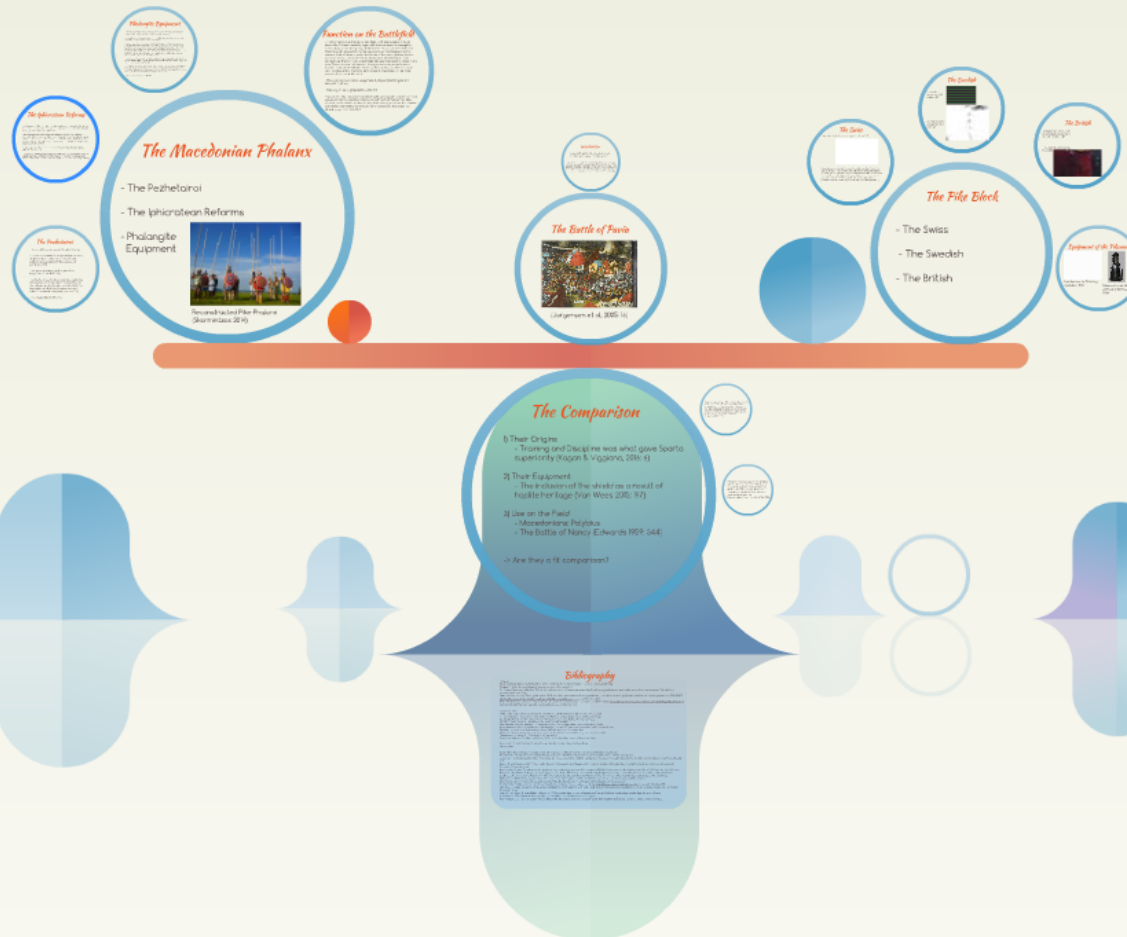


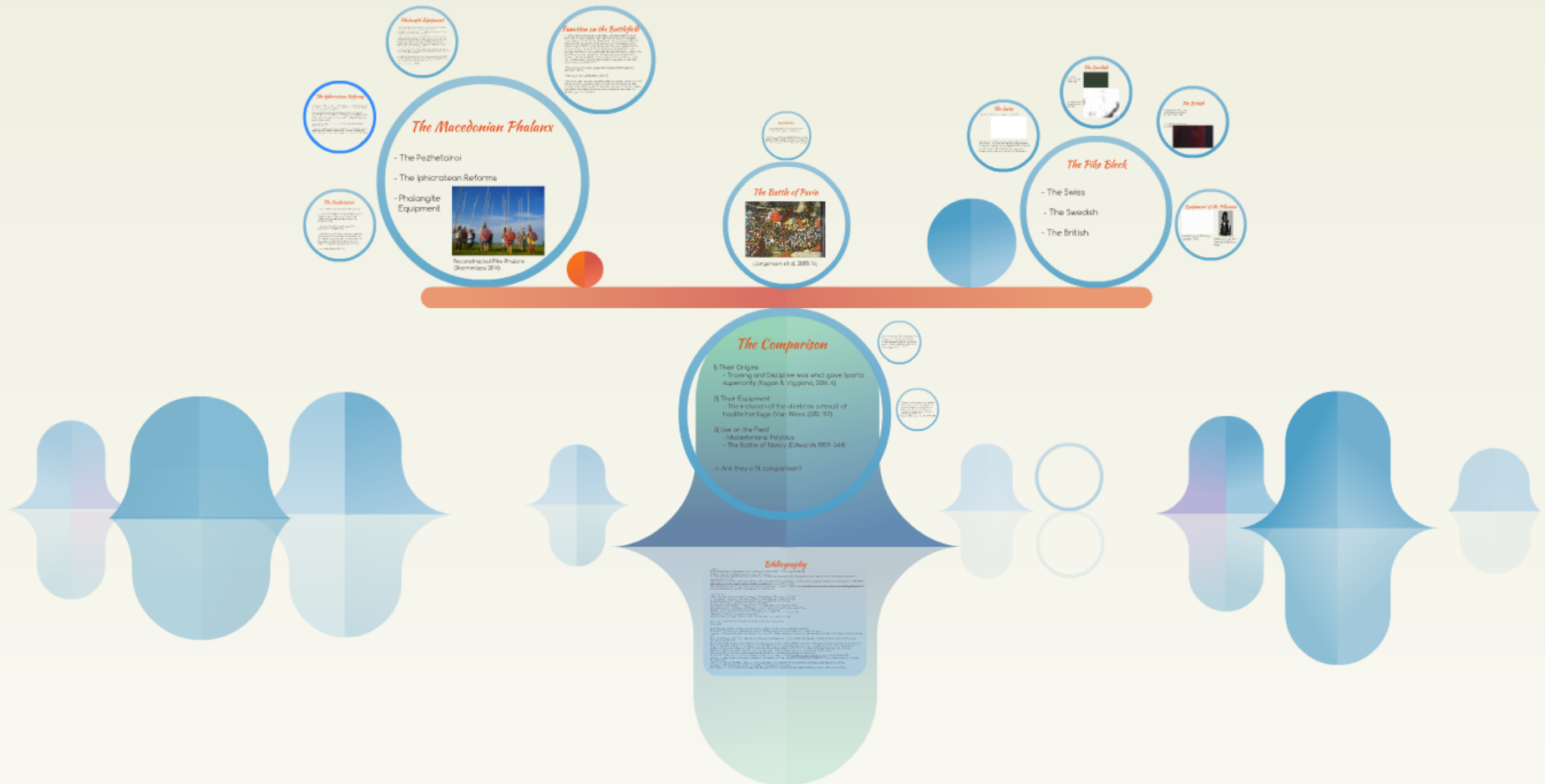
The Wrong End of the Stick

Comparing the Macedonian Phalanx and the Early Modern Pike Block



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Introduction

'A Macedonian Phalanx was nothing else than a battalion of Swiss is today, who have all their strength and power in their pikes' – Niccolò Machiavelli, 1520 (Machiavelli, trans. Wood, 1965: 45)

'It will not be difficult to imagine what the appearance and strength of the whole phalanx is likely to be, when, with lowered sarissae, it advances to the charge sixteen deep. Of these sixteen ranks, all above the fifth are unable to reach with their sarissae far enough to take actual part in the fighting. They, therefore, do not lower them, but hold them with the points inclined upwards over the shoulders of the ranks in front of them, to shield the heads of the whole phalanx; for the sarissae are so closely serried, that they repel missiles which have carried over the front ranks and might fall upon the heads of those in the rear.' (Plb. 18.30)

The Battle of Pavia



(Jorgensen et al, 2005: 16)

Macedonian Reforms

for the round ones, in order that the soldiers
more easily when less burdened. He doubled
(3-4)

and replaced with small round ones of
achieving two objectives: to provide the body
the bearer of the smaller shield, due to its
his movements... he doubled the length of the

is much shorter than the Macedonian

t, tum maxime in Amyntoe Macedonis liberis
erdiccae et Philippi, cum his ducibus pueris
igit ellusque optibus defenso est'. (Nep. 19th, 3.3)

Pezhetairoi

ions (Matthew 2015: 4, 6)

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ntry Companions and
anything.' (Arr. An. 7.2.1)

1976: 151)

- Flanking left not right (Matthew 2015: 373)

- 'Such, then, was the cavalry on either side. Coming now to the
was said that the Lacedaemonians led each half-company three
abreast, and that this resulted in the phalanx being not more than
men deep.⁶ The Thebans, however, were massed not less than
shields deep; (Xen. Hell. 6.4.12)

The Macedonian Phalanx

- The Pezhetairoi
- The Iphicratean Reforms
- Phalangite Equipment



Reconstructed Pike-Phalanx
(Skarmintzos 2014)

The Pezhetairoi

- The Foot Companions (Matthew 2015: 4, 6)
- 'As for his household troops and pezhetairoi, they have indeed the name of admirable soldiers, well grounded in the science of war' (Dem. 2.17)
- 'the spearmen who used to guard the king' (Theo. FGrH 115 F 348)
- 'So too he is said to have expressed surprise at Diogenes of Sinope, when he found him on the Isthmus lying in the sun; he halted with the hypaspists and infantry Companions and asked if he needed anything.' (Arr. An. 7.2.1)
- Archelaus? (Brunt 1976: 151)

The Iphicratean Reforms

- 'exchanged the Thracian shields for the round ones...in order that the soldiers might be able to move and charge more easily when less burdened. He doubled the length of the spear.' (Nep. Iph. 1.3-4)
- 'he discarded [the large shields] and replaced with small round ones of moderate size – thus successfully achieving two objectives: to provide the body with adequate cover, and to allow the bearer of the smaller shield, due to its lightness, to be completely free in his movements... he doubled the length of the spear'. (Diod. Sic. 15.44.1-4)
- 'carry a small shield, and his spear is much shorter than the Macedonian pike' (Ael. Tact. Tact. 2)
- 'quod cum in aliis rebus declaravit, tum maxime in Amyntae Macedonis liberis tuendis. namque Eurydice, mater Perdiccae et Philippi, cum his duobus pueris Amynta mortuo ad Iphicraten confugit eiusque opibus defensa est'. (Nep. Iph. 3.3)

Phalangite Equipment

- 'The average height of Greek males was between 162cm and 165cm compared with the 179cm of modern Western males.' (Schwarz 2016: 169)
- 'Macedonian infantrymen carried a small shield suspended from the shoulders and a pike 12 to 16 feet long' (Van Wees, 2015: 197)
- 'He was so enthusiastic about Alexander that he used certain weapons and cups which he believed had once been his, and he also set up many likenesses of him both in the camps and in Rome itself. He organized a phalanx, composed entirely of Macedonians, sixteen thousand strong, named it "Alexander's phalanx," and equipped it with the arms that warriors had used in his day; 2 these consisted of a helmet of raw ox-hide, a three-ply linen breastplate, a bronze shield, long pike, short spear, high boots, and sword' (Cass. 7.1-2)
- 'For instance, they unobstructed the combatant's vision through the introduction of the Lakonian pilos... This innovation has been attributed to the warrior-king' (Afric. Cest. 1.1.45-50 in Matthew 2015: 110)
- 'The Macedonians having fled from battle, Alexander changed their body armour into a breast-plate: which was a protection to them, as long as they boldly faced the enemy: but if they fled, they exposed to the foe their naked backs. This had the effect: that they never afterwards fled.' (Poly. Strat. 4.3.13)
- Greaves (Karunanithy 2013: 100-113)

Function on the Battlefield

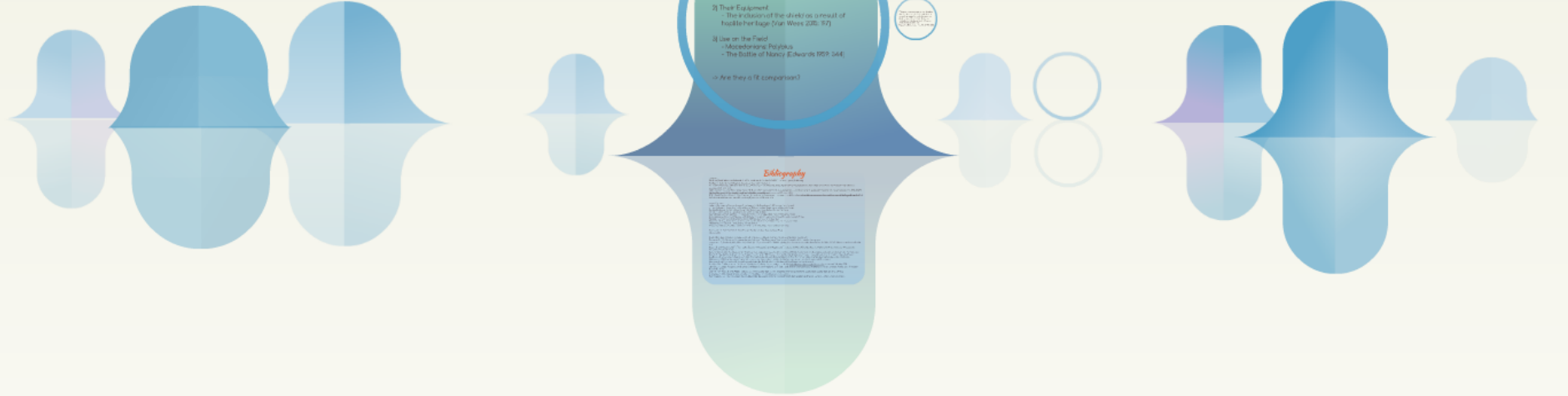
- 'it advances to the charge sixteen deep. Of these sixteen ranks, all above the fifth are unable to reach with their sarissae far enough to take actual part in the fighting. They, therefore, do not lower them, but hold them with the points inclined upwards over the shoulders of the ranks in front of them, to shield the heads of the whole phalanx; for the sarissae are so closely serried, that they repel missiles which have carried over the front ranks and might fall upon the heads of those in the rear. These rear ranks, however, during an advance, press forward those in front by the weight of their bodies; and thus make the charge very forcible, and at the same time render it impossible for the front ranks to face about.' (Plb. 18.29)

- The Granicus River, Issus, Gaugamela, Hydaspes (Worthington 2014: 144-8, 165-9, 187-93)

- Flanking left not right (Matthew 2015: 373)

- 'Such, then, was the cavalry on either side. Coming now to the infantry, it was said that the Lacedaemonians led each half-company three files abreast, and that this resulted in the phalanx being not more than twelve men deep.⁶ The Thebans, however, were massed not less than fifty shields deep,' (Xen. Hell. 6.4.12)

Comparing the Macedonian Phalanx and the Early Modern Pike Block



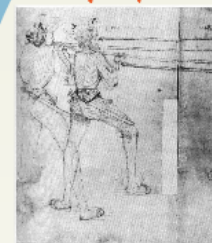
are useful against cavalry, and when they come they do their duty well before the battle closes in, are pressed, they become useless. Whence the Swiss, advantage, after every three ranks of pikemen berds, which, while it is not enough, gives the o maneuver' (Machiavelli, trans. Wood, 1965: 87)



The Pike Block

- The Swiss
- The Swedish
- The British

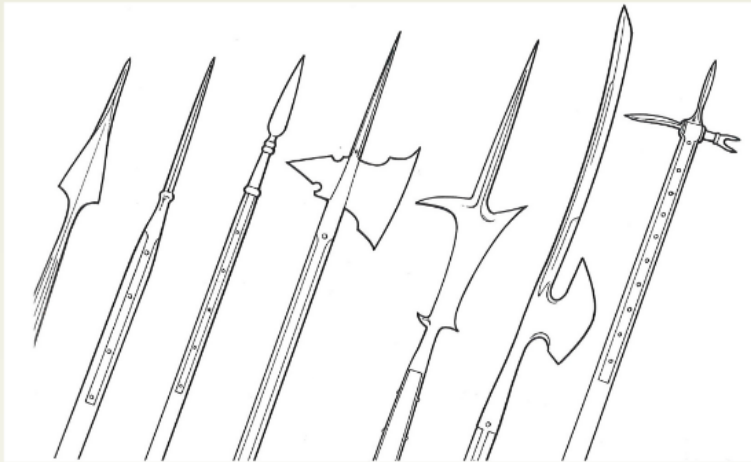
Equipment



Landsknechts T
(Dolstein 1500)

The Swiss

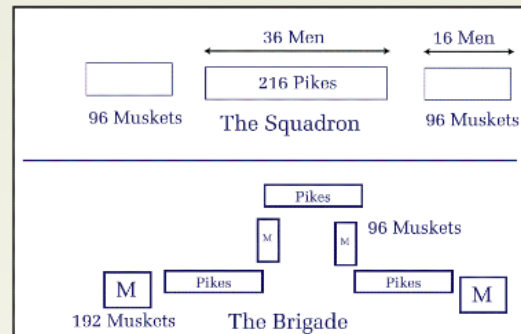
- Supported by Halberdiers (Jorgensen et al 2005: 7)



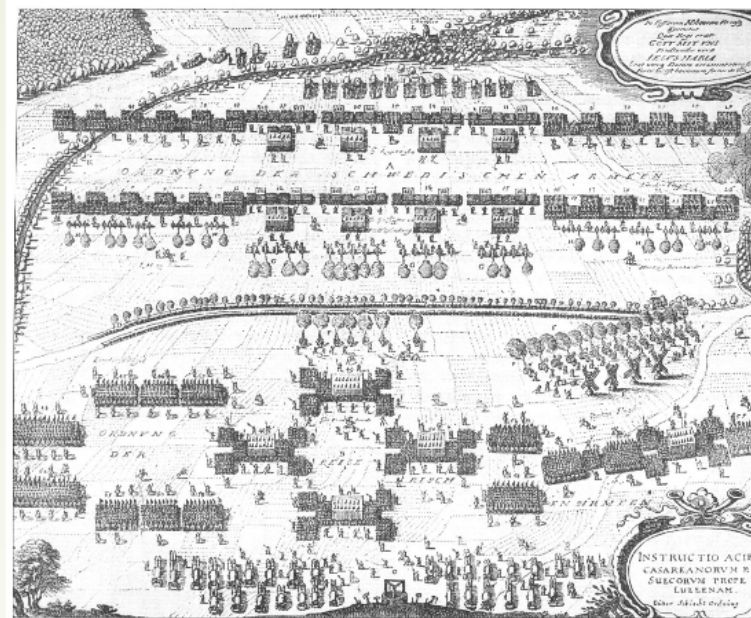
- 'because pikes are useful against cavalry, and when they come against infantry, they do their duty well before the battle closes in, for when they are pressed, they become useless. Whence the Swiss, to avoid this disadvantage, after every three ranks of pikemen place one of halberds, which, while it is not enough, gives the pikemen room (to maneuver)' (Machiavelli, trans. Wood, 1965: 87)

The Swedish

- Swedish formations (ed. Gibby 2017)



- Combined arms (Jorgensen et al 2005: 28)



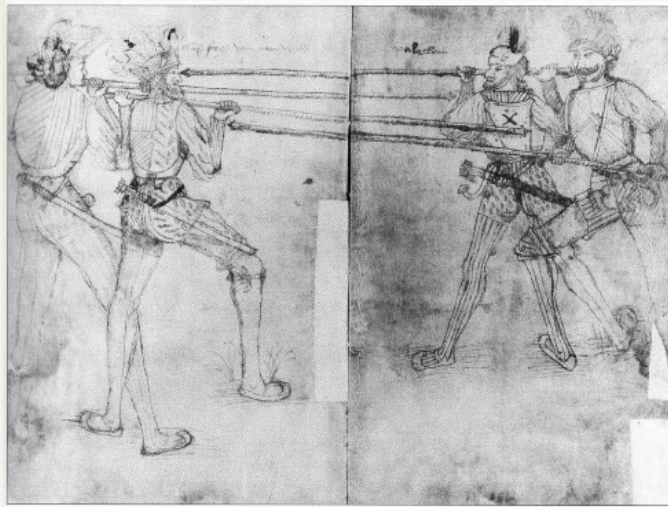
The British

- Edgehill and the ratio of pike: musket (Jorgensen et al 2005: 48; Plant 2015)

- The New Model Army (Le Roux 2018)



Equipment of the Pikeman



Landsknechts Training
(Dolstein 1500)



Pikeman's Civil War
Armour (Pitt Rivers
1884)

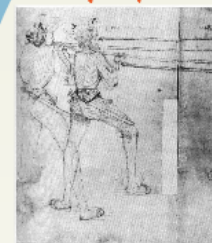
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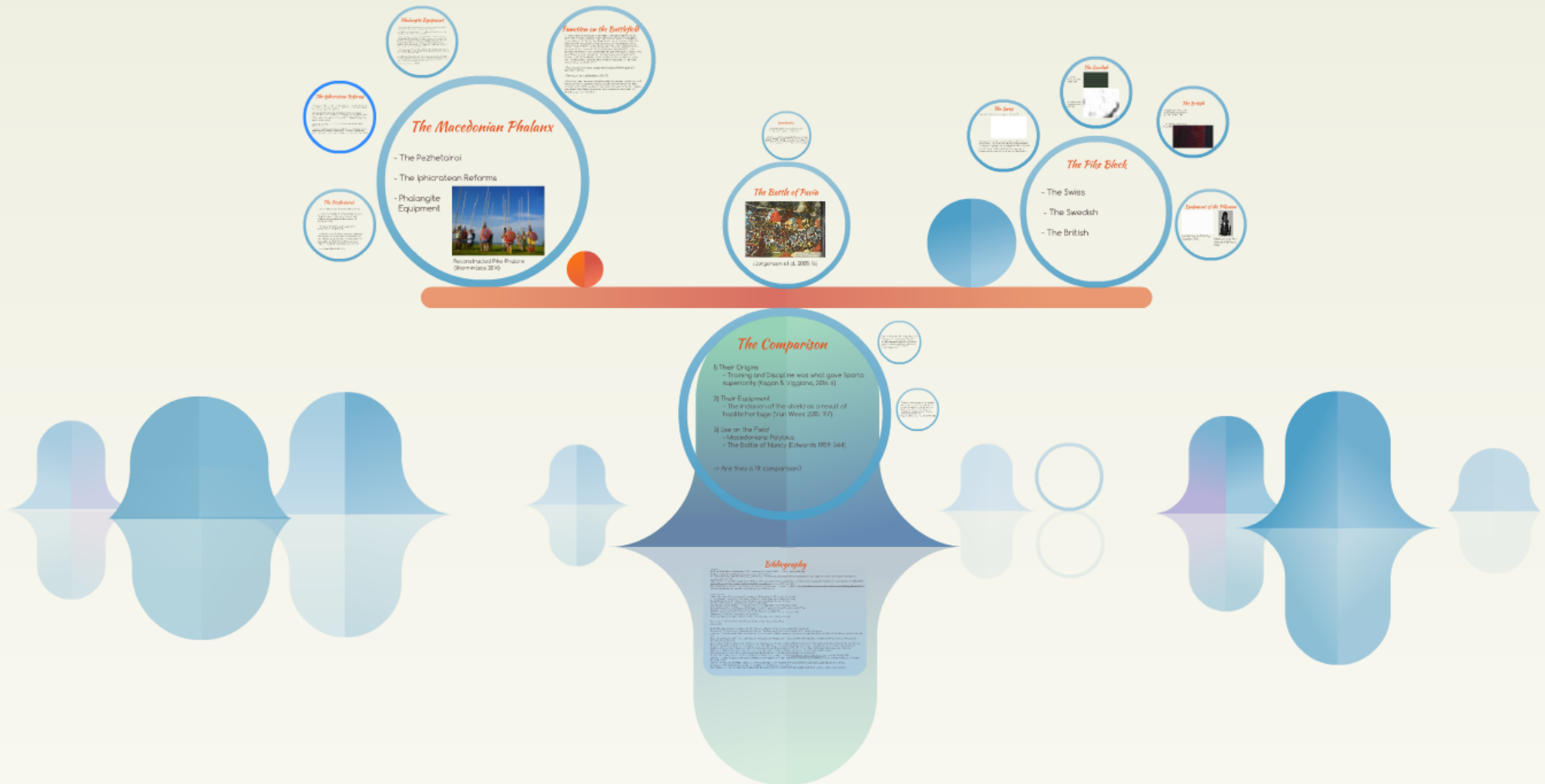
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The Wrong End of the Stick

Comparing the Macedonian Phalanx and the Early Modern Pike Block



The Comparison

1) Their Origins

- Training and Discipline was what gave Sparta superiority (Kagan & Viggiano, 2016: 6)

2) Their Equipment

- The inclusion of the shield as a result of hoplite heritage (Van Wees 2015: 197)

3) Use on the Field

- Macedonians: Polybius
- The Battle of Nancy (Edwards 1959: 344)

-> Are they a fit comparison?

'Again, no one denies that for its employment it is indispensable to have a country flat, bare, and without such impediments as ditches, cavities, depressions, steep banks, or beds of rivers: for all such obstacles are sufficient to hinder and dislocate this particular formation.' (Plb. 18.32)

'The incomparably superior ability of Swedish troops, only part of whom were actually engaged in the battle, was the main cause of the victory...the loose formation of Gustavus' order of battle enabled him to defy the Pappenheimers' (eds. Ward et al 1906)

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