

Cooking for the Vultures

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*À ma grand-mère, ma chère Mamy, tu étais la meilleure de toutes,
et tu nous manqueras énormément.*

Abstract: This paper investigates the tactics and phases of combat employed during the Early Dynastic period, i.e. the IIIrd Millennium B.C., in Mesopotamia according to the visual and archaeological data recovered.¹

Emphasize is stressed on the organized and complex battle formations already in use at this time and very similar to those of the posterior Greek city-states. Fencing stances and military drills also make part of the discussion, with the iconographic theme of the vultures and heaps of corpses as well.

Keywords: Early Dynastic, Tactics, Phalanx, Vultures, Standard, Army, Warfare, Military Drill, Fencing, Mari, Ur, Ebla, Lagash, Corpses, Officers, Combat, Ishqi-Mari, Eannatum

Introduction

Vultures are usually depicted feasting on the battlefields during the Early Dynastic period. This means huge stocks of corpses lied on very restricted areas for a long time, as these birds only scavenge on dead or dying preys.

In this paper, the author will propose a way to understand how so many animals could feast on so many human bodies, as they are recorded and represented in the written and visual data.

¹ Further analysis can be found in Nadali 2007.

A. Sources

The main sources for the study of the iconography of the vultures are mostly linked to military and battle contexts, either from Lagash as the famous Stele of the Vultures, either from Mari on the royal seal of Ishqi-Mari (Figure 1-6).

Other elements will help the analysis of the military tactics of the Sumerian period, like the War Panel of the Standard of Ur, with the stone and shell inlays from Ebla and Mari (Figure 7-18).

Ethnographical comparisons for the military tactics can be found in Human History, so these will be mentioned when necessary.

Schematics and drawings will also be employed to display how the Early Dynastic armies would have possibly been arrayed on the battlefield during the different stages of the combat.²

Finally, recent discoveries in archaeology will come in handy as there will surely be people doubting about the real link between iconography and some actual, contemporary practices.

B. Composition of an Early Dynastic Combat Group

During the Early Dynastic period, and according to the data available nowadays, the Lagash-type of army was apparently organized on a feudal system.

1) Definitions

Some particular terms must be attributed a peculiar meaning for the sake of this paper and only in this context (Figure 19).³

a) File

The Early Dynastic visual data often display the soldiers in file, which means each group composed of a horizontal line of people, each one behind another (Figure 1-2; 7-8). We know this is mainly part of the artistic conventions, but there is no reason to think this type of positioning was not used during the battles by the army.

² This paper is a basic proposal to encourage further research. Early Dynastic armies certainly had each their own particular types of tactics but, as for the 6th - 4th century B.C. Greek city-states, they could as well have had a very common military base.

³ For further details, see De Backer 2009b.

b) Flank

These are the right and left side of a Combat Group and the most vulnerable part of it. As a matter of fact, for the direct confrontation, each soldier can only put in use the weapon he carries in his hand concerned by the side, either the spear or the shield, while he can put both of them in use for any front attack. This is also why any military unit in a combat situation needs flankers: to erase or delay the enemy attack while it rotates to face the opponent with both weapons on its front towards the attack.

c) Front

To make it short, the front is where the two armies meet for a fight, so there can be many fronts for just two armies engaged on different sides of the same ground.

d) Rank

The Early Dynastic visual data often display the soldiers in ranks, which means each group composed of a vertical line of people, each one on the side of another. We know this is mainly part of the artistic conventions to depict perspective, but there is no reason to think this type of positioning was not used on the horizontal, as lines, during the battles by the armies.

e) Multi-Purpose Combat Group

The Early Dynastic people very often used their army components, Infantry and Chariotry, associating different classes of soldiers, like Archer, Spearman, Shield-Bearer and Slinger (Figure 20-28). This way, each commanding officer had at least one part of each one's skills at his disposal on the field, ready for multiple purposes (Figure 29).

2) Organisation⁴

Most military officials would act as Group Leaders, coming along with a core of élite troops, the Guards, and huge bands of foot soldiers, established around a base of heavy troops. Those would be the people rich enough to have good

⁴ For further details, see Sasson 1969.

metal weapons and armors, and the ability to train in *hoplomachia* : the martial art of armor and weapon combat (Figure 1-2; 7; 16-17; 30; 32-33; 39-40).⁵

For the particular case of the Lagash phalanx, it appears that the shield is maintained on the torso of the warriors as they wield their pike with their both hands (Figure 1).⁶ This induces that it must have been equipped with a strap that passed on the shoulder of the warrior, which is set forward when he is in the combat stance, and to the opposite hip, to ensure it will not move or fall neither cumber his motions (Figure 31).⁷ Thus the shield protects the man from the shoulder to the ankle from any incoming thrusts, blows and missiles (Figure 32). Limited experimentation for the Greek tactic of the phalanx proved this moves to be quite easy and quickly learned and mastered by individuals in a very short time.⁸

Although some authors assumed the phalanx needed a rank of individual shield-bearers, and another of pikemen, one understands how dangerous a close encounter would have been for warriors only wielding a shield with two hands, and how they would have protected themselves and the pikeman on their side in the meantime.⁹ Then, the bearers would have needed a double size shield, and this does not appear on the visual data. To the contrary, the shield certainly was designed with a single strap to put one's arm and to allow the fighter to use both his hands, as the Macedonian *sarrisophoroi's* (Figure 33). Such a system presents a diagonal sleeve to fix the shield on the arm of the warrior while advancing, so as to provide best comfort and keep a natural anatomic position. In the meantime, the guige is attached in a way that ensures most of the weight will fall on the back of the shoulder of the soldier, so that the shield stays in place when he advances.

Surely the warrior would have slipped their arm in the possible enarm of the shield when they advanced forward and closed their ranks to meet up with the enemy, then lowering their pikes to a horizontal, protruding direction and get ready for the shock.¹⁰ These moves were also employed in the 16th and 17th centuries A.D. in Europe, during the Golden Age of the pikemen.¹¹ Then, as they closed their ranks, the appearance of the Early Dynastic phalanx would

⁵ Daremberg 1877-1909: 248-249.

⁶ This word has been chosen because a pike has a very long shaft and is usually wielded with both hands, to the contrary of a spear.

⁷ This strap is called a "guige".

⁸ Randall 2011: 115, 127.

⁹ As Tallis 1984: 123, fig. 4.

¹⁰ The enarms are the two straps that fix a shield to the arm.

¹¹ Van Breen 1618: 23-29.

have been quite similar to the Greek one, with shafts protruding forward and warriors keeping close to protect their right, and exposed, side.

Finally, to the contrary of what has been thought so far, the shield of the Early Dynastic phalanx were surely not employed on a vertical stance, as this would have helped the enemy press on the phalangist's sternum through the shield and provided few, if even, protection against thrusts, blows and missiles.¹² Common sense and experimentation make it clear that the shield adopted a diagonal direction when the soldiers advanced or fought, a fact that gave them enough room to walk correctly, good protection against the missiles, high deflection of the enemy attacks and missiles, and space to fight properly, as Tyrtaeus said (Figure 33).¹³

It is not without reasons that the best warrior, i.e. the King, kills with a mace and with a spear, this depicts his best ability to reach the enemy and submit him whatever weapon he wields. Officers, supposedly veteran fighters, have axes or kopesh,¹⁴ and basic soldiers have pikes, while the simplest levy man has a small bow and dagger, or even only a sling (Figure 1; 3; 5-7; 9; 13-16).

One could wonder whether the trained pikemen, equipped with a sword and a small shield in the event of its rupture, were as highly regarded as the pikemen from the 16th to the 17th centuries A.D. in Europe.¹⁵

No need here is to say that this social model would fit with similar systems as the early Greek hoplites from the 7th to the 4th centuries, but this is not the question under debate in this paper.

Another way to understand this establishment would be to compare it with the Roman military class, set according to the annual census of each citizen during the Early Republic. Each man's income would allow him to keep a particular level of armor and this would mean his place in the four lines of battles that made the combat formations of the Roman infantry at that time.¹⁶ The poorer and younger fighters would be in the fourth line, with the *rorarii*, *ferentarii* and *accensi*, only sending stones and missiles to the enemy for they had no armor neither personal weapon for close-quarters combat.¹⁷

As formations were employed, a particular sign, like the statue of a bull or a goat, certainly helped the soldiers to identify their proper units of the fields, as did the charioteers for who this stood on the yoke of the vehicle.¹⁸ Different

¹² Tallis 1984: 123, fig. 4.

¹³ Tyrtaeus, IInd Messenic.

¹⁴ See for example the Warrior tomb of Tell el-Dab'a (Forstner-Mueller 1999).

¹⁵ As it clearly appears in the manuals of J. J. von Wallhausen and A. Van Breen.

¹⁶ Sekunda 1995: 14-16.

¹⁷ *Rorarii*: Livy, VIII, 8; *ferentarii*: Tacitus, XII, 35; *accensi*: Livy, VIII, 8; 10.

¹⁸ For further details, please refer to De Backer 2012b.

officials certainly led their own troops into combat and these would have been sorted with small standards, even for the poorest bands, as tactical troops, like the Roman maniples, with a particular sign.¹⁹ Although the common definition seeks to derive this term from a handful of grass suspended to a pole, as the present author rather believes these were real objects that were fashioned with dry weeds, a cheap and accessible material for poor troops.

Then musicians, like horn-players and drummers, could transmit orders and play their role in the battle events as well, even only to allow soldiers to keep the step while maneuvering in close formations, as for the Spartans hoplites.²⁰

3) Tactical Level

For this paper, this term will cover the level of command including one small sector of a battlefield and a rather small amount of soldiers, if compared to huger units, or even to the whole army.

First, the warriors are seemingly grouped according to their weapons and this clearly display their ability to fight as a unit in combat formations. These two first features demonstrate the existence of several martial arts and the training of chosen people into organized bands: the phalanx.²¹ One could consider such a huge shield as the one depicted on the Stele of the Vultures could not be employed with a pike held by two hands, but the manual of A. Van Breen shows that it is more than easily feasible with a bit of training.²²

Second, an evolution clearly appears in the degree of armor provided to the soldiers, according to their proximity with the enemy and with the key-characters, be it in the visual arts or in the archaeological discoveries, like the Great Pitt of Death at Ur.²³ This clearly shows that a particular attention was paid to the protection of those commanding people and that it increased with their proximity to the enemy.²⁴ Interestingly, the Guards of the Standard of Ur have a reinforced cape to protect their shoulders and back but no shield to protect their belly. This fact hints to their ability to fight from behind another troop, explaining why they don't need a front armor, and in close combat, which is revealed by the need to protect their heads and shoulder from the overhead

¹⁹ Plutarch, *Parallel Lives*, Romulus, 8, 6; Sekunda 1996: 16.

²⁰ Goldsworthy 1997: 9.

²¹ For further details, please refer to De Backer 2012c and Cook 1989: 60.

²² Van Breen 1618: 23-29.

²³ For the different types of armor and weapons according to the proximity of the soldiers to the king, see De Backer 2012b.

²⁴ For the employment of particular weapons against the enemy and according to his proximity, see De Backer 2008.

blows of the enemy. Finally, as most of their armor covers their back, one can believe they were intended to protect the back of the chariot from incoming missiles as a kind of living shield, and be protected during the time they needed to maneuver and reverse to face the enemy (Figure 7).

Third, the least well equipped soldiers are depicted at the back of the line, but only because both the Standard of Ur and the Stele of the Vultures present a victory scene. The light troops were surely employed as skirmishers to hurl missiles and projectiles at the enemy, and then fill in the gaps where soldiers of the last line would have fallen, like an ultimate reserve.

Fourth, the wealthiest and most prominent people would compose either a chariotry unit to provide the charge at the end of the battle, or rather a mobile shooting platform employed as an elevated command post, followed by their élite bodyguards. As for the Greek phalanx, the presence of reliable men at the front and rear, which is attested by the Early Dynastic sources as well, would have prevented men in the middle to run away and, in turn, compelled the men in the front to stand their ground as well.²⁵ This is also clearly attested by a very small detail, although a key element depicted on the Stele of the Vultures: the first weapon of the front row of pike, represented on the top of the first rank, is an axe (Figure 1). Only a very good warrior could be located at the front of a combat formation with a weapon far more shorter than the shafts of his fellows, moreover when this weapon can absolutely not be employed to stab from afar but only to slash and blow in close combat.²⁶

C. Phases of Combat

Military tactics employed by the people of the ancient Near East can sometimes be deduced according to a close observation of the visual sources depicting war scenes.²⁷ With the close study of the two main scenes of battle that were realized during the Early Dynastic period, a particular scheme appears, including formations and movements, officers and signals, fencing and training.²⁸

This paper presents the ten main phases of battle during the Early Dynastic period, all organized around the approach to the enemy, and skirmish to reckon his array.

²⁵ Goldsworthy 1997: 23.

²⁶ One could believe this is the only depiction of a halberd, an axe with a spike on the top and a very long shaft, but nothing supports this hypothesis so far in the written, visual or material data accessible nowadays for the Early Dynastic period.

²⁷ Seen also De Backer 2009b and 2009-2011.

²⁸ Heckel 2006: 59, pl. B.

Then come the advance and shooting to disrupt and weaken his close formation. After that, the shock and scrum that will compose the main fight.

The decision of the battle will be brought by the activities of the army commanders during the recoil and regrouping, only possible while famous fighters have duels altogether, as a kind of intermission.

Finally, the pursuit and aftermath of the combat, sometimes even more gruesome than the fight itself, as will be demonstrated by the recent archaeological finds.

1) Approach

During the Approach, the lightest troops advance slowly and reckon the field where the following Middle and Heavy Infantry is supposed to come, looking for traps or other nasties prepared by the enemy (Figure 34).

2) Skirmishers

The second phase of the Early Dynastic battle sees the Light Infantry throwing and hurling their missiles at the enemy, from a safe distance but close enough to look for their battle array, the type of troops and possibly even the V.I.P.'s at key-commands (Figure 35). As they do so, the Middle Infantry watch their back and flanks.

Surely some part of the army would create some kind of Mobile Redoubts, with the tactic of siege-archer and shield-bearer that has been studied in another paper for the siege context, but nothing prevents the employment of that method in a pitch battle, as was the case during the reign of Salmaneser III so far.²⁹

This skirmish phase also tends to disorganize and irritate the enemy so that they leave their battle array and lose control of their nerves as far as to make deadly mistakes.

3) Advance

Once half of their reserve of missiles is empty, the Light Infantry retreats to the back of the Heavy Infantry, while the Middle Infantry watch the flanks of the army. Until the next phase, the Light Infantry will array in long files alternating with the pikemen of the Heavy Infantry, up to six ranks deep (Figure 36). As Xenophon said, the real need of a phalanx is a narrow front, with small amount of reliable men to the front and rear of the formation, thus enabling it to stay

²⁹ De Backer 2010b and 2012a.

longer and win the fight for morale against tear, wear and fatigue during the combat against the enemy.³⁰

The same principle was applied during the XVIIth century A.D in Europe, with the square formations of pikemen in the middle of which lines of musketeers would advance, shoot at the enemy, and then turn to the back of the band, reload, and advance again.

4) Shooting

Once the phalanx arrives at throwing distance of the enemy, the Light Infantry throws and hurls the remainder of their missiles and then retreats behind the shields of the Heavy Infantry (Figure 37). Then, the pikemen narrow their ranks, press on to the front and aim for the contact at the chest of the incoming enemies. This last minute heavy shooting means to weaken the depth of the enemy ranks so as to ease the pressing ahead, as the Roman *pila* were intended for.³¹

The Heavy Infantry then quickens the pace and walks into the first line of the enemy, keeping their close order and interlocking shields to resist or deflect the incoming arrows. The same principle was applied by the Greek and Macedonian phalanx some centuries later on.³²

An interesting point of the Early Dynastic iconography lies in the similarity of every faces for most soldiers depicted on the battle scene, which might be a hint to the fact that they were trained in the same way, and full time professional soldiers, with the idea that their same age would not allow the faster runners to be separated from the slower ones during an advance nor a charge.

From this point on, as the two mass start to push one against the other, dead and wounded begin to pile on a very restricted area, intermingled with the shafts of the broken pikes, the fallen shields, and in between the ranks of the living.

5) Contact

Once the shock with the mass-shove of Heavy Infantry has happened, the enemies have to stand the rush by setting their feet into the ground, and holding fast with their shields.³³ After that, the press on starts on each side of the

³⁰ Xenophon, *Memorabilia*, III, 1, 8; Goldsworthy 1997: 23-24.

³¹ Cowan 2007: 9, 62.

³² Fields 2007: 15.

³³ Cinema is cinema, but the first battle presented in the movies “300” by Z. Snyder, and based on the story of the Battle of the Thermopylae according to the book of F. Miller, depicts this phase of the battle really well.

battlefield in order to disrupt the close order formation of the enemy army and find a weakness in the array to exploit by pressure and friction (Figure 38).³⁴

The close order formation means spear fighting, with every first line warrior, the *promachoi*, keeping his stead while interlocked shields produce a moving “city-wall”, tending to keep a safe distance with the enemy while trying to thrust at the faces and chests.³⁵ This could be linked to the principle of the Greek *othismos*, the pressure with the shield, although a flat shield does not help the lungs to breathe properly when in close contact with the enemy, to the contrary of a curved one, like the Greek *aspis*.³⁶

At the beginning of this phase, as the amount of shafts still is quite high, the first line opens its ranks from time to time, and lets the Light Infantry crouches out to cut the legs and stab the groins of the enemy, then retreating behind the shields (Figure 39).³⁷ The same principle was applied by the English troops at Poitiers, Crécy and Azincourt against the French Knights with a certain success.

After a while, as the casualties start to fall, the interlocked shafts produces an intermingling spear heads and broken shafts, when the Light Infantry can sally out the Heavy Phalanx, in order to blow the head of the enemy pikemen with maces or break the enemy shafts with axes (Figure 40).³⁸ This is why the Heavy Infantrymen discovered in the Great Pitt of Death at Ur, close to the King, have huge helmet with cheek-pieces (Figure 45). For this phase of the combat, morale needs to be kept at a high level by the leaders, either by their presence or by the arrival of élite troops to help the other ones. This principle was applied in Europe during the Renaissance with the concept of the *döppelsoldner*, the chosen men with brands and halberds who were supposed to rush into the enemy pike phalanx and hack a weak point inside it for their own pikemen.³⁹

From time to time, the phalanxes advance in a violent way for one or two paces, the time for the Light Infantry behind them to execute the enemies and clean the rear of the front lines from any threat. This hypothesis also finds

³⁴ As can be deduced by the phalanx formation depicted on both the Standard of Ur and on the Stele of the Vultures. See also Luginbill 1994.

³⁵ The same tactic as was employed by the Persians at Thermopylae, see Herodotus, IX, 62.

³⁶ See De Backer 2012c and 2012d;

[http://www.ancientgreekbattles.net/Pages/90087/Phalanx History.htm](http://www.ancientgreekbattles.net/Pages/90087/Phalanx%20History.htm).

³⁷ This can be suspected by the way the shields are slung from the shoulder to the waist of the front-liners.

³⁸ See Montero Fenollós 2003: 227, fig. 4.

³⁹ Miller 1976: 8.

support in the call of Epaminondas to his hoplites at Leuktra, asking for one further pace.⁴⁰

Once the front men had managed to get in between the enemy protruding spear shafts, they could start to break the formation and widen the gaps to engage in a close quarter combat where their fighting supremacy could be employed, as the Romans did at the battle of Pydna, in 168 B.C., against the Macedonian phalanx of Perseus.⁴¹

6) Scrum

With the increasing amount of wounded, dead, weapons and equipment lying on a restricted area, the close order tends to disintegrate for a more gruesome combat, where small groups of individual or even a mass of warriors would be beating each one another, for the room is no more available on the ground for the groups to keep their formations on a steady feet. The scrum is a hazardous, chaotic phase during which the army commanders have to come and take their crack troops quickly on the spot to decide the end of the battle.

7) Recoil⁴²

While the crack troops, reserves and possibly Guards press on to the front of the battle, fatigue and time would slow down the combat, at least for the first liners, while the recoil after the shock allowed the Group Leaders to gather their men and regroup for a new attack (Figure 41).

8) Duels

Although no sources can attest it so far, veteran fighters and famous warriors surely existed at that time, and while most units would be stepping backwards to regroup, they would start to shout or even fight one to one as a mean to display their bravery and earn the King's appreciation (Figure 42). This is the type of story also told in the Bible, with the episode of David and Goliath, or in the Iliad, with Achilles and Hector.⁴³ For the Roman army, soldiers needed to ask permission to their generals in order to be allowed to leave the ranks and fight

⁴⁰ Polyaeus, *Stratagemata*, II, 3, 2.

⁴¹ Livy, 44, 41.

⁴² In this paper, the "recoil" is understood as the opposite force resulting from a shock forward, as fro the firearms.

⁴³ Bible, 1 Samuel, 14: 4; Homer, XXI, 395-440.

individually.⁴⁴ This could as well have taken place because weary warriors needed to start the struggle again after the lulls and, for that, brave men had to step forward with the hope that others would follow on.

9) Regrouping

While the chariot reserve advanced, the surviving officers gather, regroup and rally their men around their standards, to get them ready for a counter-offensive or the pursuit (Figure 43). The chariots could charge at the enemy, even at a low pace, as can be seen by the elements protecting the chest of horses on the shell and stone inlays from Ur and Mari (Figure 5-6; 8).

10) Pursuit

The back of the chariots is protected by the personal bodyguards of each charioteer, as they go and sweep the battlefield of the remaining enemy forces that can still present a threat to the victory (Figure 44). In the meantime, the lightest troops awaiting at the back of the army start to execute and pursuit the isolated groups of enemies fleeing or lying on the site.

This is the scene that appears on the War Panel of the Standard of Ur, and on pieces of the shell and stone inlays found at both Mari and Ebla.

11) Aftermath

While the enemy is fleeing, the remaining units of the victorious army surely start to look for their wounded, if not to search for booty on the corpses of the enemy. At this moment, the surviving officers certainly begin to count their men, look for their dead, execute the enemy wounded without a V.I.P. status and count the enemy corpses. This clearly appears on the seals of the king Ishqi-Mari, where the bearded king is the super warrior killing his V.I.P. enemies, identified by the axe they wield, in duel on the battlefield (Figure 5-6).⁴⁵ This perhaps how and why the importance of the kopesh, the sickle sword employed as an axe-mace-sword-spear, an early multi-functions weapon, come in handy to highlight that particular status of the king as a warrior, a tradition that will last a very long time in the ancient Near East iconography and archaeological discoveries.⁴⁶

⁴⁴ Tarpin 2003: 297.

⁴⁵ Even although some old army commanders were as well, like Lucius Apronius Caesianus. See Picard 1992: 178.

⁴⁶ Forstner-Mueller 1999.

A mass slaughter of such a kind, and somewhat contemporary with the Early Dynastic Period, was recently discovered in Turkey, where the marks on the bones clearly display the employment of maces and axes to crush the skulls of the people.⁴⁷ This clearly appears to be some kind of custom on the Stele of the Vultures and in Europe as well. In Egypt, such a census of the dead enemies was sometimes made by cutting one hand of each corpse, as those that were recently discovered by archaeologists in Egypt.⁴⁸ The Belgian Gauls also erected such trophies, but they rather suspended their beheaded enemies with their weapons until corruption makes them fall on the ground of the holy trophy enclosure.⁴⁹

Conclusion

The Stele of the Vultures also presents the enemy corpses being piled up high and stuck with some kind of mortar to build a monument, in front of which a bull awaits to be slaughtered and offerings are made to the god of War Ningirsu (Figure 3-4). It seems quite important in the Early Dynastic iconography to insist on the fact that the enemy corpses are trampled over by the victorious phalanx of Eannatum, as well as observing that vultures are not always depicted at the same time and on every monument, some points that would surely deserve further analysis and research in the future (Figure 1-2; 5-6).

Some might believe this pile of corpses and feasting vultures were supposed to be part of a funerary ritual as the tower of silence, a fact that has already been refuted by other authors about other depictions of warfare discovered at Çatal Höyük.⁵⁰

This, in a way, rather foresees the buildings of Ashurnasirpal II and Shalmaneser III made with dead and living people, inside which living people were walled and to which fire was sometimes set.⁵¹

The feasting vultures surely represent a common phenomenon in the ancient Near East, as battles included a huge amount of warriors, fighting and trampling each one another for hours on a restricted area. It appears then that such an iconographical motif was drawn from the personal experience of artists and also flattered the kings' ideology.

Interestingly, the depictions of battle and combat during the Early Dynastic period fit quite well with the recent discoveries of ancient Near Eastern battlefields as well.

⁴⁷ Erdal 2012.

⁴⁸ <http://www.thehistoryblog.com/archives/18809>.

⁴⁹ Brunaux 1997, fig. 11, 591; fig. 13, 594; Poplin 1985.

⁵⁰ Testart 2008.

⁵¹ For further analysis, see De Backer 2009a and 2010a.

More research undoubtedly needs to be realized on the Early Dynastic period warfare, but it seems most of the data necessary in order to do so are accessible, and only require people to be interested in, and deepen the study with the employment of the contemporary, written sources as well.

One hopes this paper will provide a good stimulus to raise the interest on that particular, and most fascinating aspect of the Early Dynastic period, for whose warlike aspects so far seem to be restricted to the basic interest of the reliability and historical importance of their written sources.

Bibliography

- [http://www.ancientgreekbattles.net/Pages/90087/Phalanx History.htm](http://www.ancientgreekbattles.net/Pages/90087/Phalanx%20History.htm).
- Brunaux, J.-L., 1997: “Les sanctuaires celtiques de Gournay-sur-Aronde et de Ribemont-sur-Ancre, une nouvelle approche de la religion gauloise”, in: *Comptes-rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 141e année, n° 2, pp. 567- 600.
- Cook, B., 1989: “Footwork in Ancient Greek Swordmanship”, *Metropolitan Museum Journal* 24: 57-64.
- Cowan, R., 2007: *Roman Battle Tactics 109 BC-AD 313*. Oxford.
- Daremberg, Ch., 1877-1919: *Dictionnaire des antiquités grecques et romaines*. Paris.
- De Backer F., 2004: *Notes sur l'équipement de l'armée néo-assyrienne, de Téglath-Phalazar III à Assurbanipal, basées sur les bas-reliefs découverts à Ninive, Kalhu et Dûr-Sharrûkin*. Louvain-La-Neuve [unpublished M.A. thesis].
- 2008: “Notes sur les lanceurs de «pavés»”, *Ugarit Forschungen* 38: 63-86.
- 2009a: “Cruelty and Military Refinements”, *Res Antiquae* 6: 13-50.
- 2009b: “Some Basic Tactics of Neo-Assyrian Warfare”, *Ugarit Forschungen* 39: 69-115.
- 2009-2011: “Some Basic Tactics of Neo-Assyrian Siege Warfare”, *State Archives of Assyria Bulletin* 18: 266-286.
- 2010b: “Neo-Assyrian Siege-Redoubts: Some Issues”, *Historiae* 7: 1-25.
- 2010a: “Fragmentation of the Enemies in the Ancient Near East during the Neo-Assyrian Period”, in A. Michaels (ed.): *Ritual Dynamics. Usurpation Ritual. Vol. III: State, Power and Violence*. Wiesbaden, pp. 393-412.
- 2012a: “The Neo-Assyrian Siege-Archers : Some Remarks”, in G. Wilhelm (ed.): *Proceedings of the 54th Rencontre Assyriologique Internationale, Würzburg, 20-25 July 2008*. Winona Lake, pp. 427-446.
- 2012b: “Early Dynastic People and Neo-Assyrians in the Wake of Cultural Heritage and Conflict: “We, as Them” or “We, and Them”?”, in R.

- Matthews et alii. (eds.): *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East, London, 12-16 April 2010 (Vol. 2)*. Wiesbaden, pp. 81-88.
- 2012c (forthcoming): “Cardiophylax in Urartu: A Celtiberian Model”, in: *Proceedings of the 8th ICAANE, 30 April-5 May 2012*, Warsaw.
- 2012d: “Le casque bombé à cimier dans les techniques de combat néo-assyriennes”, *Historiae* 9: 31-69.
- Erdal, Ö., 2012: “A Possible Massacre at Early Bronze Age Titriş Höyük, Anatolia”, *International Journal of Osteoarchaeology* 22: 1-21.
- Fields, N., 2007: *Thermopylae 480 BC. Last Stand of the 300*. Oxford.
- Forstner-Mueller, I., 1999: “Recent Find of a Warrior Tomb with a Servant Burial in Area A/II at Tell el-Dab’a in the Eastern Nile Delta”, *Zeitschrift für Klassische Archäologie* 12.
- Goldsworthy, A., 1997: “The Othismos, Myths and Heresies: The Nature of Hoplite Battle”, *War in History* 4/1: 1-26.
- Heckel, W. / Jones, R., 2006: *Macedonian Warrior: Alexander’s Elite Infantryman*. Oxford.
- Luginbill, R., 1994: “Othismos: The Importance of the Mass-Shove in Hoplite Warfare”, *Phoenix* 48/1: 51-61.
- Miller, D., 1976: *The Landsknechts*. Oxford.
- Montero Fenollós, J.-L., 2003: “El armamento defensivo del soldado de Súmer y Mari”, *Aula Orientalis* 21: 213-227.
- Nadali, D., 2007: “Monuments of War, War of Monuments: Some Considerations on Commemorating War in the Third Millenium BC”, *Orientalia* 76/4: 336-367.
- Picard, G., 1992: “Tactique hellénistique et tactique romaine: le commandement”, in: *Comptes-rendus des séances de l’Académie des Inscriptions et Belles-Lettres*, 136e année, n° 1, pp. 173-186.
- Poplin, F., 1985: “Les Gaulois dépecés de Gournay-Sur-Aronde”, *Revue Archéologique de Picardie*, Numéro Spécial 4: 147-164.
- Randall, K., 2011: “Hoplite Phalanx Mechanics: Investigation of Footwork, Spacing and Shield Coverage”, *Journal of Greco-Roman Studies* 44: 111-137.
- Sasson, J., 1969: *The Military Establishment at Mari*. Rome.
- Sekunda, N., 1995: *Early Roman Armies*. Oxford.
- 1996: *Republican Roman Army 200-104 BC*. Oxford.
- Tallis, N. / Stillmann N., 1984: *Armies of the Ancient Near East 3000 B.C.-539*. Worthing.

Tarpin, M., 2003: “M. Licinius Crassus Imperator, et les dépouilles opimes de la République”, *Revue de Philologie, de Littératures et d’Histoire Anciennes* LXXVII: 275-311.

<http://www.thehistoryblog.com/archives/18809>.

Testart, A., 2008: “Des crânes et des vautours ou la guerre oubliée”, *Paléorient* 34: 33-58.

Van Breen, A., 1618: *Le Maniement d’armes de Nassau avecq rondelles, piques, espées et targes, représentez par figures selon le nouveau ordre du très illustre prince Maurice de Nassau*. La Haye.

von Wallhausen, J. J., 1615: *L’Art militaire pour l’Infanterie*. Franeker.

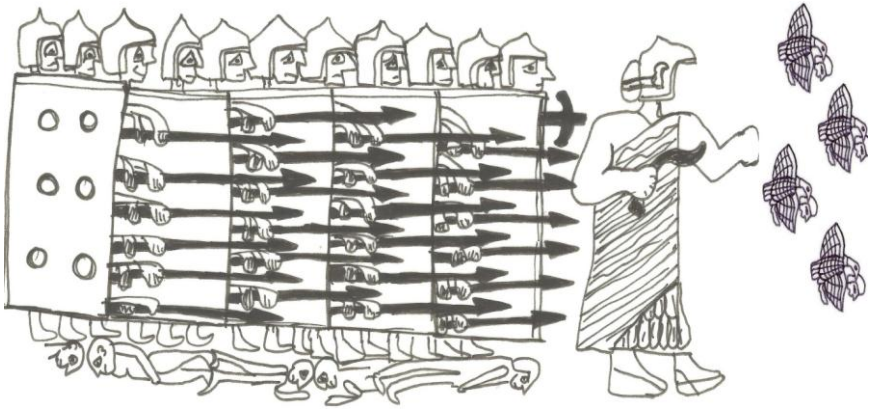


Fig. 1: Phalanx and feasting vultures as depicted on the Stele of the Vultures. Drawing by the author.



Fig. 2: Medium Infantry and the king's chariot depicted on the Stele of the Vultures. Drawing by the author.



Fig. 3: God of war Ningirsu slaying enemy prisoners depicted on the Stele of the Vultures. Drawing by the author.



Fig. 4: Heaps of corpses depicted on the Stele of the Vultures. Drawing by the author.

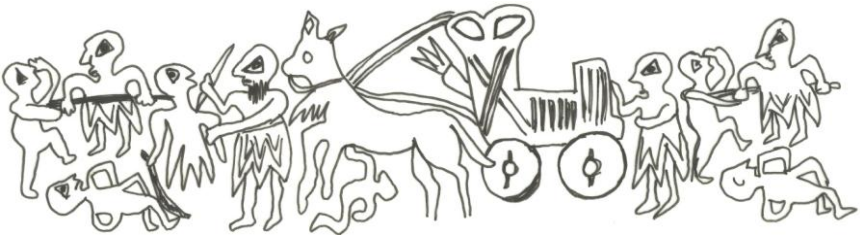


Fig. 5: Seal of king Ishqi-Mari. Drawing by the author.

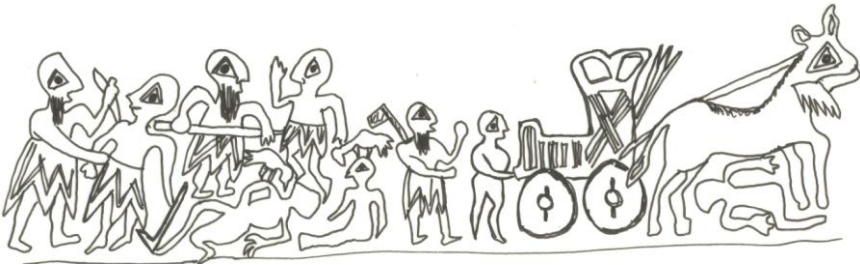


Fig. 6: Seal of king Ishqi-Mari. Drawing by the author.

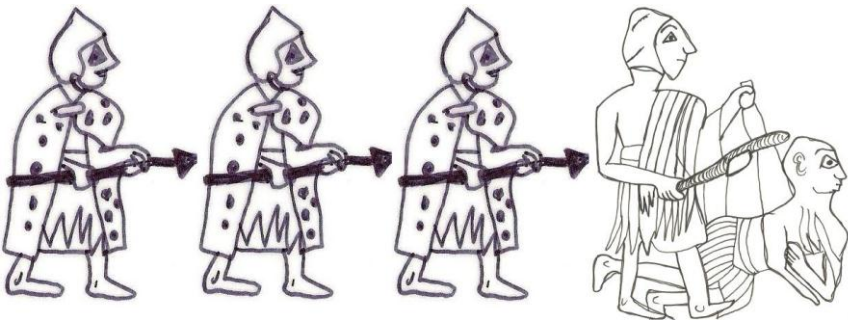


Fig. 7: Guard Infantry and officers slaying enemies as depicted on the Standard of Ur. Drawing of the author.

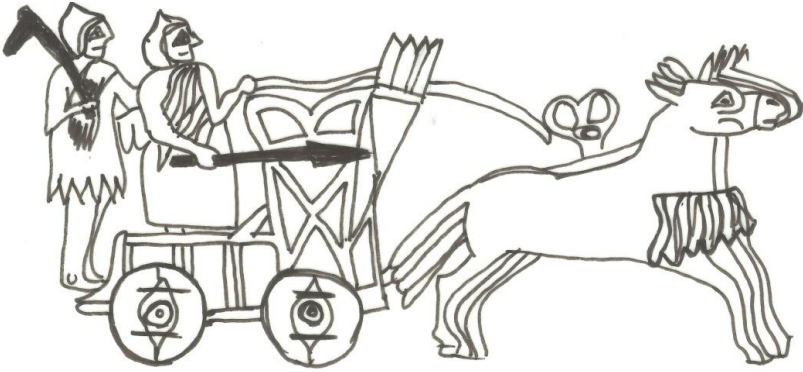


Fig. 8: Charge of chariots slaying enemies as depicted on the Standard of Ur. Drawing by the author.



Fig. 9: Officer with an axe as depicted on the shell and stone inlays found at Mari. Drawing by the author.



Fig. 10: Siege-Archer and Shield-Bearer as depicted on the shell and stone inlays found at Mari. Drawing by the author.



Fig. 11: Standard-Bearer as depicted on the shell and stone inlays found at Mari. Drawing by the author.



Figure 12 : Veteran warrior or officer with a maniple's standard (?) as depicted on the shell and stone inlays found at Mari. Drawing by the author.

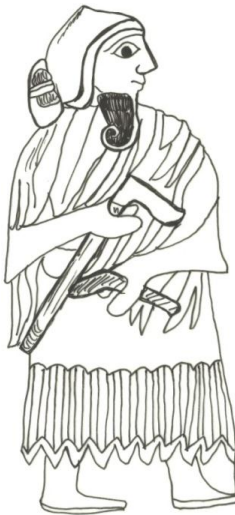


Fig. 13: The King as depicted on the shell and stone inlays found at Mari. Drawing by the author.



Fig 14: Light warrior bringing back his trophies as depicted on the shell and stone inlays found at Ebla. Drawing by the author.

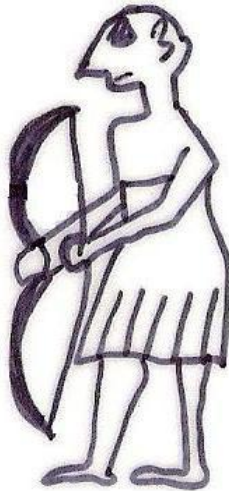


Fig. 15: Light archer as depicted on the shell and stone inlays found at Ebla. Drawing by the author.



Fig. 16: Guard slaying an enemy as depicted on the shell and stone inlays found at Ebla. Drawing by the author.



Fig. 17: Middle Infantry spearman slaying an enemy as depicted on the shell and stone inlays found at Ebla. Drawing by the author.

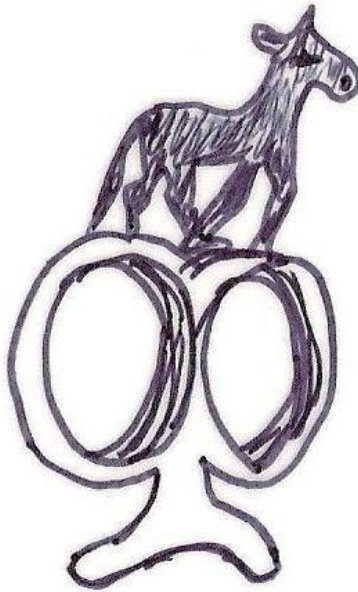


Fig. 18: Wild ass standard as attached on the chariot's yoke found at Ur.
Drawing by the author.

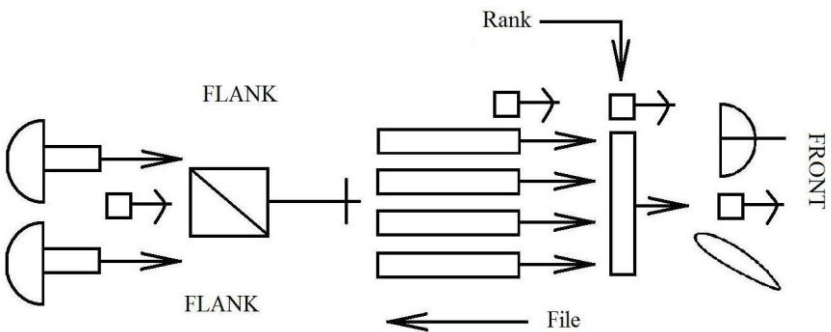


Fig. 19: Schematic employed to illustrate the different concepts employed for the formations discussed in this paper. Drawing by the author.

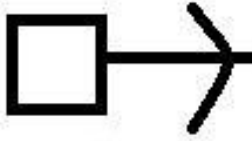


Fig. 20: Schematic employed to represent officers during the combat. Drawing by the author.

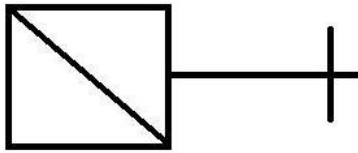


Fig. 21 : Schematic employed to represent the chariots of the nobles during the combat. Drawing of the author.

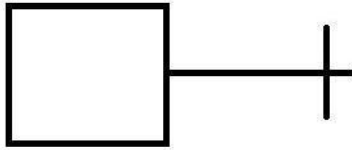


Fig. 22: Schematic employed to represent the chariot of the king during the combat. Drawing by the author.

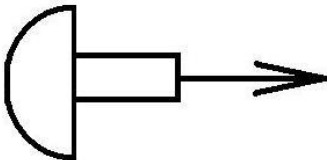


Fig. 23: Schematic employed to represent Guard Infantry during the combat. Drawing by the author.

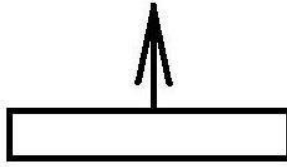


Figure 24 : Schematic employed to represent Middle Infantry during the combat. Drawing of the author.



Fig. 25: Schematic employed to represent the phalanx of the Heavy Infantry during the combat. Drawing by the author.

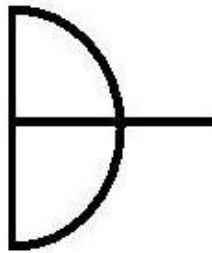


Fig. 26: Schematic employed to represent archers and light missile troops during the combat. Drawing by the author.

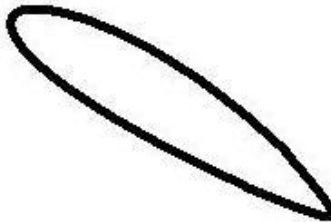


Fig. 27: Schematic employed to represent slingers during the combat. Drawing by the author.



Fig. 28: Schematic employed to represent the motions of the troops during the combat. Drawing by the author.

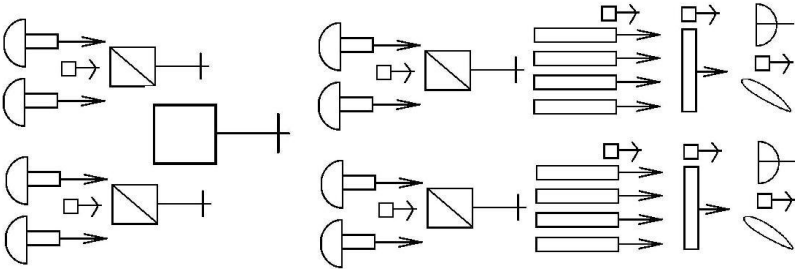


Fig. 29: Schematic displaying the basic array of an Early Dynastic army. Drawing by the author.

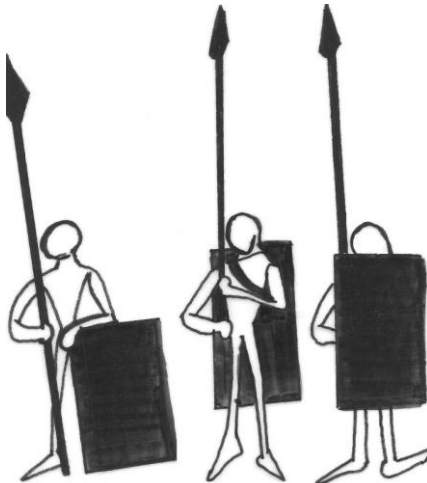


Fig. 30: Warrior at rest and on the march with the shield on his back, front and back view. Drawing by the author.

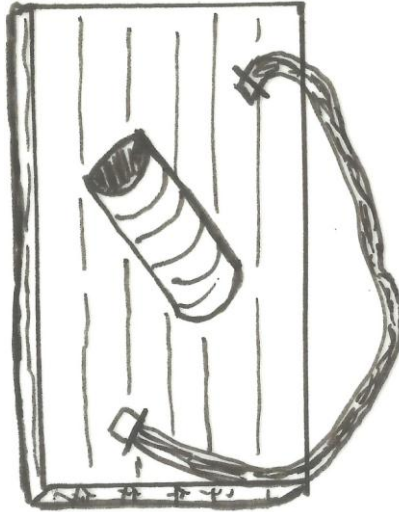


Fig. 31: Proposal for an inner face view of the Lagash shields. Drawing by the author.

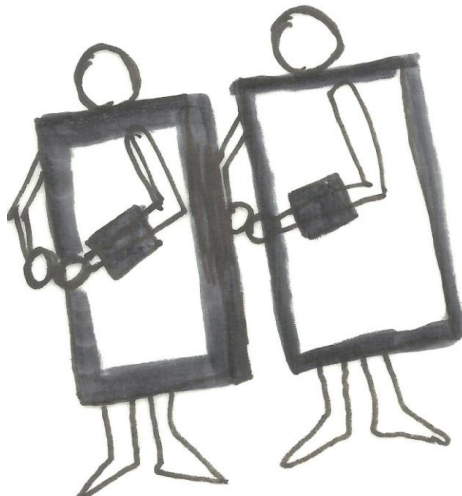


Figure 32 : Warrior bracing his shield alone and warriors in formation. Drawing of the author.

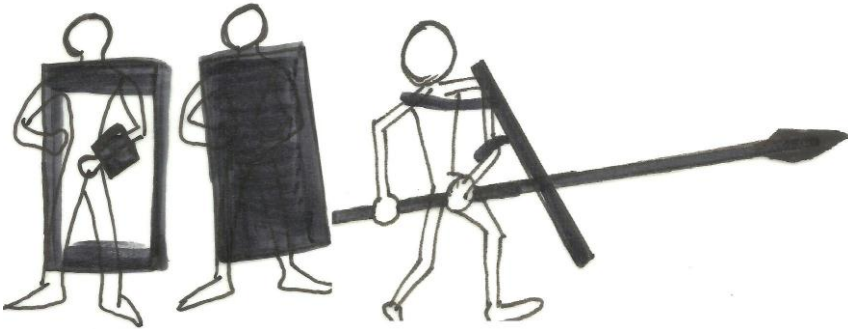


Fig. 33: Warrior wielding the pike with the shield, inside, front and side view. Drawing by the author.

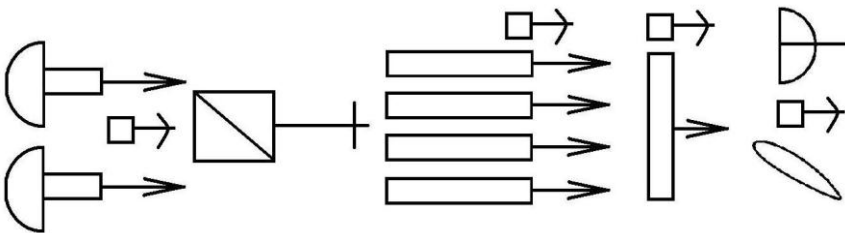


Fig. 34 : Schematic displaying the phase of Approach. Drawing by the author.

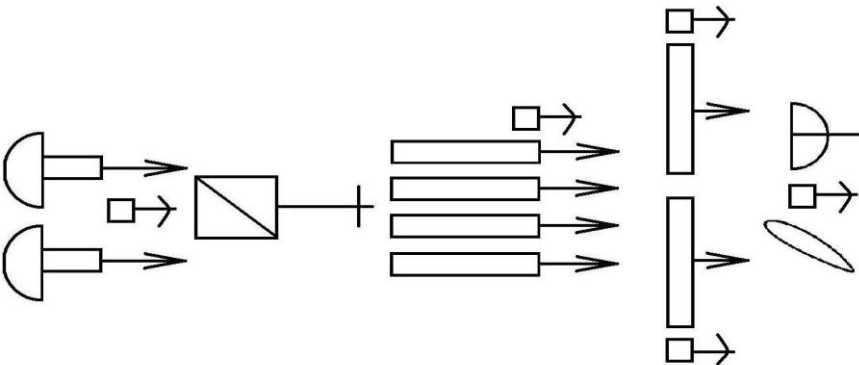


Fig. 35: Schematic displaying the phase of Skirmishers. Drawing by the author.

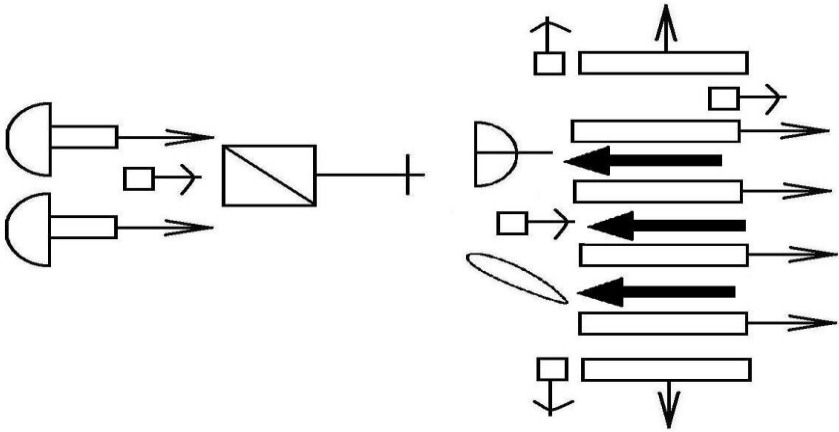


Fig. 36: Schematic displaying the phase of Advance. Drawing by the author.

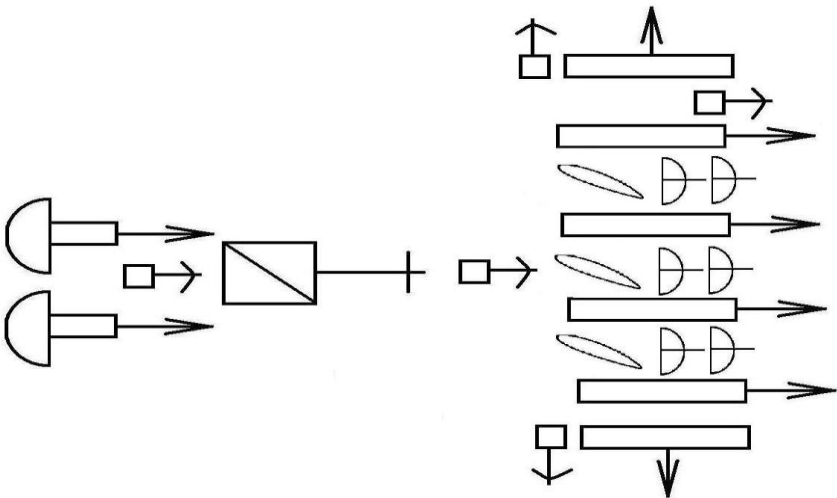


Fig. 37: Schematic displaying the phase of Shooting. Drawing by the author.

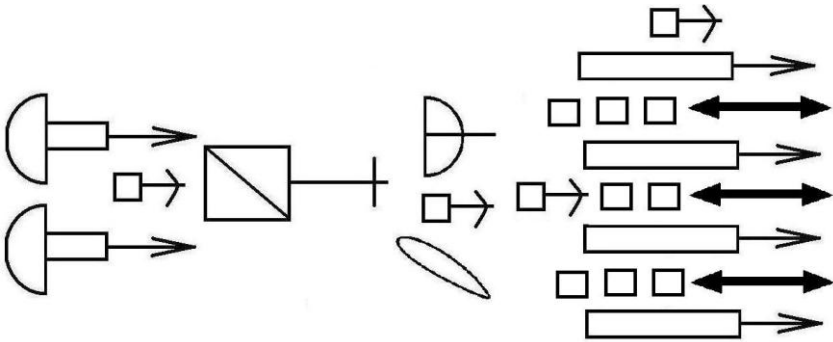


Fig. 38: Schematic displaying the phase of Contact. Drawing by the author.

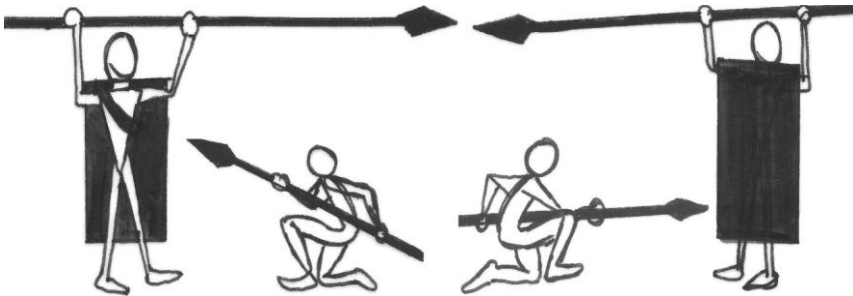


Fig. 39: Weak points of a warrior fighting with the pike in high stance against a kneeling spearman. Drawing by the author.



Fig. 40: Weak points of a warrior fighting with the pike in low stance against a standing axe-man and a kneeling swordsman. Drawing by the author.

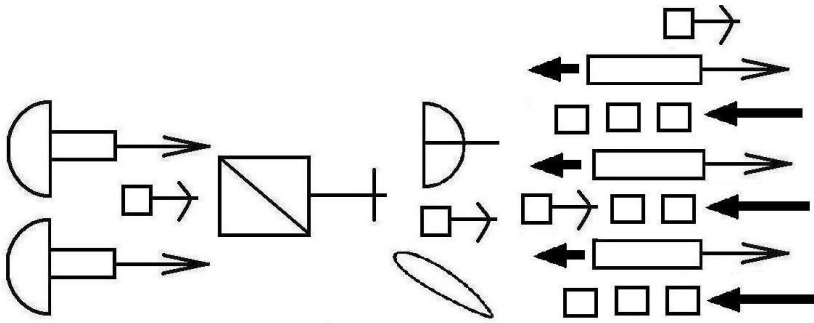


Fig. 41: Schematic displaying the phase of Recoil. Drawing by the author.

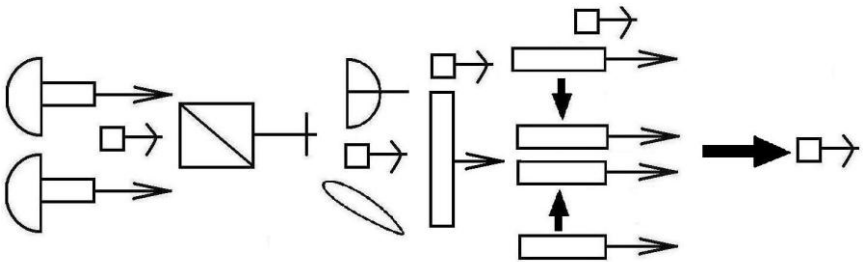


Fig. 42: Schematic displaying the phase of Duels. Drawing by the author.

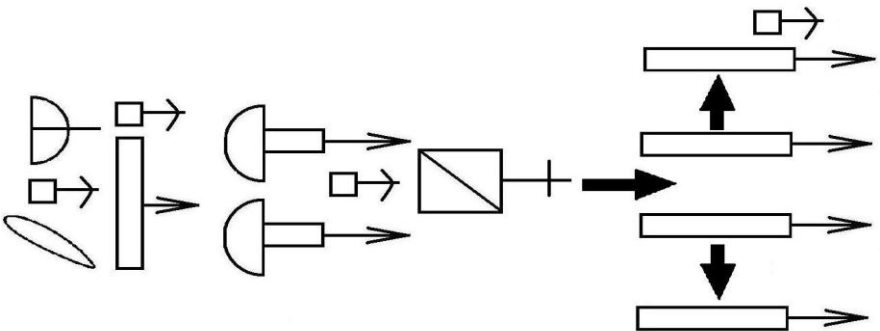


Fig. 43: Schematic displaying the phase of Regrouping. Drawing by the author.

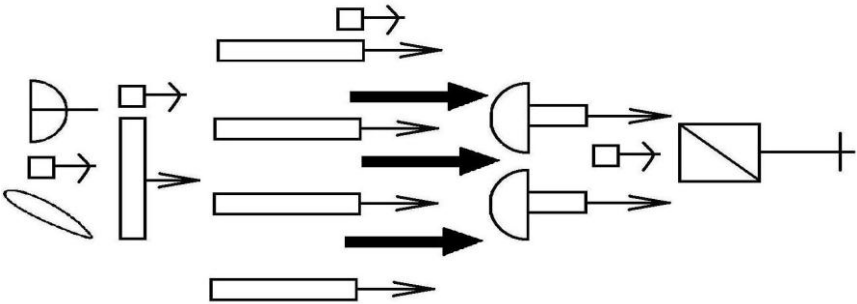


Fig. 44: Schematic displaying the phase of Pursuit. Drawing by the author.

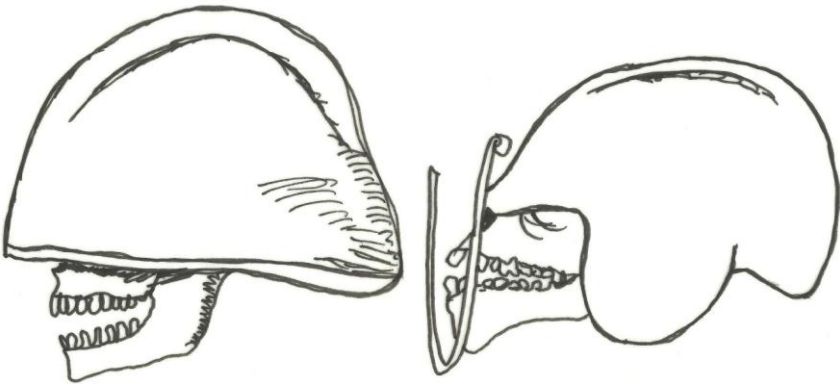


Fig. 45: Heavy Infantry helmets found in the Great Pitt of Death at Ur. Drawing by the author.