



# *The Psychology of Teaching tactics*

*Pedagogy and wargaming*

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## Teaching tactics

- USMC: 'We teach good judgement'
- Indicators of good practice
  - Wargaming *ticks* a lot of these boxes
- Tactics as a cognitive skill
  - Requires reasoning



## *Indicators*

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- Judgement
  - Shaped and honed

$$\sum \begin{matrix} \textit{Cognitive Engagement} \\ + \\ \textit{Feedback} \end{matrix}$$

- Speed
  - Verify intuitive decision-making
- Guile
  - Break with norms and assumptions

## *Pedagogy (condensed summary)*

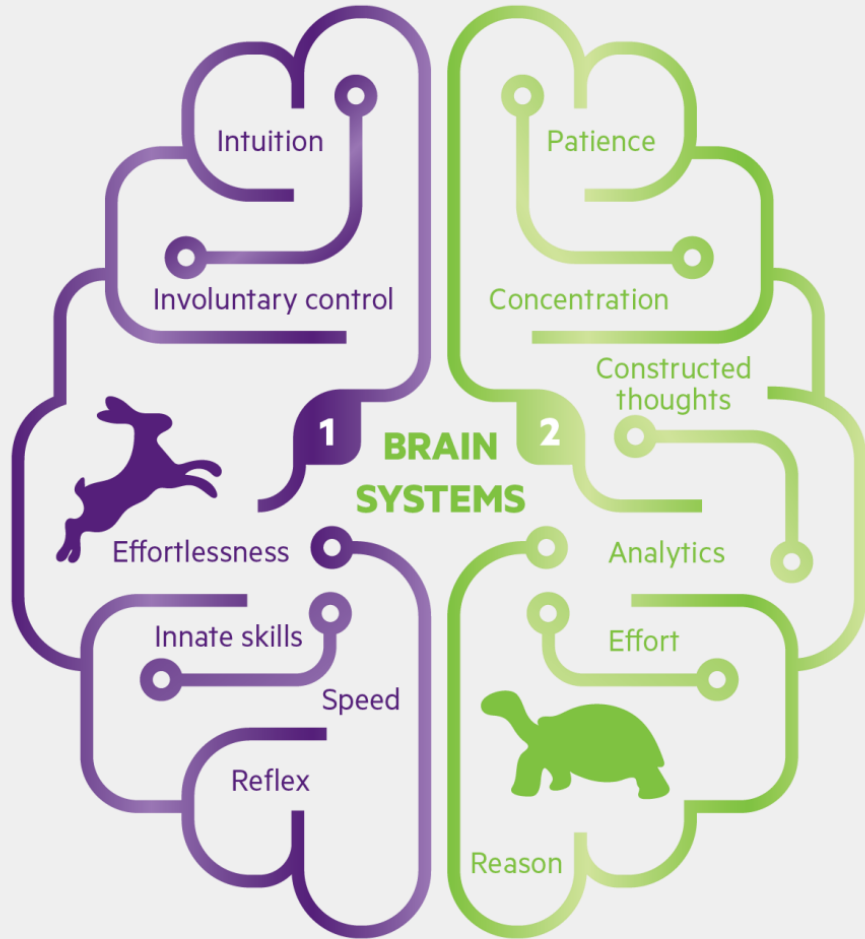
- Students teach themselves
  - Construct their own understanding
- Feedback
- Teachers must attend to what students are thinking
  - Design tasks that help students internalise knowledge
  - Enable cognitive engagement



*When teachers see  
learning through the  
eyes of the student;  
When students see  
themselves as their  
own teachers*







## *Learning: Cognitive processes*

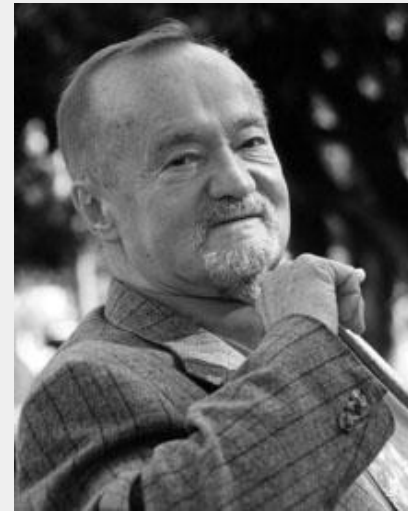
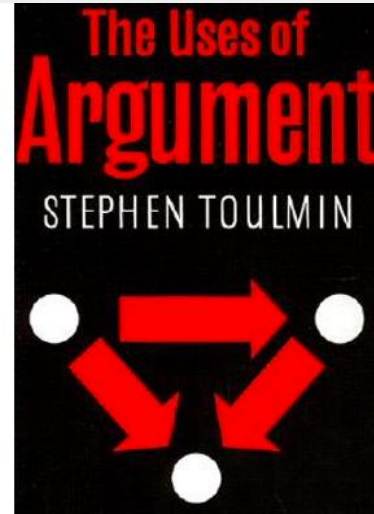
- Learning a (cognitive) skill is to transform system 2 processes into system 1 processes
- System 2 = Cognitive engagement = 'hurting thinking'
- Time required for this is subjective although there are averages, e.g.:
  - Driver's license
  - Shooting skills

# Judgement



$$\sum \begin{matrix} \text{Cognitive Engagement} \\ + \\ \text{Feedback} \end{matrix}$$

- Cognitive engagement
  - (Socratic) questioning
  - Argumentation
- Feedback
  - Discussion
  - Visualisation



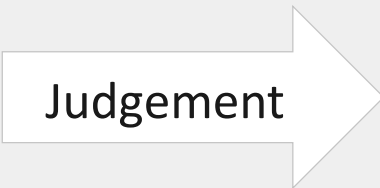
# *Judgement*

## ***Shape***

- Analysis of:
  - History
  - Experiences
  - Cases
  - ...



Repetition



- Awareness/  
visualisation:
- Argumentation
  - Discussion
  - Reflection

## ***Hone***

- Apply judgement through:
  - Tactical problems
  - Field exercises
  - TDGs
  - Wargames

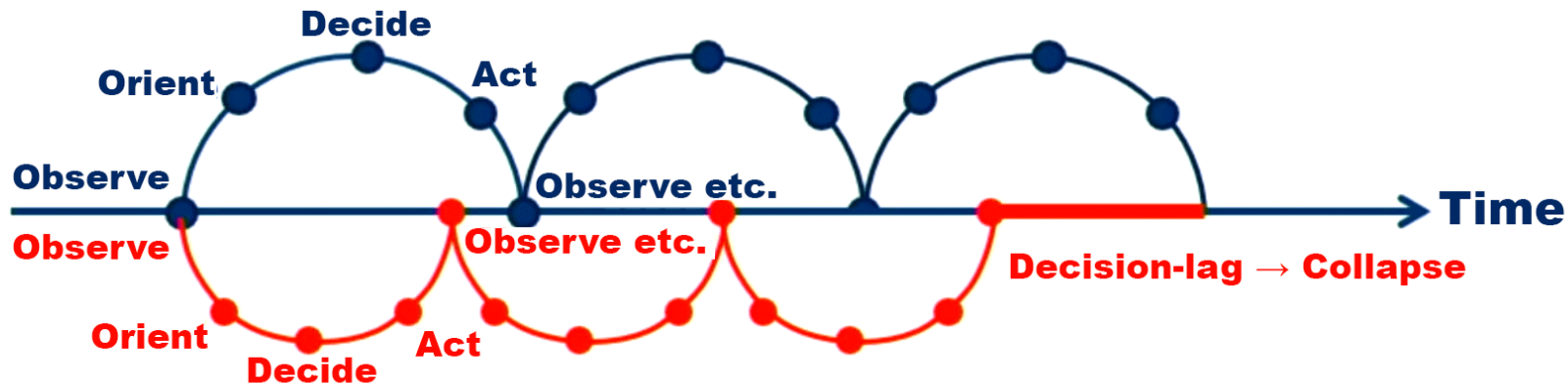


Repetition

## *Maneuver Warfare*

- ❑ Speed in decision-making is essential

- Current doctrine for
  - USMC and Norwegian Army
  - NATO and British Army as the manoeuvrist approach





## *Decision-making: Cognitive processes*

- Intuitive decisions depend on experience
  - Heuristics = mental shortcuts
- Bias and systematic errors, e.g.
  - Confirmation bias
  - Cognitive ease
- Activate system 2
  - “What did you not choose?”
  - Verify intuitive solution

### SYSTEM 1

Intuition & instinct

95%

Unconscious  
Fast  
Associative  
Automatic pilot

### SYSTEM 2

Rational thinking

5%

Takes effort  
Slow  
Logical  
Lazy  
Indecisive

Source: Daniel Kahneman



## Force vs. Guile



### STRATEGICUM

19

ἤθησεν τὸ τόξον τεταμένον ἐν  
τῷ ἰδίῳ θηκαρίῳ, εἰάν πλα-  
τύ ἐστιν, ἢ ἐν ἄλλῳ ἡμισθηκα-  
ρίῳ ὅπῃ τῷ γνωμένῳ, καὶ  
ὀπιλαμβάνεσθαι καὶ ἔκονταίς  
ἐκ τῆς νώτω ἀναβασαίζομένῃ.  
Ἐἰ τὸ ἔχεν μὲν τὸ τόξον ἐν τῷ  
θηκαρίῳ, κρατεῖν ἢ τὸ κοινά-  
ριον, καὶ συντόμως ἀποτίθεσθαι  
αὐτὸ ἐν τῷ νώτῳ, ὀπιλαμβά-  
νεσθαι ἢ ἰσχύει. Ταῦτα ἢ κα-  
λόν ἐστι καὶ ἐν τῷ ὁδοπορεῖν ἰσ-  
χυραίνεσθαι ἐν τῇ ἰδίᾳ χώρᾳ ὀπι-  
τηδεύειν ἐπάνω τῶν ἵππων ποι-  
εῖν, ἐκ τῆς γὰρ καὶ ἡ ὁδὸς ἀνεμ-  
ποδίως διανύεται, καὶ οἱ ἵπ-  
ποι ἔσονται συντρέποντες.

item arcum intentum  
confestim reponant in  
thecam, si lata satis fue-  
rit, vel in aliā thecā di-  
midiatā, ad hoc com-  
mode faciā, & in manus  
sumant hastam, quam  
gestant in tergo, ut arcu  
intentū habeant in the-  
ca, & regere possint ha-  
stam. Celeriterque rur-  
sum hanc reponant in  
tergum, & refumant ar-  
cum. Hæc vero utile  
fuerit facere milites et-  
iam in itinere per  
proprias terras, in-  
fidentes equis suis.  
Hoc enim modo &  
iter erit expeditius,  
& equi minus atteren-  
tur.

## *Force vs. Guile*

### ❑ Raise awareness of self imposed restrictions

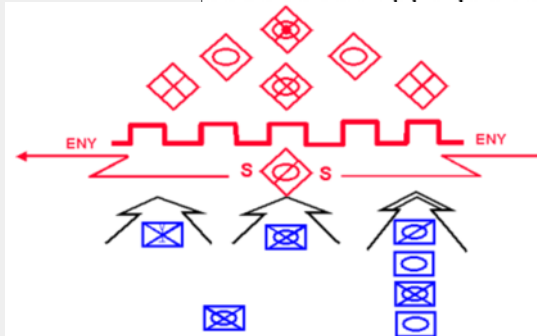
- Society/environment that fosters rule based thinking
- Doctrine → Dogma
- Break norms/assumptions
  - Within international law



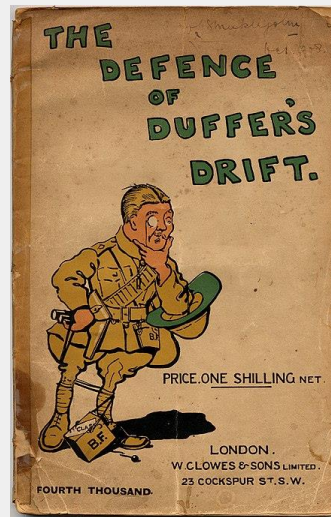
### DEVELOPING AN AMBUSH MENTALITY

Perhaps the most common tactical tool for gaining advantage is the ambush. All Marines are familiar with an ambush as a type of combat patrol.<sup>14</sup> In maneuver warfare, ambush takes on a new meaning, and the development of the ambush mentality is a key element in maneuver warfare tactics.

This is probably not new to most of us. The ambush mentality in sports. In







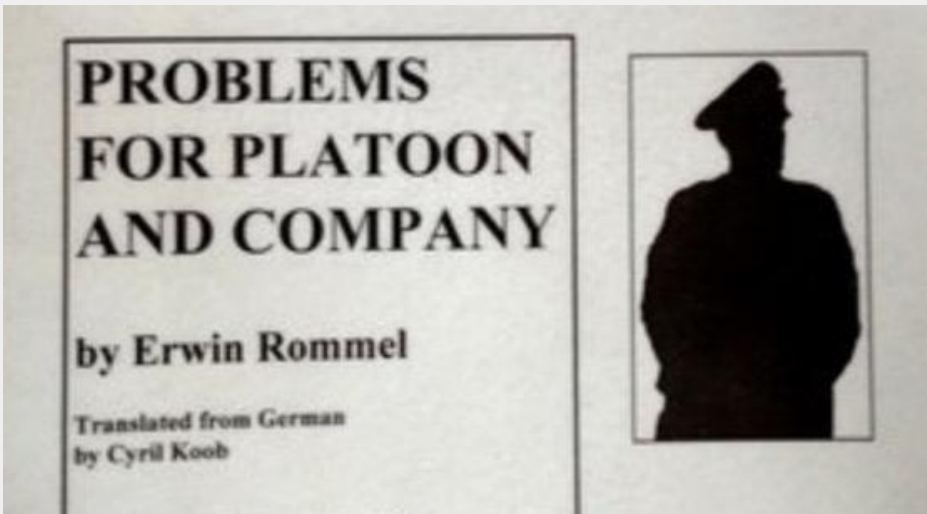
## Historical precedence

### Tasks:

- 1887-1894: Moltke his general staff
- 1894: French translation and imitation
- 1934: Rommels tactical problems
- 1939: Infantry in battle (US Army)
- 1994: Mastering Tactics (USMC)

### 'Dreams':

- 1888: Ein Sommernachstraum
- 1888: Ein Wintertagswirklichkeit
- 1904: Defense of Duffer's Drift
- 1922: Booby's Bluffs
- 1993: Defense of Hill 781
- 1995: Infantry Combat (*Choose Your Own Adventure*)
- 2001: Defense of Duffer's Drift's BSA
- 2009: Defense of Jisr al-Dorea



## Wargaming

✓ Judgement

– Shape and hone

$$\sum \begin{matrix} \text{Cognitive Engagement} \\ + \\ \text{Feedback} \end{matrix}$$

✓ Speed

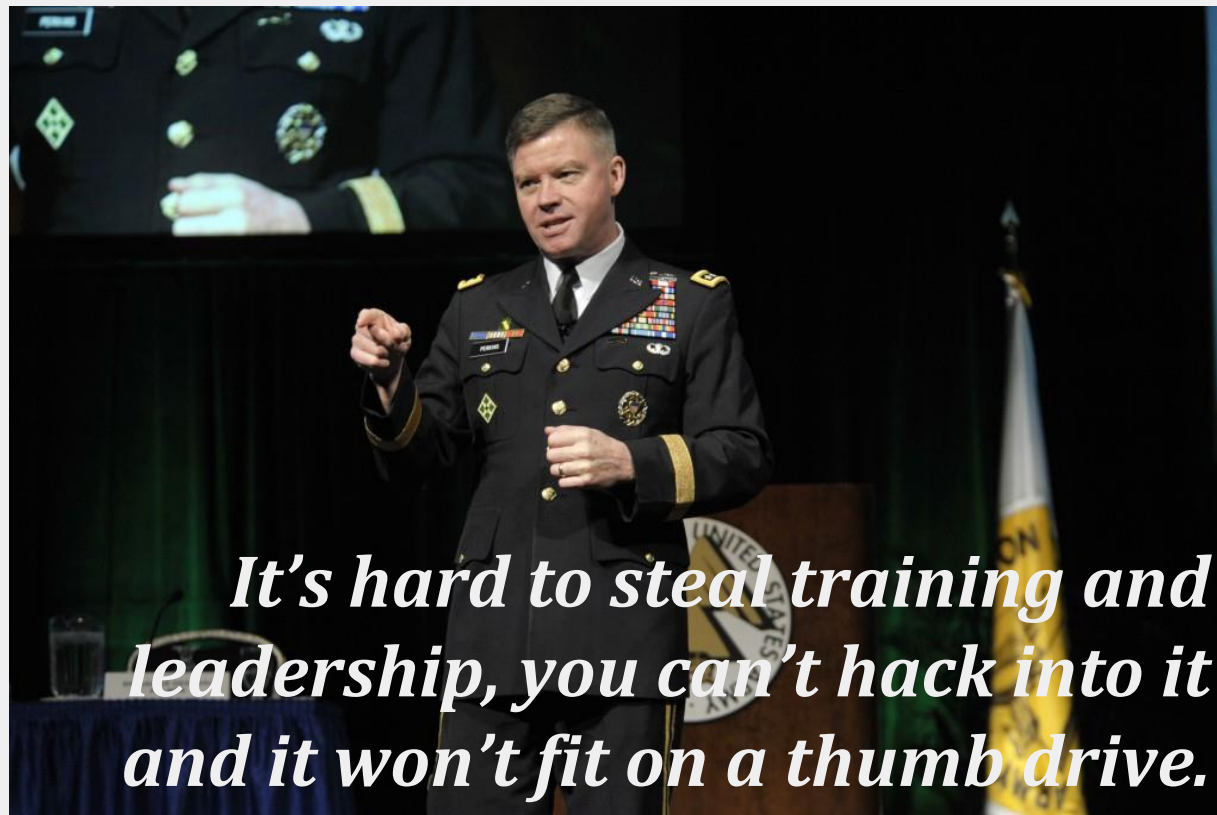
– Verify intuitive decision-making

✓ Guile

– Break with norms and assumptions



## *Relevance today*



*It's hard to steal training and leadership, you can't hack into it and it won't fit on a thumb drive.*





*Thank you for your attention*

*«If, in addition to experienced judgement,  
a special mental quality is required, it  
would be cunning or shrewdness.»  
- Clausewitz*