Twitter Thread by **Dr Matthew Ford**

Dr Matthew Ford

@warmatters



A thread on S.L.A. Marshall & the Ratio of Fire.

Marshall is controversial.

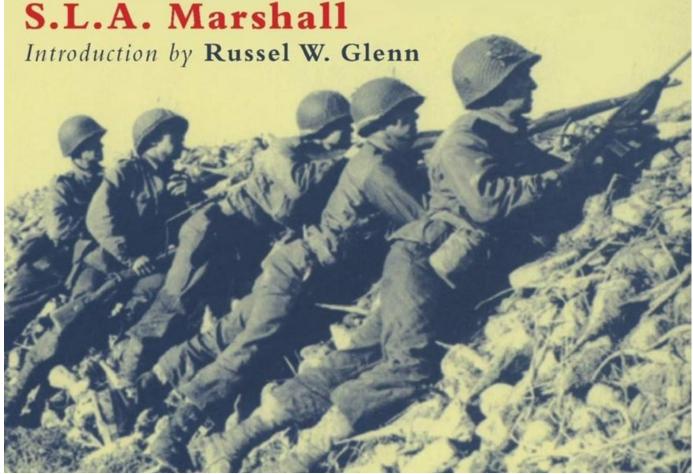
His central claim is that only 25% of soldiers in the line fired their weapons.

Several military historians have disputed this.

My own views on Marshall are framed by my work on Small Arms.

MEN AGAINST FIRE

The Problem of Battle Command



If you've ever had anything to do with Knowledge Management then you'll know that Marshall gave us the After Action Review.

This method facilitated group discussion with a view to identifying what happened and how to do better.

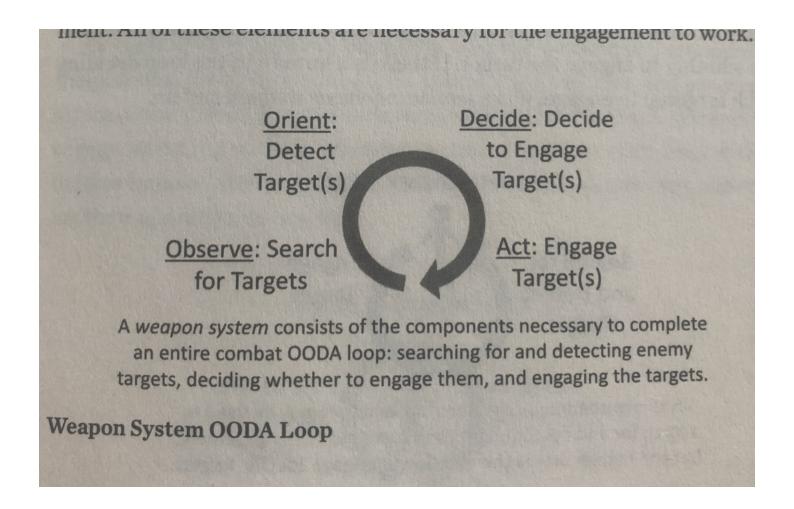
It has shaped business & military practices.

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In Marshall's case this created a feedback loop between inputs and outputs in which the soldier's (& not just the commander's) experience was also put at the centre of winning the battle [more on tech & OODA loops later].

Source: Army of None <a>@paul_scharre

3/



But the extent to which he systematically applied this new method has been repeatedly criticised.

By Roger Spiller here:

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https://t.co/TdLG8GITzy

By Harold P. "Bud" Leinbaugh here:

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By John Chambers here:

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https://t.co/phWxSVmmGV

And by @RobertEngen here (& repeatedly over several volumes):

7a/

https://t.co/FOoD9s95UO

including this:

7b/

https://t.co/roRNxw9RGF

Chapter 2 is very special to me. Before he passed away, Prof Roger Spiller allowed us to use the notes from his QueensCIDP presentation to flesh out a chapter on SLA Marshall. Allan and I took up the task. Roger never got to see it, but I hope we did his work justice. pic.twitter.com/U5Jk5UNGeR

- Robert C. Engen (@RobertEngen) December 30, 2020

Obvs this Ratio of Fire claim is a hot button.

It implies something about the willingness of humans to kill.

For democrats it implies that humans are peace loving and have to be trained to overcome their willingness to take life.

8/

It implies that soldiers who do kill are warriors.

This in turn feeds discussions around military masculinities, martial cultures and unit cohesion.

Source: Richard Holmes Firing Line.

tives probably applies in both cases.

My own deductions from the Falklands War are less valid than those of Marshall for the Second World War and Korea, Little for Korea, and Moskos for Vietnam, primarily because I interviewed my sample of soldiers several weeks after their experience of battle, when the skin of the accepted version of events was solidifying fast. Yet some useful conclusions did emerge. Firstly, the judgment of both parachute battalions on Marshall's statement that most infantrymen fail to fire in combat was epitomised by Chris Keeble's lapidary statement: 'Rubbish.' 'You had to fire,' explained a member of 2 Para, 'because you wanted to be part of that aggression, and firing was how you showed it.' The norms of the parachute battalions demanded aggression, and failing to fire came dangerously close to 'bottling out'. One soldier wished that men had

325

And it has inspired academics to investigate the pleasure that might be inspired in killing.

10/

https://t.co/TCLIF94Zyk

More recently, it inspired Lt Col. Grossman to develop training programmes designed to promote "killology".

The use of this training by US police forces was noted by several people commentating on the BLM protests last summer.

11/

https://t.co/99oPAF4yZh

Putting body cameras on cops & making them sit through anti-racism seminars doesn't work, b/c policing has increasingly adopted a culture of military violence.

I touched on this in Arms, in discussing this execrable book: On Combat pic.twitter.com/wbd4jB7z3N

— A.J. Somerset (@ajsomerset) June 8, 2020

What it fails to do, however, is foreground the socio-technical relationship between the soldier and their weapon.

For someone like me, who approaches this issue from the perspective of technology rather than (just) society, much of this

is highly problematic.				
12/				
Why is this a problem?				
Because weapons are treated as independent variables rather than an essential feature of the human-machine assemblage (yes, I'm getting all Science & Technology Studies here).				
I give an example of my thinking in this thread				
13/ https://t.co/f1rqk05d6v				
A thread outlining my thoughts on Second World War tactics.				
For me tactics only makes sense when looked at as a socio-technical system. This thread reflects that way of thinking.				
Again I'll be using British examples but there are some US crossovers later on.				
1/ pic.twitter.com/RKIzj67rj7				
— Dr Matthew Ford (@warmatters) <u>December 29, 2020</u>				
The result is a tendency to close down discussions that consider the features of the weapon and how this interfaces at micro-level (& more widely as part of a weapon ecosystem) with the behaviours of the soldier.				
14/				
And the result is a lot of commentary on Marshall that makes uncritical and poorly framed assumptions about the state engineering challenges posed by small arms.				
15/				
In this respect, the first thing to note is that if soldiers do shoot then they rarely shoot straight.				
@gravelbelly22 offers invaluable insights into this here:				
https://t.co/QXGPBO1Fpa				
16/				
Top thread that offers real insights as to why soldiers can't shoot straight.				
Not my own but something I'll be exploring further.				

9/https://t.co/0MObSfQDm7

— Dr Matthew Ford (@warmatters) December 30, 2020

This is a very nuanced socio-technical problem (& Martin explains it very well) but it is the "dirty secret" that engineers UNDERSTAND.

Weapon mindedness takes time & effort. Practical shooting over marksmanship is a difficult to acquire skill.

17/

As an aside, I posed this point to CAP-GM & an officer in the Rifles in the Pillared Hall in MB in 2009 expecting that my provocation would result in my being thrown out.

To my surprise they bought me a coffee & pushed me to explain the history behind my assertion....

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Now of course training and handling can improve understanding.

But this takes effort and time is rarely available to learn and practice.

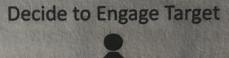
The question for engineers, then, is how to improve effectiveness if the soldier is the weakest link in the loop?

19/

The answer is to take the soldier out of the loop...

Because an engineer can design and build something that more systematically and reliably solves battlefied challenges than if commanders were to rely on soldiers alone.

Source: Army of None <a>@paul_scharre



Search for and Detect Target



Engage Target

In semiautonomous weapons, automation may be used to search for and detect targets and carry out the engagement, but the human makes the decision to engage specific targets.

Semiautonomous Weapon System (human in the loop)

I am not claiming that taking the soldier out of the loop doesn't create different problems.

But for me, Marshall has had a huge influence.

I cannot tell you that his findings were accurate but he made it possible for engineers to put forward previously unacceptable ideas.

21/

In this respect his thinking fundamentally shaped small arms development after the war because Marshall sloganised a problem engineers had already identified:

That soldiers are not always experts on the weapons they use

Source: MOD Pattern Room 200 Small Arms General Box 1

openion on one on or lower formation.

B. The value of user opinion.

This brings us logically to the question of what value is to be placed on user opinion. User opinion without an adequate background of all-round knowledge, is apt to be misleading. In connection with this aspect the following paper was prepared in June 1942 by D.G. of A. for Dr. Guy, Chairman of the Committee on Armament Development.

"WEAPON DEVELOPMENT IN RELATION TO THE USER.

The value of user co-operation in technical development depends on the qualifications of the user. These qualifications should include knowledge of the basic principles governing the design of the instruments he uses and an extensive practical experience in testing their performance. The value of all user opinion is thus dependent on the informed judgment of the individual who offers it, and not on a majority consensus of opinion. If we had accepted majority opinion on scientific matters, it would still be axiomatic that the Sun revolves round a flat Earth. Napoleon's dictum about Alexander the Great's mules, who served through twenty-three campaigns but remained mules, is also appropriate to this point.

2. There is no such thing as "User policy" or "User opinion" in the singular, though they are frequently quoted as a valuable and insufficiently appreciated asset.

A long train journey to Detroit with the chief excutives of the Ford, Chrysler and G.M. Corporations gave me an opportunity to test the extent of their use of "User opinion" in producing their annual new models.