artillery, to the gunners, is that I've got the guy out here and he's sitting on a piece of dominating terrain, or whatever, and he's looking down into a kill zone. And he sees a target and he says that meets the commander's intent for me using indirect fire and so on. What he does is, this observer calls his company commander on the radio and says 'I've got ten tanks at this grid'. The platoon leader calls his company commander on the radio and says "I've got ten tanks at this grid". The company commander says "OK I'm going to shoot artillery at this in accordance with my current plan. Fire Support Officer. Fire artillery at that target". The fire support officer then sends that back to the field artillery battalion fire direction centre. And he says "I've got ten tanks at this grid", and they compute the mission based upon elevation, altitude, deflection, gun target line, fuse, shell and some other stuff, which is technical stuff to them. That is then sent to a firing battery operations centre, which then passes it off to a platoon that is physically going to do the shooting. The guns are laid, the rounds come out'. The best artillery guys, from start to finish, will have a round in the air in 3 to 5 minutes, and that delay, said Parry, is why no army has ever been much good at firing artillery at moving targets.

All this would change, however, with the horizontal integration allowed by digitization. 'Well wait a minute, you know, if I've got a tank with a digital system and an artillery piece with a digital system, then why do I need to fiddle fart around with all these intermediate steps? Why can't I go from this guy to this guy?' The answer, said Parry, is that he can – although there were still some software limitations, including one that made it impossible to disentangle multiple sightings of the same target – so ten tanks could quickly become twenty, thirty, forty, fifty and sixty as the information poured in.

Colonel Pat Ritter was among the most intellectual of Maggart's tankers. He has two degrees in English literature: 'I can think of no better background for this kind of work than the study of humanity', he said, before launching into an account of the transformations digitization is bringing to the military's concept of battle space. Starting in ancient times with the closely massed Macedonian phalanxes and the less tightly packed squares of the Roman legions, he then marched up through the Napoleonic wars, the American Civil War and the Somme to demonstrate the 'empty battlefield syndrome', in which increases in the range and accuracy of weaponry makes battlespace progressively more lethal and empty at the same time: 'the more lethal the battlefield gets, the more empty it gets, the more dispersion you get . . .'

Digitization was set to continue this transformation. In future, battle space would be a non-linear, partly electro-magnetic domain, which no longer demanded a massing of combat power at 'the Forward Line of Troops'. Operations would be decentralised and distributed throughout the depth of battlespace, and a new emphasis would fall on the idea of Simultaneity. With digitization, it became possible to plan, coordinate and execute synchronised actions while

remaining dispersed – so you could get a massing of effects without taking the risk of massing forces for a single concentrated attack. Future strategy would be of a 'holistic' kind – co-ordinated across army, navy and airforce, and full of pre-emptive strikes that 'defeat enemy attacks even before they occur'. The enemy would find themselves in a situation like that faced by a former Iraqi officer of the Gulf War, who had since visited the Armor Centre to describe how his tanks had started blowing up all around him before he even knew he was under attack.

Desert Storm is both a model and inspiration to the prophets of digitization, who proclaim it as the first time an Information Age force met a force trained in the Cold War tactics of the Soviet Union. But the soldiers at Fort Knox wore it with special pride – the 100 hour engagement that had vindicated years of talk and preparation, leaving them and their machines 'tried and tested', and also saving the Armor Center from reforming politicians who might otherwise have sought to abolish or 'restructure' it.

Ritter had commanded the 1st Battalion of the Third Army in Desert Storm, and the memory served as the anchor of his recitation. Indeed, there came a point where this hermeneut of future warfare interrupted his futuristic monologue and got up to talk about a picture hanging on his office wall. He looked like any other man walking across his office towards a photograph, but he was actually wading through the thermal imaging system and digitized screens towards a non-virtual world that seemed as obscure as the dark side of the moon. The photograph offered a glimpse of things that happen beyond the brightly simulated virtualities of techno-Christendom. It revealed a primitive place hardware impacts on wetware, and where death is not just the going down of a simulator's lights. The picture showed Ritter's own kill – an Iraqi armoured vehicle, reduced to twisted hunks of metal in the sand, with triumphant American soldiers looking back at the camera.